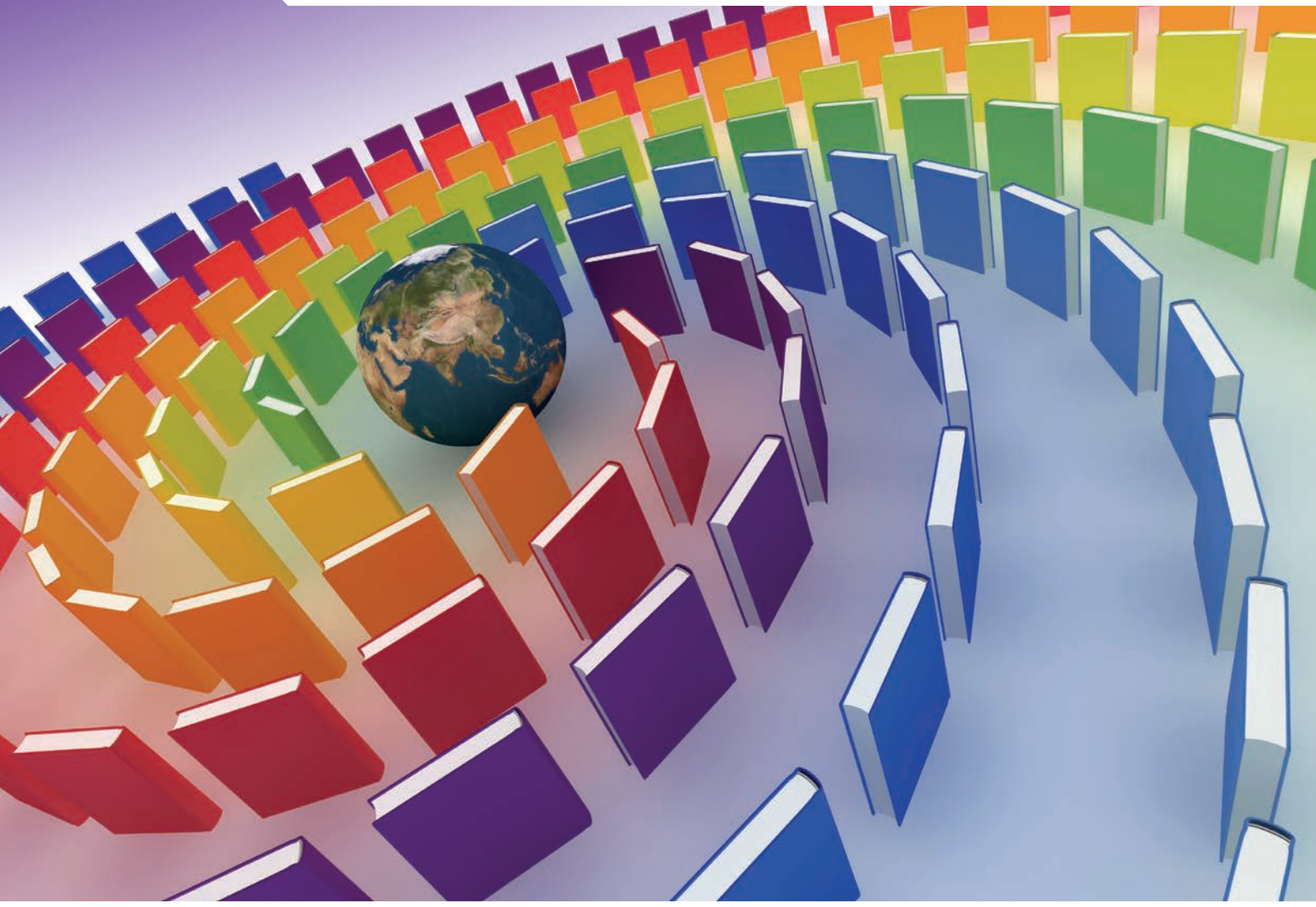
Languages in a Global World

LEARNING FOR BETTER CULTURAL UNDERSTANDING



OECD

Languages in a Global World

LEARNING FOR BETTER CULTURAL UNDERSTANDING

Edited by Bruno della Chiesa,
Jessica Scott and Christina Hinton



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Foreword

The "Globalisation and Linguistic Competencies" project was launched by the OECD's Centre for Educational Research and Innovation (CERI) in 2007 and, after a planning phase, actually started in 2008. The purpose of this venture was to shed new light on questions which, in spite of their growing importance in this era of globalisation, are only marginally tackled in the education research literature: Why are some individuals more successful than others at non-native language (NNL) learning? And: why are some education systems or countries more successful than others at non-native language (NNL) teaching?

The CERI Governing Board recognised this as a difficult and challenging task, and even a risky one, given the highly controversial nature of the topics to be addressed. Some people even explicitly expressed their concern that such an endeavour was impossible to achieve in an OECD context. Later on, members of the CERI Governing Board described the outcomes of the project as "humanistic" and even recommended that the publication be flagged in order to counteract the often heard criticism that the OECD is too technocratic an institution.

The project was successfully conducted through close co-operation between CERI and the Harvard Graduate School of Education (HGSE), Bruno della Chiesa having been invited in 2007, at the initiative of Kurt W. Fischer, to teach a course on the topic at HGSE; this "organic" course has since been given four times (2008-09, 2009-10, 2010-11, 2011-12), each year with revised and refined content, allowing great cross-fertilisation exercises across cultures and disciplines, which crucially enriched perspectives. The content of the present report directly and heavily derives from this "Learning in a Globalizing World" course at HGSE.

This book, with its many different perspectives, aims at enlightening readers about (and encouraging them to reflect on) the multiple factors besides the learning process per se that either facilitate or hinder the successful acquisition of languages beyond the mother tongue. It is intended to be accessible to non-specialists and it therefore seeks to avoid exclusive language.

Essential support (financial and/or substantive and/or organisational) was provided by:

- Human Resources and Skills Development Canada (HRSDC) (a federal ministry of the Government of Canada);
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- ZNL TransferZentrum für Neurowissenschaften und Lernen, Ulm University (Germany); and, of course,
- Harvard University Graduate School of Education (United States).

Within the OECD, the project leader Bruno della Chiesa was responsible for this report. Logistical support was provided by Carrie Tyler, Sophia Katsira, Therese Walsh and Ashley Allen (in order of succession). Substantive input was provided by Koji Miyamoto, Adriana Ruiz Esparza and Dirk Van Damme. Co-editors Bruno della Chiesa, Jessica Scott and Christina Hinton have several times reviewed the whole text, which was also partially edited, proofread and formatted by Anne-Lise Prigent, Therese Walsh and Florence Wojtasinski, and then partially or completely reviewed by Francesco Avvisati, Matt Brosius, Lynda Hawe, Kiira Karkkainen, Katarzyna Kubacka, Anne-Lise Prigent, Dirk Van Damme, Stéphan Vincent-Lancrin and Harald Wilkoszewski, as well as by members of the CERI Governing Board.

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This book is dedicated to all the victims of xenophobia throughout history, and also to all those who seek to promote justice, respect and tolerance for others.

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List of Contributors

Editors and authors

Bruno della Chiesa (Europe), is a Senior Analyst at the Organisation for Economic Co-operation and Development (OECD)'s Centre for Educational Research and Development (CERI). A former French diplomat, fishmonger and science fiction editor, he teaches a yearly course at the Harvard Graduate School of Education entitled "Learning in A Globalising World". His work on raising global awareness, closely related to (philosophy of) ethics, links his old academic interests – language didactics and sociolinguistics – with more recent ones such as educational neuroscience, and with his experience in international policy making. Bruno has lived in Austria, Egypt, France, Germany, Mexico and the United States.

Jessica Scott (United States) is a doctoral candidate at the Harvard Graduate School of Education, research assistant at Boston University, and adjunct faculty member at University of Massachusetts, Boston. A former high school teacher, Jessica was a teacher to the deaf and hard of hearing at high school level. Her research interests include the education of children who are deaf and use American Sign Language (ASL) as their primary mode of communication, as well as appropriate instructional approaches to teaching literacy skills to deaf and hard of hearing students. She is also interested in linguistic and cross-linguistic analyses of signed languages.

Christina Hinton (United States), Ed.D., focuses on issues at the nexus of neuroscience and education at Harvard University. She has worked in education policy both at CERI within the OECD's Directorate for Education, and at the United Nations Children's Fund (UNICEF). Christina has lived in Brisbane, Boston, Copenhagen, London and Paris.

Authors

Alejandro Rafael Belmont (Peru) is currently an International Mind Brain and Education Fellow from Harvard University working as a Visiting Researcher both in Dallas, Texas, and Lima, Peru. He uses child development research to build and implement tailored programs designed to improve educational outcomes in multicultural settings. Alejandro received his Ed.M. at the Harvard Graduate School of Education.

Simone Bollinger (Guam, United States) is an English instructor at Guam Community College, and advisor to the Eco Warriors. She has spent the last two summers working with Chamorro language teachers at the University of Guam, the Micronesian Language Institute, to develop with Cyrus Rolbin a trilingual (Chamorro, English, Japanese) reference book of Chamorro culture, *The AÅ of Chamorro* (forthcoming). Simone graduated from the Harvard Graduate School of Education with a Masters of Education.

Satya Brink (Canada), as director of Canada's National Learning Policy Research, is responsible for generating research evidence for national policy decisions to improve human capital in Canada, through analysis of national and international data for Human Resources and Skills Development Canada – a Federal Ministry of the Government of Canada. Satya holds a Ph.D. **Mathieu Audet**, **Justin Bayard** and **Darren King** are analysts on her team.

Peter Broad (United States) is an independent education consultant. His work focuses on helping schools create meaningful, curriculum-based service-learning experiences for students at the secondary and post-secondary level. Peter received his Ed.M. at the Harvard Graduate School of Education.

Kyung Suk Chang (Korea), a research fellow, works at the Korea Institute for Curriculum and Evaluation. She has English teaching and teacher training experience in a secondary school and various universities. In 2009, she worked at OECD-CERI as a consultant to the project "Globalisation and Linguistic Competencies". Her research interests are action research, school-focused teacher development, globalisation and English in Korea, and policy evaluation.

Natpat Chanjavanakul (Thailand) is a doctoral student of Psychological Studies in Education at the University of California, Los Angeles (UCLA). She graduated with a Masters of Education in Mind, Brain and Education from Harvard University. Natpat is a former high school teacher and a recipient of a China/UNESCO (the Great Wall) 2010/2011 fellowship. Her specialty is in connecting cognitive neuroscience to language learning and science education.

Esther Yoona Cho (United States) is the program co-ordinator of the Education Research Program at the Social Science Research Council (SSRC). Her work focuses on higher education access and success, specifically a longitudinal study examining the factors associated with learning in higher education and labour market outcomes. Prior to joining SSRC, Esther worked as a consultant for the OECD's Directorate for Education, both at CERI and within the Educational Training and Policy (ETP) division's Migrant Education program. She received her B.A. in International Comparative Studies at Duke University and Ed.M. in Language and Literacy at the Harvard Graduate School of Education.

Vanessa Christoph (Germany) is a research fellow within the ZNL Centre for Neurosciences and Learning (TransferZentrum für Neurowissenschaften und Lernen) at the University of Ulm. She worked at CERI from 1999 to 2004 and holds a Master in Sociology. At the ZNL Vanessa is currently involved in the project "MINT-Atlas 3-10 für Deutschland", which aims at mapping and analysing STEM initiatives in German pre-schools and primary schools. Her main interests lie in language acquisition, the sociology of education and in issues related to migrants' education.

Sarah Katherine Fuchs (United States) graduated from the Harvard Graduate School of Education with a Masters of Education in Language and Literacy. She lives in Brooklyn, New York, where she is pursuing a career that marries her interests in community development, immigration, language education, and family literacy. Sarah currently teaches English as a Second Language (ESL) to adult students.

Jessica C. H. Grant (United States) teaches Spanish at St. Mary's School of Medford in southern Oregon. She believes that facilitating cultural awareness is as important as helping her students learn vocabulary and verb conjugations. Jessica finds that integrating Spanish music into her curriculum is a highly effective way to achieve both ends and she is especially interested in the relationship between music and language at the neuro-cognitive level.

Nobuyuki Honna (Japan) is Professor Emeritus at Aoyama Gakuin University in Tokyo, where he taught sociolinguistics and international communication at the School of International Politics, Economics, and Business. He is one of the founding members of the International Association for Cross-Cultural Communication and also serves as a member on the Board of Directors for the Intercultural Education Society in Japan. In addition, Nobuyuki is a member of the Editorial Board of the *Journal of Multilingual and Multicultural Development* and the *International Journal of Bilingual Education and Bilingualism*.

Rauan Kenzhekhanuly (Kazakhstan) worked as first secretary at the embassy of the Republic of Kazakhstan in Moscow, as chief of the Moscow bureau of the National TV Agency of Kazakhstan, and as adviser to the governor of the Mangystau region (Kazakhstan), counselling on domestic and foreign policy issues. In 2010-2011, he was a fellow at the Weatherhead Center for International Affairs at Harvard University, where he also taught the Kazakh language. The founder of Wikibilim Foundation, Rauan now manages several projects aiming at developing the Kazakh Internet.

Armida Lizárraga (Peru) works as a research associate at the Harvard Graduate School of Education where she leads a study on the links between the knowledge Latino immigrant families have about the school system and the academic achievement of their children. She also manages an interdisciplinary longitudinal study focused on children's reading achievement and the influence of context on first generation Latino students in the United States. Her primary field of interest is children's language and literacy development, especially in multilingual populations. Internationally, Armida has worked as a consultant for curriculum development and evaluation projects in China and Mexico and as a teacher in linguistically diverse classrooms in Brazil, Spain, and the United States.

Luis Felipe Lopez-Calva (Mexico) is currently a lead economist at the World Bank's Latin America and Caribbean Region. Luis Felipe is responsible for a large-scale technical assistance scheme in Brazil and also leads a project on early fertility in Latin America and the Caribbean region.

Koji Miyamoto (Japan), an economist at OECD-CERI, is now the manager of the Education and Social Progress project after having worked previously on the Social Outcomes of Learning project. Koji specialises in the economics of education and lifelong learning policies.

Gigliana Melzi (Peru) is an Associate Professor of Applied Psychology at New York University. Gigliana's research focuses on language and literacy development of dual-language learning Latino children.

Lisa Mulvey (United States) holds a Masters of Education in International Education Policy from the Harvard Graduate School of Education. She spent a year teaching English in France and is currently co-ordinating two study abroad programs at the University of New Hampshire. Lisa's interests include global citizenship, international education, language and literacy, cross-cultural learning and international exchange program management.

E.B. O'Donnell (United States) is an international education consultant based in Boston, Massachusetts. Her work focuses on literacy, language acquisition, global citizenship, and international education. E.B. graduated from the Harvard Graduate School of Education with a Masters of Education.

Lourdes Rodriguez-Chamussy (Mexico) has worked for the United Nations Development Programme (UNDP) and the Office of the Presidency in Mexico. She holds a

Ph.D. in Agricultural and Resource Economics from the University of California, Berkeley. Lourdes' current research is on the political economy of social policy and development.

Adina R. Schick (United States) is an advanced doctoral student in Applied Psychology at New York University. Adina's research focuses on the home and school influences on the development of narrative competencies of dual-language learning Latino children.

Matthew Shapiro (United States) has been teaching since graduating from Tufts University with a degree in chemical engineering in 2003. He later received his master's degree from the Harvard Graduate School of Education. Born in Washington, DC, Matthew has lived the majority of his life in the United States; however he is currently teaching middle school science in Madrid, Spain. He describes teaching and living internationally as "a wonderful experience".

Massimiliano Tarozzi (Italy) is an associate professor at the University of Trento in the cognitive sciences and education department. He has taught a number of courses, including a qualitative methods course and an educational sociology course. His research interests include qualitative research methods, intercultural education, citizenship education and philosophy of education. Massimiliano has served on the editorial board of a number of journals and has also received a Fulbright research grant. He received his doctoral degree from the University of Bologna in 1997.

Dirk Van Damme (Belgium) is Head of the Centre for Educational Research and Innovation (CERI) at the OECD in Paris. Before joining the OECD in 2008, he was Professor of Educational Sciences at Ghent University and lectured on comparative education at several other universities. Dirk has published mainly on higher education policy, quality assurance and lifelong learning. He also served as advisor and head of the cabinet of several ministers of education in the Flemish government in Belgium.

Jessica Welch (United States) is a graduate of the Mind, Brain, and Education program at the Harvard Graduate School of Education. Her work as a violin instructor and arts administrator in both North America and East Africa led her to the study of how early music education influences cognitive development, particularly among at-risk children. Jessica is currently working as a Spanish instructor at the Axl Academy in Aurora, Colorado, and continues to teach violin both privately and through community programs.

Jennifer Worden (United States) is a doctoral candidate at the Harvard Graduate School of Education. Jennifer's work centres on the challenges of educating for participation in pluralistic democracies through cross-disciplinary work in philosophy; educational policy; and mind, brain, and education.

Key Concepts and Acronyms

The following list is not a glossary: it is not meant to explain the meaning of supposedly unknown words but to clarify what is understood, in this book, under each of the words/phrases below, which are of frequent and common use, but are nonetheless equivocal.

I. Globalisation

Globalisation: "Like most terms of political discourse, this term has two meanings: a literal meaning and a technical meaning employed for doctrinal warfare. In the literal sense, 'globalisation' means international integration. […] in its technical sense, [it refers] to a particular form of international economic integration […]" (Chomsky, 2010, p. 35). In this report 'globalisation' refers to both meanings; if it has to be understood in one way only, it will be indicated.

Cosmopolitanism, derived from the Greek words for "citizen"[1] and "cosmos," reflects a long philosophical tradition that each human is part of a shared global community (Appiah, 2006; Diogenes; Hierocles). Individuals who develop a cosmopolitan worldview are prepared to care for people from all cultures and embrace responsibility as members of a global society.

II. Language[2]

Mother tongue/First language (L1) is the language(s) that an individual hears spoken and speaks, particularly within the family context, during his/her pre-school years.

Non-native language (NNL)/Second language (L2) is any language(s) an individual learns that is not the individual's mother tongue.[3]

Lingua franca/World language is a language used globally by both native and non-native speakers. The lingua franca is currently English, or perhaps more accurately, "Globish," which refers to a simplified form of English used as a means of communication by many non-English speakers. This language has a special status in the globalised world.

School language is the dominant language(s) spoken and taught in school.

Local language/Indigenous language/Heritage language is any language(s) shared by a minority group in a population (UNESCO, 2003).

Dialect is a variety of a language shared by a particular group of people, which may be associated with a particular region or social status (Wolfram and Schilling-Estes, 2006). Technically speaking, there is no difference between a dialect and a language. The distinction is of a political nature. A quote commonly attributed to Yiddish linguist Max Weinreich captures the idea: "A language is a dialect with an army and a navy".

Multilingual refers to a society in which multiple languages are spoken.

Plurilingual refers to an individual who speaks many languages nearly close to fluently (UNESCO, 2003). **Bilingual** refers to an individual who speaks two languages close to fluently.

Non-native language learning (NNLL) refers to the process by which an individual acquires a second (or third, or fourth…) language after he/she has learned or begun to learn his/her mother tongue (Fromkin, Rodman and Hyams, 2003). **Success or failure in NNL learning** can be measured at individual level (*i.e.* did the student reach his/her personal goals?), institutional level (*i.e.* did the student reach the goals set by the teacher, school, or institution?), and societal level (*i.e.* did the student learn enough to make a valuable contribution to society?).

III. Culture

Multiculturality is a purely descriptive word that indicates that a society hosts people from distinct cultural origins, who have different cultural representations and practices.

Multiculturalism is understood as a political and social agenda that aims to develop a harmonious multicultural society.

Bicultural refers to an individual who has internalised two separate cultures, along with the language(s) that each of those cultures use (Ringberg *et al*., 2010).

Immigrant refers to an individual who moves to settle in a new country from his/her native country.

Emigrant refers to an individual who leaves his/her home country to settle in a new country.

Alterity is a philosophical term meaning "otherness" (Levinas, 1970; see also Todorov, 1989).

Doxa is understood throughout the book in Pierre Bourdieu's sense: everything (facts, rules, etc.), that in any given society is culturally determined but appears "natural" to the individual not aware of its contingent nature (Bourdieu, 1979).

Notes

1. The word "citizen" refers to national or regional membership that bears rights and responsibilities set by a government. Since we do not have a global government or enforceable international laws, we cannot be "global citizens"; it is more accurate to discuss preparing individuals to be members of a global society (see Rousseau, 1762/1968).
2. It should be noted that the distinctions between the different language categories are only rarely as hermetically separate as this classification might suggest. Often, in fact, people find themselves somewhere between these idealised representations, moving within a continuum between languages and cultures. The case of "Spanglish", spoken by certain Latin Americans living in the United States, is an excellent example of this. This sort of situation is encountered almost everywhere in different forms.

3. Sometimes NNL/L2 is referred to as "foreign language." Since this seems to be a concept that is more operational at the political level, it won't be used here. For example, is French a foreign language for a German-native speaker from Switzerland? No, from a political point of view, since French is an official language of Switzerland; but from an individual point of view, it can be close to this.

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Preface:

Language learning and culture in a time of globalisation

By Kurt W. Fischer

(Charles Warland Bigelow Professor, Harvard Graduate School of Education)

This remarkable book takes on the big questions of language diversity around the world and its relation to education. These questions are among the most important for the future of humanity on earth. With a globally interconnected economy, unprecedented levels of migration, and a continuous stream of information circulating the planet, children are growing up in a globalised world. Globalisation is not an option but a fact that permeates every village, city, nation.

In this time of globalisation, language learning is ever more important – central to politics, economics, history, and most obviously education. This book recognises that language learning is not isolated, but totally enmeshed with all the important issues for the future of humanity.

More than 175 million people worldwide live outside their country of birth (Meyers, 2004), and most of them in their new country speak one or more languages besides the one they learned first at home. Across the world proficiency in the language of instruction is one of the strongest predictors of academic achievement among immigrant students (OECD, 2006; Suàrez-Orozco, Suàrez-Orozco and Todorova, 2010). This fundamental fact is often neglected in debates about language diversity and policies about language.

Indeed language learning is not only a means to improve communication, but more importantly a key avenue to promoting global understanding. To understand the importance of language and culture, people need to be familiar with several languages and cultures. The diversity of human culture and language is fundamental to the future of our planet.

This publication explores language learning all across the globe, in countries ranging from France to Kazakhstan and from Peru to Tanzania. It provides a fundamental sense of the centrality of language and culture to humanity both at present and into the future. It lays out a starting point for a humanitarian dialogue about language and culture around the world.

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Executive Summary

1. Introduction

In our globalised world, language competencies are increasingly important. It is no longer an advantage for a job seeker to speak just one non-native language (NNL). Rather, it now could be a drawback for a job seeker to only speak one language.

NNL learning is a challenge for many individuals and countries. These challenges have to do with many factors other than just education. In this book, we explore factors that play a role in successful and unsuccessful NNL learning, including motivation culture, identity (immigration, etc.) and neuroscience.

First we have asked two questions based on observation:

- Why are some individuals more successful at non-native language learning (NNLL)?
- Why are some education systems or countries more successful than others at NNL teaching?

As expected, the main answers have had much more to do with what happens outside of the formal learning context, and as far as children are concerned, even before they enter their first language class.

2. Globalisation, languages, and motivations: Introducing the issues and the angles chosen

Firstly, the role of motivation in NNLL is addressed. Even if it is not the only factor to be considered (obviously, opportunity is also crucial, and some other aspects play their roles too), it is a key element of its success. Motivation plays an important role in learning in general, and is especially significant to language learning. The presence or absence of motivation in NNLL is crucially influenced by perceptions and representations of the "otherness" – alterity (Chapter 1). Motivation in NNLL may be intrinsic (learning a language because of an interest in the language or culture), extrinsic (wanting to learn a language for external benefits), or combinations of both (Chapter 2). While neuroscience can help us understand language acquisition and bi- or multilingualism, it is also important in understanding motivation, and potentially how we can use technology to better support learning (Chapter 3). Some people are motivated to learn a NNL for the extrinsic reward (economic incentives), as increasing one's earning potential is a goal that many find desirable (Chapter 4). At the policy level, multilingual and multicultural countries have to contend with many challenges. For example, while Estonia and Singapore differ in a variety of ways, both of these countries have bi- or multi-lingual policies in place. Even though they have achieved success in NNLL in different ways, each offers an important perspective when it comes to facilitating the development of multiple perspectives in learners (Chapter 5).

3. Languages, cultures and identities: What's at stake?

Since culture and language are inextricably intertwined, learning a language necessitates familiarising oneself with a culture. People often express a perceived change in their identities as a result of experiences with other languages and cultures. This may be expected, as experts in a number of fields have found that different languages have different ways of expressing their worldly experiences. Even non-verbal gestural communication is mediated by cultural rules (Chapter 6). With this in mind, it is not surprising that debates around NNL learning and teaching are, in most cases, highly political. As the case of Kazakhstan shows, language not only involves technical issues, but also history, politics and culture (Chapter 7). Language can be a way for members of cultural and linguistic minorities (in a broad sense) to define their identity and establish themselves as separate from other cultures. A particular case occurs in France, where socio-economically deprived suburban youth speak the language "game" *Verlan*. One purpose of Verlan, a sociological marker of belonging, is to distinguish the in-group and the out-group (sometimes in terms of "us *vs*. them"), by keeping outsiders from understanding. Although *Verlan* is specific to France and the French language, in many societies, one can find minority groups who have developed a style of speaking designed for the same purposes (Chapter 8). Similarly, mastering a language can be a characteristic required for a person to be considered a member of a culture. For instance, a deaf individual should know a world sign language in order to be considered culturally Deaf (Chapter 9). But might this hold true for other cultural groups? Is a person from a Latin American country considered "Latino/a" if he or she does not speak Spanish? Again, language is a prevalent topic in neuroscience, including comprehension and production of native and non-native language. We explore research on the neuroscience of signed languages, as this provides insights into how the brain generally understands and constructs language (Chapter 10).

4. Landscapes, languages and policies: Mapping the past, present, and future

This section explores issues related to NNL learning and teaching in particular contexts. It brings us to North America, Europe, Asia, and South America. Each of these regions presents unique histories, language policies, populations, politics, cultures, worldviews, and other factors relevant to NNLL. However, each provides insights relevant to other regions around the world.

In its report, Canada gave an account of its linguistic map and the language policies and practices it has implemented. Such a comprehensive and precise knowledge is likely due to the value Canada places on language diversity. Canada's dynamic and positive approach to its linguistic landscape could serve as inspiration for policy-making bodies around the world (Chapter 11). Issues can become sensitive for many reasons. Sometimes it may be because intertwined languages strive to assert themselves within a given state, where for a long time a different linguistic form has been dominant, as such a case can be observed in Catalonia, Spain (Chapter 12). Or, when the weight of history does not smooth relationships when defining linguistic and cultural identities, as in the case of Quechua-Spanish language learners in Peru (Chapter 17). But teaching of diversity and culture are not the only challenges faced by educational systems; it is also necessary to determine which form of a language should be taught, especially when this target language is a form of the current *lingua franca*, like an "Asian English" (Chapter 14). Sometimes two countries share similar histories but they arrive at NNLL methodologies *via* different routes, such as is the case with Korea and Japan, which is explored through a detailed historical case study (Chapter 15). Theoretical knowledge of NNLL is of obvious value,

but it is its application that is most important. Therefore, we aimed to not only explore the theoretical underpinnings of NNLL, but also to apply this knowledge to a particular context as in the teaching of Chamorro (Chapter 16).

5. Movements, languages, and migrations: Particularly sensitive issues

Mastery of a NNL can give significant benefits. Studying abroad is of importance and may help students become members of a global economy. This understanding can also promote appreciation of cultural differences, which is one step towards more tolerance and thus a better understanding of the world. Since study abroad programmes can yield important benefits, it is useful to analyse why students choose to embark (or not) on such "adventures" (Chapter 18). But studying abroad is not the only scenario in which students may be confronted with a foreign educational system. Educating immigrant children represents challenges virtually everywhere (Chapter 19), especially in countries where tracking systems hold back migrant children from achieving high levels of education and associated social mobility (Chapter 20). Moreover, in the case of immigrants, the destination country is only half of the equation: for example, the educational system currently in place in Mexico may be contributing to emigration patterns from Mexico to other countries (Chapter 21). Last but not least, intercultural education involves recognising diversity and encouraging communication between cultural groups (Chapter 22). As movement across the planet increases, we must further explore the issue of migration to see better how education systems can adjust to meet resulting challenges.

6. Learning languages, means and ends: Implications for individuals, educators and policy makers

Educational systems should adapt to bring about changes in how we think about "us and them". The presence of many cultures in the classroom may help students see the connections between themselves and others. Increasing opportunities for students to study abroad, or exchange virtually with individuals in other countries, may also move children towards a more cosmopolitan mindset (Chapter 23). Languages may also be taught using unique approaches and more "universal" ways to communicate. Two chapters explore the use of music as a tool in NNLL: one presents an example of an experiment conducted in Tanzania (Chapter 13), and the other offers a more general neuroscientific argument for how music may be used as a pedagogical tool (Chapter 24). The cultural tesseract hypothesis presented towards the close of the book is a framework for thinking about how our experiences within and around other cultures shape our ways of being and knowing, and language's role in this process. Our goals for teaching language, advocating cultural awareness, and fostering intercultural competency may seem unique across contextual situations. However, we have a great deal to learn from each another when it comes to promoting cultural and global awareness. These issues must be approached in a transdisciplinary way: educators, neuroscientists, policy makers, musicians, sociologists, historians, philosophers, and others have a role to play to consider how best to teach NNLs, as well as the reasons to do so (Chapter 25).

7. Outcomes and conclusions

There are many different individual and social benefits to improving and expanding NNLL. Not only could individuals and societies enhance their economic prospects through the mastery of languages, but there are personal, academic and global reasons for ensuring that our students learn languages. The experience of learning another language and culture could be satisfying for individuals and research suggests that certain academic skills may be improved by learning to speak other languages. Additionally, the learning and teaching of NNLs might create feelings of appreciation for cultural differences, which could lead to the development of more tolerant mindsets.

Educating people about cultures may enhance NNLL. Learning another language means that at some stage one becomes acquainted with another culture. Deliberately using culture as an avenue for teaching may increase motivation and success in and outside of the classroom.

Neuroscience can provide us with a window into how NNL may be learned. While not sufficient on its own for planning changes to how we teach languages, findings from neuroscientific research can inform the ways which we may approach teaching languages. For example, it has been found that late language learners appear to process a second language differently than native speakers. Further understanding of these differences may be essential to finding out which techniques are best suited for students.

Policy and planning may be used effectively to promote language learning. Many countries have policies in place to promote the languages that are or were once considered dying-out. We can learn from the successes and failures of other countries in language learning, planning and policy implementation. In this way, we could address issues of motivation, identity, and culture while working to encourage students to develop their own cultural and global awareness.

To raise proficiency in other languages, understanding of cultures should be promoted from primary school on. Asking students to think critically about the world, in particular who they are and how they connect with people in other parts of the world could begin early in life. Teaching young children about cultures, philosophies and religions in an open-minded and tolerant way may nurture an appreciation of other cultural perspectives, appreciation of differences and global understanding.

Introduction:

User's Guide

The project on "Globalisation, Languages and Cultures," which led to the present book, was launched by OECD's Centre for Educational Research and Innovation (CERI) in 2007, but actually started after one year of planning, in 2008. It was conducted in close co-operation with Harvard University Graduate School of Education (HGSE) between mid-2008 and mid-2011. The purpose of this project was to encourage the exploration of elements generally not considered (and largely underestimated) in the process of language learning. This topic is increasingly important as the rise of globalisation makes language competencies more and more valuable, both at individual and societal levels. Such an endeavour, an atypical activity for the OECD, was recognised from the beginning as a difficult and challenging task. Some even warned that the OECD, because of the diversity of member countries' viewpoints on languages and cultures and because of the balance of power there, might not be the ideal forum to address such obviously controversial issues that went beyond (applied) linguistics to deal first and foremost with history, sociology, psychology, and always (directly or indirectly) touch upon the extremely delicate matter of identity/alterity, and hence philosophy, ethics and politics. A number of issues discussed here have so far been only marginally tackled by the vast field of language didactics, especially at policy and practice levels. This is perhaps due to the fact that their ideological foundations, and hence their highly controversial nature, were considered better to carefully avoid. But this is not a good enough reason to shy away from such debates, especially if better policies and practices can come to light once these controversial issues have been recognised, acknowledged, analysed and understood. So, this publication aims at providing an introduction to what is actually at stake in the realm of language learning.

Quantitative and qualitative research so far has been able to inform decision-making processes, to examine a variety of practices, environments and outcomes. While the second half of the 20th century has provided a body of knowledge apt to help understand some of the modes of language teaching and learning associated with success or failure, identification of the deeper elements that account for the variety of outcomes is still lacking. Much about cultural and historical factors underlying learning processes are left as a black box: that is where this book attempts to shed light.

Everyone knows that when it comes to learning languages some individuals are more "successful" than others, regardless of the methods used or of the approaches privileged: they seem to acquire languages easier, better, and sometimes even faster. Moreover, it is well-known that in some countries people tend to speak at least one language on top of their mother tongue well (apart from possibly existing associate official languages and regional languages), while in other places it is the exception rather than the rule. Does this mean that some education systems are more successful than others at teaching languages? That may be part of the story, but it is certainly too simple an explanation. Other elements,

which have to do with deeply running tendencies within societies, are likely to play a crucial role here as well. What are these tendencies? For example, why do Nordic people speak much better English on average (to say nothing of other languages) than, say, southern European people? This report suggests complex answers to these questions. However, it is intended to be accessible to non-specialists as well, and therefore it seeks to avoid abstruse language and jargon as much as possible.

These initial questions were only the beginning; nevertheless, they shaped the entire research effort underlying the project and may in turn be broken down into several sub-questions.

- What are the representations at work in societal diversities (perceptions, values, etc.)? What is their influence on the motivation to learn and, hence, on the success or failure of learning?

Upstream from learning, it is important to establish in what way representations are at work in diverse situations (whether it is a matter of perceptions, values, beliefs, etc.) and what their influence is with regard to motivation (and hence the success or failure of learning) in a given context (see Melzi, this volume). Where the learner is concerned, the initial premise is that attitudes and motivation with regard to learning a new language depend largely on his/her representations, feeling of belonging, values and the opinions voiced in his immediate or more remote surroundings (Markus and Kitayama, 1991). Downstream from learning, the "indirect" benefits of language learning need to be measured at the individual and collective levels. Aside from measurable advantages (such as integration on the labour market), does a multilingual/multicultural individual have an advantage, socially speaking, over someone who is monolingual and monocultural? If so, in what way and how? Since they come relatively later in the life cycle, education systems have to make do with perceptions that are already instilled and, in the majority of cases, seek to have some influence on preconceived ideas (della Chiesa, 2010b; see also the "Motivation Vortex" hypothesis, in della Chiesa, Chapter 1, this volume).

- What are the (direct and indirect) benefits of learning languages, at individual and collective levels? What is the impact of language competencies on economic outcomes and on social integration and cohesion?

Labour market demands with regard to linguistic skills have changed appreciably in recent decades, and more especially over the last few years. Outside the English-speaking countries, anybody recruited at or above "a certain level" is now expected to be able to express himself/herself at least in English (assuming it is not his/her mother tongue) or in *Globish*, and even in one or more other languages – this is often what "makes the difference" between two candidates for the same post, whose respective qualifications are otherwise judged to be equivalent. In other words, the time (up until the 1970-80s) when mastering a non-native language (mainly English) was considered to be a "plus" belongs to the past and has given way to a situation in which not mastering English is seen as a "minus" – a real social and economic shortcoming, in fact – whether or not English is *really* needed for the job in question. The impact of these labour market practices on the language learning/teaching market and the consequence of labour market outcomes on social representations is substantial (see Rodriguez-Chamussy, Lopez-Calva and Miyamoto, this volume). The aim here is to understand how language skills affect economic and social outcomes (outcomes which, in their turn, encompass disparate but linked factors such as social integration and cohesion, sociological representations and factors relating to the labour market) and, of course, to draw the appropriate conclusions in terms of education policies and practices.

- What would a scientific viewpoint offer on formal or informal language teaching/learning today?[1]

The remarkable progress of educational neuroscience over the last decade, in the wake of CERI's pioneering work on "Learning Sciences and Brain Research " (1999-2007) and of the creation of the Mind, Brain and Education programme and journal at HGSE (Fischer *et al*., 2007) has afforded a better understanding of the biological underpinnings of language learning (Neville and Bavelier, 1998; Neville and Bruer, 2001; OECD, 2007) and even of cultural components of self (Zhu *et al.,* 2007; Zhu and Han, 2008; Ng *et al*., 2010). Neuroscientists have already learned a lot about how the brain processes language, be it comprehension or production of both native and NNLs (see Scott, this volume) and to shed light on the brain circuitry associated to motivation (see Chanjavankul, this volume). No doubt more research will contribute to a better understanding of how a NNL is learned/acquired, and how it may best be taught depending on the context and, of course, on the learner. It seems that the brains of native and non-native speakers process languages differently, at least before a certain level of proficiency is attained (Neville and Bruer, 2001); this at least should not come as a surprise, for it corroborates intuitive perceptions in anyone exposed to NNL learning. Understanding such differences will be useful to successfully teaching languages (and other disciplines as well[2]). However, although information from neuroscience can be helpful, it is not sufficient for understanding the teaching and learning of languages on its own (findings from any one science, even linguistics, are insufficient for understanding the teaching and learning of languages; the phrase "applied linguistics," which at some stage was used as an equivalent of "language didactics," thus reflecting the dominant position of linguistics as a reference discipline in the field, should for these reasons be avoided, if not banned). The present report addresses a range of competencies used to examine the links between leading edge scientific research and reflection on education (Chiao *et al*., 2008; Hinton and Fischer, 2010; Scott and Curran, 2010): new light can be shed on language learning from a neuroscientific angle even if the emerging scientific insights have to be constantly analysed in conjunction with the underlying social issues, which are at least as decisive – and without forgetting that it is not the role of science, whatever science, to dictate policy decisions which derive from political considerations and hence, ideally, from ethical considerations (Koizumi, 2007; Gardner, 2009; della Chiesa, 2010a, 2010b; Lang, 2010).

- What are the implications for learning policies and practices?

With the globalisation process that began at least three decades ago (some would say five centuries…) approaching a first "maturity" phase, and with the world probably about to witness phenomena of unprecedented magnitude in terms of migration flows, managing the challenges of multiculturality in school systems is posing increasingly acute problems. The overall aim of this report is to shed light on the impact of linguistic diversity on education and to see how education policies and practices might be able, in the medium term, to respond better to the challenges set by these new situations so as to inform decision makers now (see Brink *et al*.; Broad; Grant; Honna; Lizárraga; Worden, all this volume).

Often, language teachers and researchers are more or less consciously familiar with the tricky issues addressed by the authors in this book. Our hope is that these elements will be better taken into account in language policies, teaching practices and learning strategies in the coming years and decades. The diverse angles and findings presented hereafter are relevant to all stakeholders involved in language education. This includes end users (parents and children, and, more generally, learners of all ages), who will be empowered

to improve their language skills as they better understand the deeply rooted factors underlying the processes of language learning. For instance, informing parents about their crucial role in creating a favourable learning environment for their children is certainly not a waste of time. However, we by no means claim that any avenue presented here leads to any form of panacea. No author included in this book pretends to have the ultimate solution to the complex issues being tackled.[3] The spectrum of factors displayed for consideration is so broad that only a common, international effort, involved at all levels, can address all of the issues in language learning and teaching.

This report discusses recent research addressing language learning issues at many levels. In some cases, this research complements what is already known with evidence, which is useful even when it only strengthens support for policies or practices that have previously lacked a rationale. In other cases, science and reflection can help us grasp why certain existing approaches are not justified in terms of the way humans learn languages; some longstanding debates on "methods" might well be close to being outdated. Readers will also find a number of remarks in this report that are either tentative (*i.e.* based on limited evidence) or lacking consensus within scientific communities. These are included to stimulate thinking in this area and identify research directions for the future.

Each chapter of the present report displays the particular voice of its author(s), thus mirroring the formidable linguistic and cultural diversity of mankind. It brings together ideas at the intersection of a variety of disciplines and offers views from all over the world, with authors' cultural backgrounds being as varied as possible. From the very onset of the work carried at CERI, HGSE and beyond, it was a conscious choice to not focus on pedagogical aspects of language learning and to give authors as much freedom as possible – recognising and acknowledging diverging viewpoints, even when it comes to science, is a first step towards a greater global understanding – from an underlying agenda of every language learning endeavour. Moreover, even if reviewers recognised that "the whole is superior to the sum of the parts", this book was designed and written in order to allow the reader to focus on one or two chapters only, depending on his/her interests (please also note that unsigned boxes are written by the author(s) of the chapter in which they appear). Hence, each chapter can be read independently. Since the editors wanted to provide multiple angles, some ideas might be repeated in places, albeit with different tones and perspectives.

We hope this approach will enable policy makers and practitioners to see the complex issues involved in language learning for what they really are – because as Maslow warned, "If the only tool you have is a hammer, you tend to see every problem as a nail."

Bruno della Chiesa, Jessica Scott, Christina Hinton

Notes

1. Two key questions that, to a large extent, remain to be answered by neuroscience, though, are the following: Taking into perspective an entire life cycle, would it be possible to identify "sensitive" phases for certain types of language learning? If so, what is the optimal way to take into account these phases in the conception and definition of programmes in terms of curricula?
2. This is the topic CERI is tackling in the "Innovative Teaching for Effective Learning" project (from 2011 onwards).
3. The main questions identified but not sufficiently addressed in this book, due to lack of resources, are the following: How does one best measure the outcomes of these ways of language teaching/learning? How to assess the findings and circulate the new ideas brought to light? What type of link should be set between formal and informal learning? What role plays the "source language" (*i.e.* mother tongue) when it comes to a learning other languages?

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Part I

Globalisation, languages and motivations

Chapter 1

Learning languages in a globalising world

By Bruno della Chiesa *

This chapter situates the debates to follow in the present context of globalisation. Given the expectations of the labour market, the explosion of ubiquitous "communication" around the world and the massive movements of populations, language learning issues are more salient than ever. Even before formal instruction takes place in an individual's life, aspects to be explored crucially relate to the key relationship between language(s) and culture(s). From this perspective, while pointing at issues raised by formal learning, this chapter starts to explore the causal relationships between different forms of motivation (for language learning) and perceptions–representations of the world, especially as far as alterity is concerned, introducing the first innovative hypothesis to be presented in this book, entitled the "motivation vortex". Dealing with languages: Why now?

* Harvard University Graduate School of Education; OECD Centre for Educational Research and Development (CERI)

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Globalisation and the process of change in societies whose pluriculturality is becoming more and more marked, raise numerous questions, some unprecedented,[1] at least in their current scale. Migration flows and demographic trends at the world level are altering the socio-ethnological composition of our populations. It is a phenomenon that is contributing substantially, though not exclusively, to the development of the extremely rapid transitions affecting our economic, political and social structures and which, in addition, are causing major impacts on various aspects of our lives – not just in the OECD member countries (most of which, at the outset of the 21st century, are immigration countries) – but also elsewhere in the world (where it is mainly the reverse phenomenon of emigration that is being experienced). It is important, however, to qualify this rather simplistic classification, because some countries are experiencing both emigration and immigration *at the same time* (including some within the OECD), or are moving very rapidly from one to the other (certain southern European countries are a good example of this). The "dual" experience gained by the countries in question is valuable in fuelling thought and helping to broaden and expand people's viewpoints.

Cultural diversity represents potential enhancement but is also a source of colossal challenges to be met by these societies (Baier-Allen and Cucic, 2000; see also Cho; Christoph; O'Donnell; all this volume). No human organisation in modern times can claim to be unaffected by these issues which, in most cases, are at the forefront of political debates. There is at present a patent need to establish common languages and work towards increasing awareness of diversity-related problems (see Kenzhekhanuly, this volume). Prominent among these questions, of course, are the challenges facing our education systems (see Brink *et al*.; O'Donnell; Tarozzi; Hinton, all this volume). The media frequently echo the difficulties resulting from pluriculturality in the context of education (and especially, though not solely, in schools[2]). Finding themselves in the spotlight in this way makes those involved in education all the more sensitive to the issues at stake in that they often feel the media coverage of the problem is far from adequate (Chomsky, 1989; Bourdieu, 1996; della Chiesa, 1989a, 1989b, 1993, 2010a, 2010c). This is an issue tackled in the framework of this report, but more work on the comparative dimension is still needed: while all the OECD countries have to contend with the problems posed by the new forms of diversity, media coverage thereof differs from one country to another.

Nobody could therefore claim that the challenges are not the systems' responsibility, although the solutions proposed often differ according to the context and educational culture of the societies concerned, which will come as no surprise, of course. Some countries, for example, attach crucial importance in their education systems to the notion of national belonging, whereas others seem to be less concerned by this. Furthermore, while some countries like Canada, for instance, seek to encourage diversity (see Brink *et al*., this volume), others promote the idea of adhering to a set of values and principles which make up a national identity. These approaches impact on the expectations of the stakeholders of the educational community (teachers, students, parents…) and result in appreciable differences in the education policies and practices put in place, as well as in the curricula. Since as many countries and cultures as possible should be encompassed when it comes to these issues, the present report includes chapters which deal with regions outside the OECD area (see Belmont; Kenzhekhanuly; Welch; Worden, all this volume).

Box 1.1. **A stance on bilingualism and languages**

Q: "Is there any down side to the United States becoming a bilingual nation?"

*Barack Obama: "It is important that everyone learns English and that we have that process of binding ourselves together as a country. Every student should be learning a second language, because when you start getting into a debate about bilingual education, for example, now, I want to make sure that children who are coming out of Spanish-speaking households had the opportunity to learn and are not falling behind. If bilingual education helps them do that, I want to give them the opportunity. But I also want to make sure that English-speaking children are getting foreign languages because this world is becoming more interdependent and part of the process of America's continued leadership in the world is going to be our capacity to communicate across boundaries, across borders, and that's something frankly where we've fallen behind. Foreign languages is one of those areas that I think has been neglected. I want to put more resources into it." (*www.ontheissues.org/International/Barack_Obama_Immigration.htm*).*

I have always asked myself why it is that Americans, on average, do not speak other languages. One of the possible reasons for this could be that there is no necessity for it. The United States has been a self-sufficient country, which has also something to do with the fact that they are geographically isolated (this is another question to unpack). This is also tied to the English language as part of the "identity", or the development of the "self" as an American. Language plays a big part in this construction. One of my best American friends once said "we Americans are pathologically monolingual". I think she was right. Easy examples could be the banning of bilingual education in some states, and the fact that it is seen as a "problem" and not a resource. I think we are witnessing a shift in the world economy that will be interesting to watch. The next generations will need to have the "21st century skills" mentioned by so many, which include bridging cultural differences and using differing perspectives to increase innovation and the quality of work. The need to speak other languages to communicate with people from other countries will be a need (countries where English is not spoken by the average citizens that are part of the "emergent economies"). The question is if America will be willing to cross that bridge. It will require a lot of political will and a massive education campaign to convince the people of its importance. Speaking other languages will not only help us develop our first language, but our second, third, or even fourth language. Our metalinguistic awareness (ability to view and analyse language as an object, as a process and as a system) will expand even further. This will help us develop an awareness of the "other" and be able to think from other perspectives/ points of view.

Armida Lizárraga, Peru

Which "languages" are we talking about?

Language is an essential component of a given culture. This being the case, it follows that languages and cultures, cultural diversity and linguistic diversity are closely linked, and the papers collected here do not overlook the fact that the latter are part and parcel of the same complex phenomenon (Beacco, 1986; Coste, Moore and Zarate, 2009).

However, when separating language and culture in a heuristic manner, the focus can sometimes be on the teaching and learning of languages only or, to be more precise, on *language teaching/learning* (since any learning necessarily involves a teaching dimension, whether formal or informal, traditional or otherwise). But one can argue that an essential point is missed if culture is not always considered throughout the process (Azhar, 2009): while language is but one component of any *language/culture* complex – admittedly an

essential one, but nevertheless subordinate to the overall defining of a culture – the concept of "language" is hierarchically and logically subordinate to that of "culture", and the idea of linguistic identity comes within the broader framework of identity questions (Deutscher, 2010). The debate has been going on for decades, if not longer, and is becoming all the more virulent in that it is the actual notion of identity and alterity which is at stake here: "Us and Them" or "We and the Others" (see Todorov, 1989).

Among the myriad of labels used to characterise languages, archetypal "categories" have been examined in parallel and constant interaction between OECD's Centre for Educational Research and Innovation (CERI) and Harvard University Graduate School of Education (HGSE) between 2008 and 2011: Mother tongue(s), *lingua franca* (English or "Globish",[3] the simplified form of English nowadays used as a means of communication by many non-English speakers throughout the world), and non-native language(s)[4] (NNL: any language which, *for a given individual*, is not a "mother tongue"). The complex but crucial relations between languages (and hence between the various learning processes involved) in the cases referred to in the "Key Concepts" section of this book mean using a varied approach in view of the multiplicity of situations. Lastly, it should be noted that the distinctions between the different statuses of languages are only rarely as hermetically separate as any classification might suggest.[5] Often, in fact, people find themselves somewhere between idealised representations, moving within a continuum between languages[6] and cultures as they themselves evolve (the case of "Spanglish", spoken by certain Latin Americans living in the United States, is an excellent example of this, and has been fairly extensively documented and described. This sort of situation is encountered everywhere, in different forms; international comparisons could be useful in this connection). More and more individuals and families are changing countries, moving across borders, languages and cultures. Although migrants have differing levels of education, many must in any event learn a second or even a third language (see Cho; Christoph; O'Donnell, all this volume). Doing so (and acquiring the culture "that goes with it") is of crucial importance for economic and also social integration (see Rodriguez-Chamussy, Lopez Calva and Miyamoto, this volume).

Formal and traditional educational contexts: Some issues

In the context of formal instruction, language learning has in many cases been largely shaped by political choices. The latter, informed by hands-on experience and empirical conclusions, have all too often ended in failure when set against the objectives officially drawn up. Decision makers seek to improve results in their respective education systems by means of innovative policies, new methods and appropriate teacher training. However, the results are often meagre, to say the least. Why is it that, with just a few exceptions, education systems (particularly at school level) seem to be so staggeringly incapable of providing effective training in these areas?

At the heart of what is often the subject of an intense ideological debate (which is inevitable, and, to some extent at least, desirable; see Beacco, 1986), providing information derived from research (in the natural and social sciences) from a forward-looking viewpoint, would make it easier to take a step backwards and look at the values, methods and objectives fuelling the current debate in a more informed manner – even if science should never replace ethics, especially when it comes to political decisions and policy making (della Chiesa, 2010c).

Because of the globalisation that we are living with, members of all social groups (whether natives of their country of residence or migrants) have to contend with major challenges when it comes to acquiring linguistic competencies. The command of various languages can become one of the fundamental objectives of education,[7] if this is not already the case. What is involved is the acquisition of knowledge (*savoirs),* know-how (*savoir-faire)*, and interpersonal skills (*savoir-être)*, which has a considerable impact on economic performance and social integration by virtue of defining – redefining, even – people's cultural identity (Markus and Kitayama, 1991; see della Chiesa, Chapter 25, this volume).

Contextual factors of motivation and success

Motivation towards language learning may already be determined to a large extent even before formal learning takes place. Education systems have to take into consideration perceptions that are already instilled; as individual learners get older, their representations of identity (and, hence, alterity, the two concepts being linked by a reciprocal polarity of a causal nature) are solidly rooted and, thus, likely to turn into either a powerful motivational springboard or, conversely, a powerful resistance to learning. Motivation to learn languages can be hypothesised as driven by representations such as values and beliefs that shape an individual's worldview: for many, if not all, people, language is inseparable from cultural identity; it is a marker of cultural membership, and because people place values on different cultural groups, NNL learning involves decisions about values.

It should be stressed here that the various components of motivation and their respective weights can certainly be distinguished between children and adults. Motivational factors for adults include professional elements and/or personal ones (being married to a native speaker of that language, for instance), lifestyle, connectedness with a specific culture or society, or learning for the joy of learning. A child, on the other hand, may not experience as many motivation factors as an adult. Children are usually required to learn a non-native language by their parents or schools. There are some cases where children are highly motivated to learn another language, and some of these motivators include cross-cultural family ties, media impact or a natural competitiveness. Motivation is a somewhat fragile key that needs to be nurtured in the classroom. Non-native language educators may need to come up with innovative strategies to keep this motivation high and reinforce the students' enthusiasm for learning (see Melzi, this volume).

By way of example, while everyone intuitively realises that one's mother tongue (and/or school language) has a major impact on learning a non-native language, people should also come to realise that learning another language also has a significant effect on the learning of one's mother tongue. This is a point with a host of consequences when it comes to drawing up education policies and curricula (della Chiesa, 2010b). What is already an old debate has recently come back to the fore in some countries. A lot of people are arguing in favour of introducing NNL teaching in schools at a very early age (primary school or even sooner), basing their arguments in some cases on, *inter alia*, findings of neuroscientific research on cerebral plasticity. Others are worried that this might be at the expense of acquiring a sound knowledge of one's mother tongue: what is really at stake here is that learning one or more languages successfully might have consequences in terms of identity perception, sense of belonging, and maybe, at the end of the day, loyalty to one language group or another. The consciously or not hidden agenda here is neither technical nor scientific, but political. A working hypothesis might be expressed as follows: experience suggests that exposure to another language, far from being a hindrance when it

comes to learning one's mother tongue, in fact makes for a much better understanding of it. The hypothesis is that the greater an individual's knowledge of one (or more) non-native languages, the more developed his metalinguistic reflection on his mother tongue will be, making for more sophisticated analysis and a closer understanding of the structures of the said mother tongue. According to this argument, NNL learning has a decisive and positive impact on a person's understanding of his mother tongue, and, as research recently has shown, even on a person's cognitive functioning (Bialystok *et al*., 2009). Studies on the different forms of bilingualism, in different countries and contexts, can usefully be canvassed to fuel the debate (see Worden, this volume). Moreover, it has been shown that infants have the innate capacity to learn two languages from birth and that an early dual language exposure does not delay development in either language. Arguments against early NNL learning cannot be seriously grounded in worries related to language mastery or in the technical results of the learning processes, on the contrary; however, other arguments, of a completely different nature (mostly political and generally more prevalent in former colonial powers: see *User's Guide*, and Chang, this volume), can be raised against early exposure. Whatever one thinks about this, it is necessary to debunk the myths on language competencies, which only too often are used as pretexts for "arguments" opposed to early introduction to languages in education systems.

Given all this, the instruction of a non-native language can arguably be one of the most delicate and challenging of all academic subject areas. NNL learning and teaching deals not only with didactics (of languages: application of phonetics, grammar, syntax, and vocabulary rules and knowledge), but also with understanding values, ideologies and histories of people-groups[8] (Beacco, 1986; della Chiesa, 1989b; Porcher, 2004; Porcher and Abdallah-Pretceille, 1996). When it comes to defining policies and practices, one should, then, weave in lessons of history as well as take into account research insights on social norms, as related to contemporary cultural, economic and political phenomena. It may be the price to pay to enable individual learners, on average, to better acquire the desired linguistic fluency and start to develop cultural competences and awareness.

Environmental factors such as attitudes/norms have an impact on individual representations. If a child's environment holds positive attitudes toward a certain language/culture continuum, the child is likely, at least in early years, to develop similar attitudes towards this language/culture continuum. The media, a potential source of informal learning and a part of the environment, also shape motivations, and their power in shaping people's perceptions goes beyond imparting an image of a culture, thus strongly affecting motivation to learn, particularly NNL(s). The immediate and mediate environment affects motivation, and therefore learning results.

This suggests a direct causal relationship between representations and motivation. In reality, the direction of causation can be reversed, and motivation will also affect representations. One's motivations not only influence ways of viewing the world and self, but lead to constructing new understandings of the environment associated to synaptic plasticity (see Chanjavanakul, this volume). Conversely, the way one views the world and speakers of a NNL will influence motivation for NNL learning. In sum, provided of course learning opportunities are available (see Box 25.5, this volume), the more positive one's image of the other, the more motivated one will be to learn another's language and the more likely one will be successful in doing so. A metaphor, the "Motivation Vortex", tries to capture the ideas being developed in order to link perceptions, representations, motivation, and relative NNL learning success/failure in a given environment.

Box 1.2. **Motivation vortex** (by Bruno della Chiesa, 2007-2010)

In what has been called the "Army Method" of non-native language teaching during WWII, soldiers (spies) being sent to war were successfully taught a language in a few months prior to deployment. Since the method in itself proved later on to be mostly inadequate in terms of leading to any successful NNL learning/teaching developments, this extreme situation provides a textbook example of exactly how important motivation can be in language education. In this particular case, it was not the method itself which was effective, but the motivation – survival during wartime in an enemy country – for learning the language. Closer to us, the remarkable success of foreign Sumo wrestlers learning Japanese as young adults (H. Koizumi, personal communication, 2008) illustrates the same point: their career depends among other factors on their ability to adequately communicate in Japanese, and this provides a powerful motivation.

Everyone is capable of learning at least one language (one's mother tongue), and, provided motivation and opportunity (see Clapp's Box 25.5, this volume) are there, everyone is capable of learning another one or several other ones.

Not only will individual differences in learning and motivation play a key role in the acquisition of non-native languages, but also whether this motivation is intrinsic (learning a language because one wants to learn it, for the love of learning, or due to an interest in a culture and/or language) or extrinsic (wanting to learn a language for outside gain, such as economic advantage; see Rodriguez-Chamussy, Lopez-Calva and Miyamoto, this volume), or a combination of both (the more likely scenario in most cases). There are also aspects of motivation specific to the learning of NNL. For some, the desire (or the need) to be valued by members of a given cultural group is motivational in terms of learning the language of that culture. Moreover, self-perception of linguistic ability also can either help or hinder language acquisition: like for other matters, if a student feels incompetent, he or she will lose motivation and never become fluent (see Melzi, this volume).

The "motivation circle hypothesis" (Figure 1.1), which has evolved into a "motivation vortex hypothesis" (Figure 1.2) provides a metaphor of the relationship between motivation and non-native language learning. One's feelings towards and perceptions of another culture strongly affects one's motivation to learn the language of that culture. This motivation, in turn, can lead to better outcomes in terms of language acquisition, in either the family or the school environment. These experiences of motivation and fluency may also lead to increased positive perception of the target culture/language continuum (ascending vortex). Economic and social benefits of learning a language (see Rodriguez-Chamussy, Lopez-Calva and Miyamoto, this volume), or at least the perception of these benefits, are also a factor in the motivation vortex, leading to increased motivation as benefits are actually realised. A better understanding of types of motivation and how they impact the acquisition of NNL is essential if we hope to become more successful at language teaching and learning.

The outcome of this vortex may not always be positive, however. A reverse motivation vortex occurs if negative feelings (xenophobia) exist within an individual or that individual's environment (*i.e.* family, peer, educational, and media influences) about a particular cultural group. One would be unlikely to feel motivated to learn the language of a culture that one has negative associations with. As a result of this lack of motivation, successful language learning and mastery are unlikely to occur (descending vortex). Moreover, early experiences of failure in language learning may also cause language students to lose motivation (conversely, early experiences of success are likely to foster positive feelings of motivation, thus giving students the push they need to be successful in the future).

I herewith hypothesise that xenophobia is a powerful factor of failure in NNL learning. The notion of "xenophobia" is understood here in a literal way. To use the etymology, with xenophobia I mean first and foremost "fear of what is alien", specifically a fear of foreigners or strangers, but keeping in mind the second sense of the word: dislike or hatred of persons of a different ethnic or national origin. The relationship between dislike and fear of that which is unknown or different from oneself is an interesting one to explore.

Figure 1.1. **Motivation circle hypothesis (2007)**

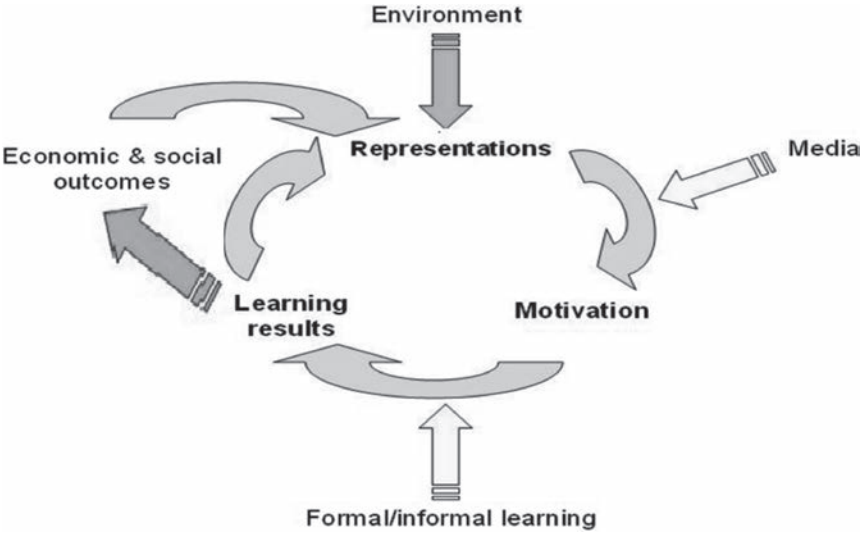
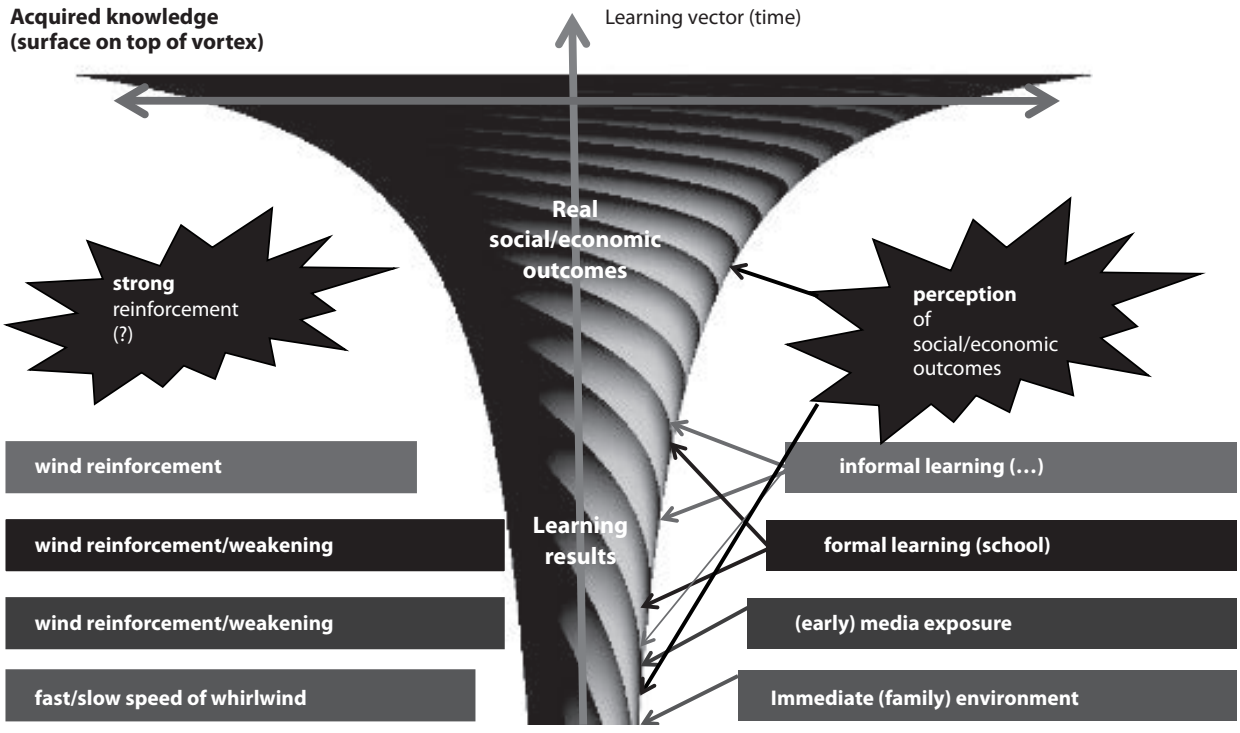


Figure 1.2. **Motivation vortex hypothesis, positive (2010)**



Box 1.3. **About the motivation vortex**

Something I have been pondering is how one un-learns, or becomes less fluent, in a language – particularly a mother tongue. I grew up with a great-grandmother whose native language was French, but who had spent at least ¾ of her life in America and spoke a strange mixture of French and English, and was half fluent in both. Another example that is even more pressing for me is that of Swahili in East Africa – specifically Kenya and Tanzania, where there is almost a stigma attached to Swahili; many times people will choose to converse in English, even if there are no native speakers around, and in some cases it seemed to me that there was a kind of pride in, or striving to, use English to the point of losing fluency in Swahili. Is there an inverse version of the vortex?

Jessica Welch, United States

When I first saw the vortex representation, I thought I had the idea of it, but the more I look at it, the more I find myself dissatisfied with the diagram. For one, this tornado vortex is insufficient in truly describing the continued impact of learning results and socio-economic outcomes because they are placed at different levels in the diagram. I think that the vortex fails to show how learning results and real socio-economic outcomes continue to have an effect on the acquired knowledge. In this sense, I think I appreciate the initial loop model more because it shows a continual process, rather than a stratified one.

Sarah Fuchs, United States

Are theories useful?

Theories and practices developed on NNL learning in the last century mostly derive from linguistics (see Bollinger, this volume). Since the middle of the 20th century, a number of linguistic theories have constellated the sky of language didactics (still sometimes called "Applied Linguistics", a not only out-of-date but also very restrictive label). Some models are taken from the field of education and psychology and include *a)* disciplines considered to be closely related to language learning, such as behavioural psychology, as in Skinner's stimulus-response model; *b)* descriptive linguistics, starting from Saussure's structuralist linguistic theory and advancing to Chomsky's concept of generative grammar; *c)* theories of transition, such as Krashen's "Input" hypothesis in second language acquisition; and *d)* theories based on psycholinguistics, socio-linguistics or disciplines whose primary objects of study impinge upon the topics of language, culture and non-native language learning (for instance, approaches like that of Lévi-Strauss in anthropology or of Bourdieu in sociology). However, we cannot expect to find much in these interesting theories to answer the questions we are asking, because these various schools show(ed) little or no particular interest in them. Hence, above all else, the aim of this book is to map the language/culture realities (see Brink *et al.*, this volume), and to clarify the reasons underlying the relative successes or failures in the field of teaching/learning non-native language(s). A review of their work affords us the opportunity to discard those theoretical questions, topics or concepts that are less relevant within our framework than it may seem at first glance, such as the distinction between competence and performance, the debates on modularity, or the controversy between "nature" and "nurture" that neuroscience makes possible to move beyond.

It is necessary to look for answers elsewhere (which doesn't completely disqualify linguistics, of course). Often the most neglected aspects of developing theories (or practices,

for that matter) relating to NNL learning is that of the contextual elements that inform the conditions of learning. It is important to identify the "tipping point" at which stage collective perceptions and representations influence how attracted learners feel, on various levels, to particular languages. Too often, the supposed characteristics of the target language are used to justify the choices: one still regularly hears prejudices or preconceived ideas which do not make any sense (such as "this is a difficult language", or conversely, "this is an easy language": the notion of "easy/difficult" entirely depends on the level of performance for which one aims, in turn related to what one wants to be able to do with the language learned, as well as to the level of motivation and therefore effort one is willing to put into learning a language). What such myths are "hiding" are in fact value judgments on the speakers of a given language; in other words, on the culture(s) associated with the target language (this is the first way to explain, for instance, the fluctuations in the number of French students choosing to learn German in school during the last century…). The traditional disciplines of reference for language learning – linguistics, in particular – are not in a position to give an account of these kinds of phenomena. Therefore, it is essential to seek explanations and remedies in other disciplines. History, to begin with, brings to light certain determining factors in the sense that historical trends and events deeply inform and/or directly shape representations of cultures, ethnicities, behaviours and customs. This is true for philosophy as well, which enables us to approach the complexity of questions relative to concepts of identity and alterity – self and other – and to illuminate the debate which opposes notions of universalism (often an unconscious ethnocentrism) to those of relativism (whose excesses are not less dangerous: it is the continuity of humankind which is at stake here).

In order to understand why some systems are more successful in teaching languages, this book draws, at the social level, on insights gained by anthropology and sociology as well as history and philosophy. This involves identifying the language policies and non-native language teaching practices in use in the different contexts considered, and studying how they are linked (or attributable) to historical legacies, to social and cultural representations and to political wishes.

Can plurilinguality help move towards a more "global awareness"?

One of the relatively direct consequences of access to plurilinguality is the access to a more or less advanced form of pluriculturality, or at least the birth of an awareness of the aforesaid pluriculturality, with all it implies in terms of vision(s) of the world. Perceptions of one's self, one's identity and one's culture are influenced by successful language learning because it also raises self-awareness and cultural awareness. As already stated, language is inseparable from cultural identity, and hence NNL learning and teaching involves decisions and consequences about cultural values. Beyond the aforementioned cultural awareness, becoming at least partly plurilingual and pluricultural might foster a form of global awareness (Noddings, 2005; see Hinton, this volume). Raising global awareness, at individual as well as societal level, might well represent, in the framework of "local/global" dialectics, a key to a better (reception of) globalisation, thus contributing to a better world. Let's dream: it is not forbidden yet…

Box 1.4. **"Doxa" to explain success rates in language teaching?**

The success rate in teaching NNLs varies across school systems. Why? Why are some countries more successful than others in NLL teaching? My hypothesis: difference in success rate can be explained in part by the doxa of language teaching as perpetuated through the education system. The two countries I would like to focus on are South Korea and Germany.

"Doxa" as Bourdieu explains, refers to everything that is taken for granted in a society. It includes assumptions and beliefs that ultimately have the power to solidify and perpetuate social limitations. Each school system operates within a different doxa that determines and limits its success in NLL teaching.

Let's take the case of teaching English as a NNL as an example. In Germany, in most Länder, students start learning English upon entering one of the three tracks after finishing elementary school after 4th grade at the age of around 10. There are some schools and Länder that have begun to start non-native instruction earlier (in elementary school). Instruction of English after elementary school varies between four and more school periods, depending on the year in school and programmes within a school. For example, in my German school (in Duisburg), we had a separate bilingual programme that about one-third of the students of our grade could choose to enter, so that they would receive additional English instruction in subjects like geography, history and politics. On the other hand, in South Korea students start learning English much earlier in elementary school if not even kindergarten. Parents contract for their children often times private tutors or send them to after-school programmes or cram schools. With English being one of the subjects tested on the high stakes college entrance exam, getting a good score is of high priority in South Korea. Despite those vast amount of resources spent in English education and the external high stakes in mastering English in Korea, it seems though that many Korean students still struggle with English language speech production, while many German students seem to be more at ease in speaking in English in spite of fewer hours of instruction and less pressure to excel in that particular language for university entrance. Is it due to the fact that German and English are in the same language family, and thus for German students it is easier to pick up English and speak it? Can it be perhaps explained with the geographic closeness of Germany to the United Kingdom and the number of tourists and business people who come to Germany and speak English? While those might be plausible explanations, I would like to suggest an additional factor that might explain to some degree the difference in outcome in English language acquisition, in particular when it comes to speech production with the class format and doxa of NLL teaching in both countries.

In my English classes as well as in any other class in my German school, 50% of the final grade was participation in class. If you didn't participate, your grade would suffer considerably. Practically, in a NNL class you would have to produce spoken language. This leads to a culture in class that cultivated a lot of discussions in English on various topics like literature, history, politics or geography. Students were engaged in speaking it with one another and the teacher. On the other hand, in South Korea, participation in class is less frequent and oral contributions are not counted for the final grade. Therefore, students are less pushed and engaged in producing speech in English with the exceptions of memorised lines and practised presentations. Practically, Korean students are trained to excel in grammar exercises, vocabulary memorisation, written and oral text comprehension, while lagging behind in learning how to express themselves orally. This phenomenon could be explained with the existence of a particular kind of doxa in both places.

The culture in German schools fosters a more interactive language learning environment in which the students are trained to use the language skills in class to engage each other and the teacher. Diverse opinions and view points are encouraged and nurtured. It is acceptable and even seen as a sign of intelligence to question and challenge the teacher. On the other

Box 1.4. **"Doxa" to explain success rates in language teaching?** *(continued)*

hand, in Korean culture with Confucian traditions and values, the teacher takes a very central role in the classroom experience. Challenging the teacher with pointed questions would be equal to questioning his or her authority and violate the concept of *chae-myun* (face-saving). Maintaining it is tantamount to protecting dignity, honour and respect. In other words, respecting the teacher's *chae-myun* might hinder students from correcting or disagreeing with the teacher. Another concept is *noon-chi*, which literally means "measuring with the eyes" and refers to "learning to pick up external cues in order to choose a course of action that is both non-offensive and appropriate." In Korea, students are brought up with a high level of self-awareness and self-consciousness to the extent that they feel that they could only participate when they have something important and of high quality to say, which is determined by the teacher's reaction. It would be embarrassing to say something incorrect, redundant or irrelevant. This makes speaking up in class in a NNL even more so challenging because making mistakes publicly by speaking in the NNL incorrectly with wrong use of verbs, pronunciation, grammar etc. has such high stakes for one's image.

Overall, in addition to the research in NNL teaching on instructional methods, school structure, language relatedness, I believe there needs to be more substantial research on how the doxa of particular cultures affect the NNL teaching success. Furthermore, it would be valuable to continue comparing NNL teaching in different countries and to learn from each other. For example, German schools could benefit from the approach of English grammar instructions in South Korea, while South Korean schools could benefit from fostering oral speech production by organising more class discussions. Finally, as the world community gets closer and closer, it will be fascinating to see how NNL teaching is to evolve in the 21st century.

Samuel Kim, Germany–Korea

Notes

1. Only partly, in that the experience garnered by certain countries during the 20th century (when their societies had to contend with migration flows which had to be managed in terms of education and, more generally, at the social and societal levels) may no doubt prove useful. This is one reason why, without of course confusing questions that arose in the years 1920-30 or 1960-70 with what is happening today, studies should consider history. Also, when "deep-rooted" cultural representations are involved, as is often the case, it is necessary to canvass the experience from earlier periods.

2. In most OECD countries, PISA studies offer an undeniable source of information regarding the relative performance of "foreign-born" 15-year-olds, whether the first or second generation, in comparison to the "natives", especially in terms of reading (a competency partly related to the command of language). It is striking to observe that beyond the vast irregularities amongst countries, the "natives" always perform better, regardless of the context. In addition, it is also interesting to look at these PISA results (OECD, 2006) in comparison with statistics related to employment: in all 16 countries surveyed, there is often a 1 to 2 unemployment ratio between "natives" and "non-natives", if not more (from 1 to 3.3 in at least one case). The participation rates registered confirm this reality: varying between 50.2% and 70.1% in 2004 for migrants (confirming the profound disparities among countries) they must be compared to the 57.4% to 77.4% range corresponding to the natives in equal contexts.

3. On top of the technical questions about the role played by the respective linguistic characteristics of both the mother tongue and the target language when it comes to learning an NNL, which is

only quickly alluded to here (see Box 1.4, this volume), a question unfortunately not dealt with in detail in the present report is that of the relations between the various languages in the world and the *lingua franca*. The first step would involve identifying, as accurately as possible, the practices in use in different contexts (whether these be linguistic policies or teaching/learning practices), and studying in what way said practices are linked (or attributable) to historical legacies, to social and cultural representations and to political wishes. Moreover, when it comes to teaching and learning English outside of the Anglo-Saxon world, an important issue is that of the relations between the various languages in the world and the current *lingua franca*. Because the perceptions and representations of a given language are directly related to the perceptions and representations of the culture attached to it, a first open question is the following: Is there a "transculture" attached to *Globish*? In other words, can one talk about a current *cultura franca*? If yes, what would that be? While there is obviously a culture (or, to be more precise, a closely related set of cultures) linked to the English language, identifying a *cultura franca* linked to *Globish* is certainly difficult – and the representations are likely to widely vary across countries and regions of the world. To adopt a position (even as to the existence or otherwise of the said *cultura franca*) without running into all the ideological pitfalls that litter the ground seems impossible. Another aspect of this discussion is the following: "With globalisation, the instrumental value of learning English should be rather high for everyone, considering that knowing English is becoming a "must"/a default in the globalised world. In which case, instrumental value could potentially almost be disregarded for English acquisition while the differences in the intrinsic motivations could be particularly influential on the outcomes of NNL acquisition. Thus, relative to teaching other languages, making English fun would increase the students' learning interest more than emphasising the rewards of learning English." (Katarzyna Kubacka, personal communication , October 2011).

4. NNL, a rather heavy acronym which refers to the learning process of individuals, was preferred to other more current terms, such as "foreign language", which is ambiguous and thus difficult to define in officially multilingual contexts.

5. To illustrate the complexity described *via* the language categories outlined in the "Key Concepts" section, let us imagine an individual who acquires his mother tongue from parents who come from an area which is linguistically and culturally foreign to the country of residence. If the region where the family lives has a "local" language with no official status in the education system, the individual will quite soon be faced with this situation (in surroundings other than those of the family), but his school language will be different from mother tongue and local language. The *lingua franca* will, in turn, be different from the first three. Any other language/culture mix will be considered a "non-native language/culture". Obviously, this is an extreme case, but another extreme case which does in fact occur frequently, is that of an individual whose mother tongue, school language and *lingua franca* are one and the same.

6. "School language", yet another category, will require specific attention in the future, especially since it is recognised that mastering (successful learning of) the language used at school is essential to all subsequent learning, not just that of other languages. Hence looking at the links between learning one's mother tongue and learning the language used at school, when they are not the same (the case of sociolects – a specific form of a given language spoken by a particular social group – being only one manifestation of this phenomenon) could not only be the subject of a specific study, but represents a promising research avenue in the years to come.

7. Particular emphasis was placed on this point by the senior officials responsible for education policy in the OECD countries at their Copenhagen meeting in September 2005.

8. Most of the present report deals with this second aspect, the first one, widely explored elsewhere for decades, having been only marginally addressed.

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Chapter 2

Motivation and second language acquisition

By Gigliana Melzi * and Adina R. Schick *

This chapter examines past research on the role motivation plays in the success of learning a second language. We begin by providing a comprehensive overview of the key conceptual models that have applied the construct of motivation to second language acquisition, namely Gardner and Lambert's seminal Socio-educational Model of Motivation on Second Language Acquisition. Next, we present an overview of more contemporary conceptual models, which are more inclusive and integrative in nature, and examine how different aspects of the learner and the learning situation might influence motivation and learning outcomes. Then, we turn to the operationalisation and measurement of second language motivation and present an overview of recent empirical work on integrative motivation and second language learning. In our final section, we discuss group differences in motivation and second language acquisition, with an emphasis on the influence of gender, age and culture/ethnicity.

* New York University

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

The scope of the field of second language acquisition (SLA) is quite broad, encompassing diverse disciplines (*e.g.* psychology, education, linguistics, and anthropology) and representing a large variety of theoretical perspectives and methodologies. In its broadest definition the field of SLA is concerned with the process of "acquisition and loss of second (third, etc.) languages or dialects by children and adults, learning naturalistically and/or with the aid of formal instruction, as individuals or in groups, in "foreign", second language or *lingua franca* settings" (Doughty and Long, 2003, p. 3). Given this wide scope of inquiry, the present review, by necessity, must be selective. Thus in this review, second language acquisition is defined as learning a language *after* the native or first language is in place (*e.g.* Ritchie and Bhatia, 1996).

From this perspective, SLA is different from and should not be confused with bilingual language acquisition (BLA). Although the outcome of both SLA and BLA is to become "bilingual[9]", bilingual language acquisition refers to the process of acquiring a second language (L2) at the time when the person is still developing the first language (L1). The bilingual learning process can occur simultaneously – that is learning L1 and L2 together and usually between the ages of 0-3 years (*i.e.* a simultaneous bilingual) or sequentially – that is adding L2 when L1 acquisition is underway but not yet established, usually between 3-7 years old (*i.e.* a sequential bilingual). In both situations, the assumption is that the child's exposure to both L1 and L2 will continue, otherwise development in one of the languages will be halted or delayed. Therefore, in this review two key distinctions are made between second language learners and bilingual language learners. First, the L2 learner begins the language learning process after the time when L1 is normally acquired (some time during or after puberty). Second, the L2 learner has an established language system. These two distinctions are reflected in both the process and the potential outcomes of L2 learning. As a result, the present review will focus mostly on the L2 acquisition of adolescents and adults rather than that of children.

Although the process (*e.g.* rates and developmental paths) of SLA is of importance for scholars of language, the present review will pay particular attention to the outcome of SLA that is, the ultimate attainment of the process of learning, whether or not it is native-like proficiency in L2. Twenty years of research on L2 attainment has identified numerous variables, both exogenous and endogenous to the individual, that are predictive of the L2 outcomes. Exogenous variables, for example include, age of acquisition, which is defined as the age at which the learner becomes immersed in the L2 context; age of first exposure through formal settings (*i.e.* classroom) or family visits or to the country where L2 is spoken; amount of contact with L2 in both spoken and written modalities, preferred over length of residence as residence does not ensure exposure to L2; relative use of L1 and L2 in daily activities; amount of formal L2 instruction as a NNL and use of L2 in other school content areas (Birdsong, 2005).

Endogenous variables constitute what researchers have identified as responsible for *individual differences* in the outcome of L2 acquisition and, thus will play a more central role in the present discussion. Individual differences are defined as universal dimensions or constructs (*i.e.* are present in all individuals) that are relatively stable in the individual, but vary systematically across individuals (*i.e.* making individuals unique) (Dörnyei, 2005).

Individual differences research has generated the most consistent predictors of L2 outcomes, aside from age of acquisition, yielding multiple correlations of .50 and above (Dörnyei, 2003, 2006). The variables most studied include motivation, personality, language aptitude, learning styles and strategies. Of these variables, motivation has yielded the most predictive outcomes and is associated with a long trajectory of empirical and conceptual work.

Motivation is a psychological construct defined as the impetus underlying behaviour or action. The study of motivation began in the mid-twentieth century and has encompassed numerous theoretical perspectives that conceptualise motivation in distinct ways. This diversity in perspectives responds to the highly complex and multi-faceted nature of the construct itself. The components of motivation that lead individuals to act in a particular manner within specified contexts are intertwined with both the psychology of the individual and the contextual factors of the situations in which the learning takes place. Of particular relevance to our discussion of L2 motivation are those psychological theories that address achievement motivation. Achievement motivation refers specifically to the motivation that is relevant to the performance in learning tasks (Wigfield *et al*., 2006). Although a review of the main theories and research on achievement motivation goes well beyond the scope of the present review, it is important to situate our discussion of L2 motivation within the larger understanding of achievement motivation not only to appreciate the complexity of motivation as a construct, but also to place L2 motivation theoretical perspectives and research within this larger framework.

Current psychological research on achievement motivation focuses on three key aspects: beliefs, values and goals. The focus on these three aspects places the current research and theory on motivation within a socio-cognitive tradition of psychology, which emphasises the social and cognitive processes (in contrast to behavioural and biological) involved in psychological phenomena. The central constructs addressed in the various theoretical perspectives and accompanying empirical efforts include: learner's self-efficacy and other competence-related beliefs, learner's goals for the learning task, learner's interest and intrinsic motivation for learning, and the value placed on achievement. Three main theoretical branches have been distinguished (Wigfield *et al*., 2006). The first branch includes theories that emphasise competence-related beliefs, such as the individuals' perceptions and appraisals about their general and specific ability to execute a task at hand and how these influence their persistence and readiness to expend effort towards the learning task. Research supports the idea that higher appraisals of self-worth and higher levels of self-efficacy are associated with a more successful performance in learning (*e.g.* Bandura, 1977, 1997; Dweck, 2002; Elliot and Dweck, 2005, Weiner, 1985, 2004, 2005). The second branch includes theories that emphasise the goals, motives, and value of engaging in the learning process (*e.g.* Csikszenmihalyi, 1988; Deci and Ryan, 1985), in other words the reasons that lead individuals to engage in a learning task and persist in attaining a particular goal. Research from this perspective, for the most part, finds that intrinsic motivation (*i.e.* internal rewards) yields the best learning outcomes. However, current research also shows that extrinsic motivation (instrumental rewards) does play a powerful role in learning and that intrinsic/extrinsic motivation might be better thought of as a continuum rather than as dichotomies. The third and final branch includes more recent perspectives that highlight the relationship between motivation, self-regulation, and volition (*e.g.* Pintrich, 2000a, 2000b; Schunck and Ertmer, 2000; Zimmerman, 2000). Work from this tradition examines how multiple and diverse cognitive, emotional, and social factors shape an individual's engagement and persistence in achieving a learning goal (see Wigfield *et al*., 2006 for a review of psychological approaches to achievement motivation).

Scholarly work on motivation in second language acquisition has relied heavily on the second theoretical branch – those focusing on examining the purpose and value of engaging in a particular learning task. Within this perspective, a theory that is particularly relevant in L2 motivation research, and therefore deserves more attention, is the self-determination theory (SDT) (Deci and Ryan, 1985; Ryan and Deci, 2000). Within this perspective, individuals differ in the degree to which they are motivated and also in the types of motivation that lead to action. SDT identifies three regulatory styles which lead to action. These regulatory styles are conceptualised as different motives (reasons, goals or orientations), including amotivation, intrinsic motivation, and extrinsic motivation. Amotivation is considered the regulatory state characterised by an absence of intentionality and causality stemming from lack of perceived competence, value in the activity, or relevance. Intrinsic motivation refers to self-driven motives; that is an individual engages in an activity because the activity is inherently enjoyable, interesting, or rewarding. Extrinsic motivation refers to the instrumental motives that lead the individual to activity as a way to attain a separate desired outcome.

Decades of research has unequivocally shown that the quality of experience and level of performance in a particular task vary depending on the type of motivation that fuels engagement. Results of empirical investigations have consistently showed the learning that occurs as a result of intrinsic motivation is more meaningful and of higher quality than that stemming from extrinsic motives (see Ryan and Deci, 2000). However, as most learning tasks do not necessarily trigger intrinsic motivation, extrinsic motivation plays an equally important role in determining learning outcomes. As a result, SDT conceptualises intrinsic and extrinsic motivation as a continuum, rather than as a dichotomy. Motives are organised in the continuum based upon the degree of autonomy and internalisation (*i.e.* the relative importance of the activity for the self or self-determination). Whereas intrinsic motivation is the most internalised, autonomous and self-determined form of motivation, extrinsic motivation is subdivided into four regulation types that vary from the most to the least autonomous. Thus, at one end of the continuum, is intrinsic motivation – individuals are motivated to act because engagement and performance are inherently related to self-definition or are inherently associated with the values and needs of the self. At the other end of the continuum is the extreme type of extrinsic motivation: external regulation. External regulation is the least autonomous form of motivation; the self is least involved and actions are performed solely for the purpose of gaining external rewards or avoiding punishment. Introjected regulation is the second type of extrinsic motivation and is more connected to the self through feelings of self worth. Thus, individuals perform actions as a way to maintain or enhance self-esteem. Introjection is still considered to be controlled because actions are performed as a way to avoid negative feelings or to achieve positive feelings about the self. The third, more autonomous form of extrinsic motivation is regulation through identification. Individuals are moved to action because engagement and performance in the specific activity are perceived as valuable to the self. Finally, the most autonomous form of extrinsic motivation is integrated regulation. Attained through self-examination and reflection, individuals engage, persist, and achieve because doing so has value beyond that of the specific activity. They have integrated the value of the specific activity with other values and needs that define the self. The adoption of a particular regulation is not predetermined and can vary at any point in time. In conclusion, motivation is a complex and dynamic construct that depends on many individual and environmental factors. This complexity is evident in the multiplicity of approaches and the scope of the investigations.

Motivation and second language acquisition

Conceptual models

In the 1960s, Canadian social psychologists Gardner and Lambert along with other collaborators applied the construct of motivation to the acquisition of a second language. Their application of motivation to L2 acquisition was a direct consequence of the social reality of their country "characterised by the often confrontational co-existence of the Anglophone and Francophone communities" (Dörnyei, 2005, p. 67). Gardner and his collaborators believed that language was the most direct route towards intercultural exchange. In other words, the acquisition of a particular language by an individual has the potential to enhance intercultural communication between the learner's community and the community of the target language. Their model was concerned with the motivations behind the language learning process – what drives individuals to begin learning a second language and what sustains them through the learning process. Gardner and Lambert (1959) argued that the motivation behind L2 acquisition (*i.e.* L2 motivation) differs from that fuelling other learning processes because language is inherently related to socio-cultural identities and socio-political factors.

Contemporary L2 motivation research has shifted away from the socio-educational model towards more cognitive and integrative explanations. The newer conceptual approaches were inspired by the shift in general psychology toward the exploration of the "black box" (*i.e.* inside the mind) in the 1980s. The shift in focus allowed for newer interpretations of the connection between thought and action, as well as a greater appreciation of the role that social context plays in any learning process or activity. In motivational research this shift translated in the acknowledgement of self-perceptions about ability, potential, limitations, and the task, and how these might influence achievement. However, researchers did not reject Gardner's model in its entirety, but attempted to complement the ideas put forth by the socio-educational model. Therefore, it is of utmost importance, to begin our discussion of L2 motivation with Gardner and Lambert's Socio-educational Model.

Socio-educational model of motivation and second language acquisition

In the initial formulation of the socio-educational model of SLA, Gardner and Lambert (1959) identified two factors as contributing equally to students' L2 learning success: language aptitude (or ability) and (integrative) motivation. The latter was defined as an individual's "willingness to be like valued members of the (L2) language community" (Gardner and Lambert, 1959, p. 271). Motivation was assessed through: *a)* attitudes towards French Canadians, *b)* motivation to learn French, and *c)* orientation toward learning French (*i.e.* integrative or instrumental reasons underlying the L2 learning process). Gardner and Lambert's model dominated the field from the 1960s until the 1990s. Most of the work conducted over these three decades focused on investigating the validity of the socio-educational model in classroom language learning situations. The empirical research conducted during this time, for the most part, supported Gardner's ideas and findings that motivation plays a significant role in L2 learning outcomes. Since its original formulation the model has undergone various changes (Gardner and Lambert, 1972; Gardner, 1979, 1985, 2001, 2006), but the basic premises remain the same (*e.g.* Gardner, 1985; Gardner, Tremblay and Masgoret, 1997; Tremblay and Gardner, 1995).

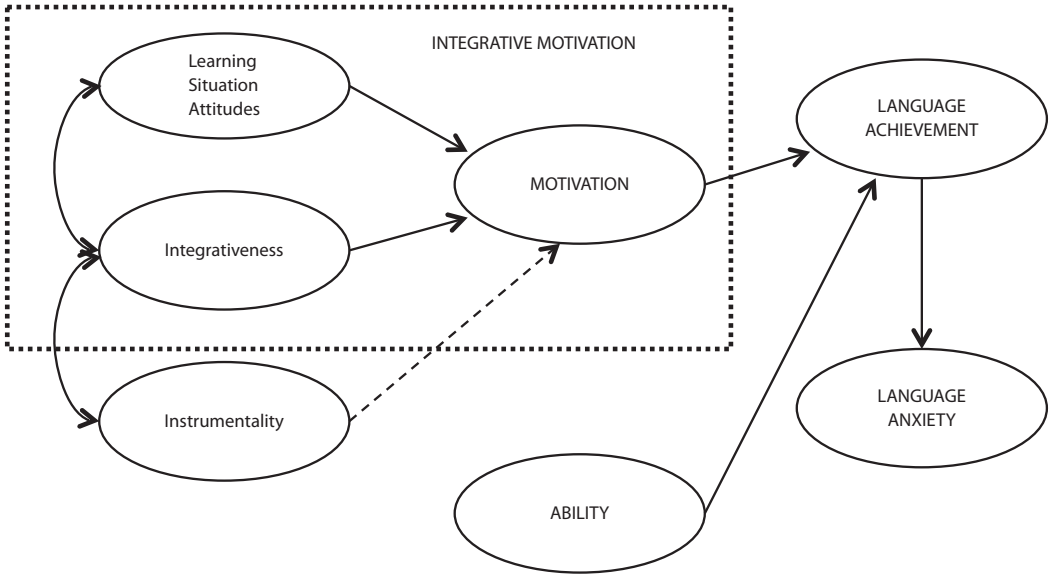
The main version of the model stipulates that two endogenous variables, ability and motivation, are largely responsible for levels of L2 achievement (see Figure 2.1). Although Gardner acknowledges the contribution of other endogenous and exogenous variables in

producing L2 outcomes, he argues that these other variables act upon L2 achievement indirectly through ability or motivation. Gardner defines ability as a combination of general intelligence and language aptitude and motivation as a combination of effort, desire, and affect that leads to action. Individual differences in both ability and motivation are influenced and supported by personal and contextual factors, such as personality, language history, gender, and culture. L2 acquisition takes places in both formal (*e.g.* specialised training in L2, such as schooling) and informal contexts (*e.g.* opportunities to use the language in everyday situations). Learning in formal and informal contexts yields both linguistic and non-linguistic outcomes. Linguistic outcomes include all productive and receptive aspects of language and literacy development. Non-linguistic outcomes include variables such as attitudes and perceptions of L2 community, willingness to communicate, and self-confidence in L2.

The great portion of the model is dedicated to expanding the construct of motivation as it relates to second language acquisition, as can be seen in Figure 2.1. Motivation is regarded as a broad-based, multi-faceted construct that encompasses cognitive, affective, and behavioural elements. Thus, a person who is highly motivated will be goal-directed, display high levels of effort, persistence, desire, and positive affect, as well as demonstrate self-confidence. In the model, motivation is measured through effort, desire and affect. In other words, a person who is highly motivated to learn a second language must want to learn the second language to expend energy and engage in activities that will ensure L2 attainment while finding the process enjoyable.

Two correlated variables directly support L2 motivation: attitudes toward the learning situation and integrativeness. Attitudes towards the learning situation are conceptualised as the learner's assessment of the language learning context in general. This might include, for instance, evaluation of the school or classroom environment, the materials used, the effectiveness of the instructor, and the language course. The basic idea is that the emotional reactions to various aspects of the learning situation influence the degree to which the learner is engaged in the process of L2 acquisition. Integrativeness (or integrative orientation) is viewed

Figure 2.1. **Schematic representation of socio-educational model**



Source: Gardner (2001, 2006).

as positive attitudes and openness toward the L2 community, general interest in NNLs for acquiring the second language, and integrative orientation (to be discussed below). The basic underlying premise of integrativeness is that to acquire a second language, the learner must to some extent have the willingness to identify with native speakers of the second language. This willingness to identify with the language community is seen as a necessary condition for L2 attainment. These two variables, integrativeness and learning situation attitudes, constitute *integrative motivation* in other versions of the model (marked with a dashed box in Figure 2.1).

Before discussing instrumentality or instrumental motivation, it is important to introduce the term orientation as used in Gardner's model. Orientation is a term used synonymously with reasons or motives; it is defined as the cluster of reasons for acquiring a second language. Gardner distinguishes between integrative and instrumental orientation. Individuals who adopt an integrative orientation are motivated to learn the second language because they want to be part of (or integrated into) the L2 speaking society. The reasons behind their desire to be integrated into the L2 community are varied and stem from having a positive regard, respect, and general attitudes towards the target community or language. Integrative orientations can be used synonymously with intrinsic motives. By comparison, instrumental orientation (or instrumentality) refers to the practical benefits of acquiring a particular language. Individuals who adopt an instrumental orientation are motivated to learn a second language because of its usefulness in achieving other goals, such as finding a job or getting a better salary. Integrative motives or orientation is a component of integrativeness, whereas instrumental orientations are not part of integrative motivation. In some language learning situations, instrumental orientations coupled with the construct of motivation (*i.e.* desire, effort, and positive affect) will give rise to *instrumental motivation*.

Gardner's (1985) initial claim followed traditional psychological perspective which stated that integrative orientations had a higher value than instrumental orientations, and therefore had the potential of producing better outcomes than instrumental orientations. In an early critique of Gardner's model, Au (1988) suggested that in order to ensure successful acquisition of a second language both instrumental and integrative orientations (reasons) are needed. Empirical studies on L2 acquisition (*e.g.* Clément and Kruidenier, 1983; Dörnyei, 1990) have supported Au's claim and, most likely, precipitated its inclusion in Gardner's final version of the socio-educational model. The last component of the model is language anxiety (*i.e.* anxiety about language use resulting from previous experience or deficiencies in language skill), which was added in the latest version of the model (Gardner, 2006). Language anxiety contributes negatively to language achievement, and influences as well as is influenced by achievement.

Contemporary conceptual models

During the 1990s the socio-educational model was criticised as being too global and disregarding the contribution of other cognitive and social factors to second language learning. The study of L2 motivation took a shift and became more inclusive and integrative, examining how different aspects of the learner and learning situation might influence motivation and learning outcomes. Studies, for instance, examined characteristics of the classroom setting, the effects of the teacher, the curriculum, and the learning group (Dörnyei, 1994; Williams and Burden, 1997). Nikolov (2001), for example, found that high levels of integrativeness were not sufficient to ensure L2 learning success; the teaching methodology and assessment methods had a direct effect on student's motivation and thus their ultimate performance. Donitsa Schmidt, Inbar and Shohamy (2004) and Inbar, Donitsa-Schmidt and Shohamy (2001), as another example, found that although positive attitudes and perceptions

influenced motivation to acquire L2, satisfaction with programme was a better predictor of motivation. The various contemporary conceptual models of L2 motivation examine how characteristics of the learner, such as biology, past learning experiences, self-worth, influence L2 motivation. Among the most recognised models are: Weiner's attribution theory, Schuman's neurobiology of motivation, Noel's application of DST theory, and Dornyei's L2 motivational self-system. However, these models are not meant to replace the socio-educational model; rather they are meant as expansions to the ideas proposed by Gardner and his colleagues. The remainder of this section will summarise briefly these conceptual models.

The attribution theory is a dominant perspective in psychological research used to explain student motivation classroom learning situations (Weiner, 1986, 1992). Essentially, attribution theory suggests that there is a strong link between past achievement experiences and future achievement, such that the subjective explanations we attribute to our past success or failure will affect future motivation. Weiner (1986, 1992) posited that there are three main components of attributions: the locus of control (*i.e.* whether the cause is internal, such as effort, or external, such as luck), controllability (*i.e.* can it be controlled by the learner), and stability (*i.e.* can it be changed). The stability and controllability of the causes to which success and failure are attributed will influence the extent to which individuals are motivated to engage in a particular activity in the future. When failure is seen as the result of unstable and controllable internal causal attributions, such as effort, individuals are more likely to try the activity again. By contrast, when failure is attributed to a stable, uncontrollable cause, such as ability, individuals are more likely to be resistant toward additional attempts at the activity. Current research shows that attribution influences the effort students expend when learning a second language (Peacock, 2009). In her study of Irish university students studying French as a second language, Ushioda (2001) found that positive L2 motivation resulted from students attributing success at L2 learning to internal factors such as ability and effort, and attributing L2 learning failure to more transient (*i.e.* unstable) variables that can be controlled, such as lack of effort. Additional research examining the link between attribution theory and L2 motivation provides further evidence that attributing L2 success to controllable, internal causes (such as effort) leads to higher levels of anxiety related to L2 use (Lim, 2007).

Technological advances have enabled the investigation of brain processes, including the neurobiological underpinnings of L2 motivation. In the 1990s, Schumann presented a neurobiological perspective on motivation for learning. Key to Schumann's model is Scherer's (1984) model of stimulus appraisal of emotional situations, which occurs across five dimensions: novelty (the expectedness or familiarity of the stimulus event), pleasantness (the degree to which an event is perceived as pleasant or unpleasant), goal/need significance (the relevance of the stimulus events, how the stimulus relates to one's expectations, and how conducive the stimulus is to achieving one's goals), coping potential (the cause of the stimulus, and the ability to change the outcome of the stimulus event), and self and social image (the extent to which the stimulus is compatible with societal norms and expectations) (Schumann, 2001). According to Schumann *et al.* (2004) the stimulus appraisals system generates emotion that leads to action. Viewing learning of a form of "mental foraging", Schumann (2001) posited that motivations are stored as emotional memories, and the dimensions of stimulus appraisal influence the degree of motivation related toward achieving a goal. There is some anecdotal data (based on autobiographies of L2 learners) that supports the notion of the neurobiological underpinnings of L2 motivation (Schumann *et al.*, 2004). However, to date there is no direct evidence demonstrating the applicability of the stimulus appraisal model to L2 motivation.

A particularly relevant theoretical framework for the purposes of this review is the one proposed and developed by Noels and her colleagues that modifies and applies Ryan and Deci's self-determination theory to second language learning. Following SDT, Noels conceptualises motivating orientations as falling into three categories: amotivation, intrinsic Orientations, and Extrinsic Orientations. *Amotivation* results from the belief that the outcome is unrelated to one's behaviour. Thus, students who are amotivated might "go through the motions" of studying a second language, but, feeling that they have no control over their mastery of the L2, they will quit at the first opportunity to do so. This is in stark contrast to an *intrinsic orientation*, where the underlying reasons for learning an L2 come from a sense of internal pleasure and satisfaction in feeling competent. Noels (2001) delineates three subtypes of L2 intrinsic orientations. *Intrinsic knowledge* refers to the feeling of pleasure that results from satisfying one's curiosity and gaining knowledge about a subject matter. *Intrinsic accomplishment* refers to the pleasure that comes from having accomplished a challenging task. The third intrinsic orientation, *intrinsic stimulation,* refers to the pleasure that comes from enjoying "aesthetics of the experience" (for example, deriving pleasure from the sound of a given L2).

Rather than stemming from inherent (or intrinsic) interest, *external orientations* refer to motivations that are derived from external sources, but might become "internalised and integrated into the person's self-concept" (Noels, 2001, p. 46). As some extrinsic motives are more relevant to the individual than are others, subtypes of extrinsic motivation range on a continuum of self-determinism, from most self-determined to most external. The most self-determined of the extrinsic orientation subtypes, *integrated regulation* refers to motivation to achieve an activity because it is important to the individuals' self-concept. Integrated regulations are external, rather than internal, orientations because the motivation is not driven by a sense of intrinsic pleasure or enjoyment. However, integrated regulations ultimately become assimilated with the individual's overall values and needs. Thus, over time, L2 competence will become a valued part of the individual's self-concept. Somewhat less self-determined, the second subtype of an extrinsic orientation, *identified regulation*, refers to being motivated because the value of the task is significant for some aspects of one's sense of self. For instance, an individual might strive to learn a second language because in doing so they will become a better scholar. Even less self-determined is the third subtype of extrinsic orientation, *introjected regulation*. Introjected regulation refers to motivation that is derived from self-imposed pressure to gain rewards, avoid failure, or accomplish a goal in order to regulate one's sense of self worth. For example, some individuals might be motivated to master an L2 so that others do not think of them as failures. Finally, *Extrinsic Regulation* is the epitome of an extrinsic orientation, in that the motivation is entirely contingent on an environmental source external to one's self, such as learning a second language solely for financial gains.

These orientations are not necessarily mutually exclusive. In fact, there often are combinations of reasons at play behind one's motivation for second language acquisition, although some orientations might hold more weight than do others. Not surprisingly, amotivation is negatively correlated with perseverance and having a positive attitude. By contrast, the intrinsic and self-determined orientations are predictive of motivational persistence, positive attitudes toward L2 learning and L2 competence (Noels, 2001). Thus, it is important to promote intrinsic and self-determined forms of extrinsic motivation among L2 learners. Research has shown that to do so, L2 learners should be imbued with a sense of agency and autonomy, a sense of competence, and a sense of relatedness. In the classroom, the most successful approaches are those that provide guidance through constructive feedback, and encourage learners to make their own choices regarding

L2 learning and engage in independent problem solving. The least successful strategies are those that use a reward or punishment system to encourage learning. Best outcomes are, thus, attained when L2 learners feel that they are valued and esteemed by the L2 community and by important others in their lives.

Among the most recent developments in L2 motivation is Dörnyei's (2005, 2009) L2 Motivational Self System framework, which is comprised of three dimensions. Similar to Noels' integrative category, the first dimension, the *Ideal L2 Self,* is based on the notion that all individuals have an image of their *ideal self*, replete with desired attributes that they strive to attain. Thus, if one's ideal self is someone who speaks a second language then this in it of itself becomes a strong motivator to learn a NNL. The second dimension, the *Ought-to Self,* is grounded in more extrinsic motives; there are traits and attributes that we believe that we should have. These need not necessarily be aligned with one's own wishes and desires; they are attributes we feel that we ought to possess. Finally, the third dimension is the *L2 Learning Environment*, or motives related to a specific learning experience, including the actual learning environment, teachers, classes, and peers.

The *Ideal L2 Self* (which has been the focus of most of Dörnyei's elaboration on the framework) serves as an effective motivator when an individual has a clear image of their ideal self, when that image is in accordance with the expectations of significant others in the individual's life, and when there is some understanding of the negative consequence that might ensure if the goal is not achieved (Dörnyei, 2009). Thus, a first step in motivating an individual to learn a second language is to guide them to create an image of an ideal self that has mastery of an L2. Dörnyei (2009) posits that in our globalised world, this should be quite doable. It is very important, however, that the ideal self can be realistically achieved by the person. In classroom settings, most effective teaching strategies include those that "keep the vision alive" (p. 37), through activities and language-related tasks highlighting the commitment L2 students made to themselves (the *Ought-to Self*). In conclusion, there are many models explaining the role of motivation in second language learning. Although these models use similar terminologies, they highlight different aspects of motivation. The overarching idea across models is that the more internally motivated and the more integrated into the self learning a second language is for the individual, the more successful the act of learning for individual will be.

Operationalisation and measurement of L2 motivation

One of the major difficulties in L2 motivation research concerns the operationalisation and measurement of motivation. In fact, although there is consensus in the field concerning the conceptual definition of the construct, operationalisation has posed a challenge. Depending on the conceptual perspective, researchers have used the terms motivation, orientations, and reasons interchangeably. The leading researchers agree that reasons for engaging in L2 learning can be integrative or instrumental in orientation. These orientations are but one component of motivation. Orientation is neither the only nor the most significant element of motivation. Gardner (2001, 2006) issues a warning about the interchangeable use of motivation and orientation (or motives that underlie the learning process). He notes:

> A reason is not motivation. One can want to learn a language for reasons that reflect an integrative orientation, but unless this is accompanied by other features of motivation it does not reflect motivation. Similarly, we can want to learn for reasons that might be classified as instrumental, but without the motivational features, this does not reflect instrumental motivation. If one is motivated, he/she has reasons (motives) for engaging in the relevant activities, expends efforts,

> persists in the activities, attends to the tasks, shows desire to achieve the goal, enjoys the activities, etc. Without the associated motivation, a reason is just a reason, not a motivation (Gardner, 2006, p. 243).

In psychological research motivation is generally measured through direct observation and experimentation, or through self-report instruments. Although early work in L2 motivation used experimental methods to observe motivation, most L2 motivation research has relied on self-report measures – questionnaires developed from conceptual models validated through empirical research. Of the instruments developed exclusively to measure the motivation to learn a second language, two are most notable.

The *Attitude/Motivation Test Battery* was developed by Gardner and his colleagues (Gardner, 1985; Gardner and Smythe, 1981; Gardner, Tremblay and Masgoret, 1997) using the operationalisation of motivation from the socio-educational model perspective. The AMTB is a self-report measure consisting of 130 questions. The test has good psychometric properties including construct and predictive validity (Dörnyei, 2005). The items (Likert scale and multiple choice options) are grouped into a total 11 scales, each measuring the five key constructs of the socio-educational model. As an illustration, the construct of integrativeness is measured through the integrative orientation, attitudes toward the target group, and interest in NNL scale. A question assessing attitudes toward the target group is the following: *French Canadians add a distinctive flavour to Canadian culture* (Dörnyei, 2005, p. 72). Gardner and colleagues have also developed the mini-AMTB, which is a shorter version of the AMTB using one scale per construct (see Gardner and McIntyre, 1993; Tennant and Gardner 2004).The AMTB has been adapted and used in international contexts (*e.g.* Gardner, 2006; Masgoret, 2005; Vaezi, 2008) . Gardner (2006), for example, examined the generalisability of the AMTB to other language learning situations in four European countries: Croatia, Poland, Romania, and Spain. A sample of 1 473 adolescent students (of two age groups 12-13 and 15-16) who were learning English in their respective countries completed the translated versions of the AMTB, the mini-AMTB, and the 12-item Can-do scales which assesses students' perceived competence in productive and receptive L2 language and literacy skills. Results showed that the AMTB maintained its internal reliability, indicating that the items were meaningful for L2 learners in other countries. The factor structure of the AMTB was also maintained across the 4 countries under investigation showing three main factors: integrativeness, attitudes toward the learning situation and language anxiety.

A second instrument, *Language Learning Orientations Scale-Intrinsic Motivation, Extrinsic Motivation, and Amotivation Subscales*, was devised by Noels and her colleagues (Noels, Pelletier, Clément, and Vallerand, 2000) to assess amotivation, the three types of extrinsic motivation, and the three types of intrinsic motivation proposed by Noels' model. The LLOS-IEA is a self-report measure consisting of 21 (Likert scale) items (three for each motivation subtype). For example, an item assessing external regulation for second language learning as: *In order to have a better salary*; for introjected regulation: *Because I would feel guilty if I didn't know a second language*; and for identified regulation: *Because I think it is good for my personal development*. Although its use has not been as widespread as the AMTB and psychometric information is limited, the LLOS-IEA has been adapted to some languages and used in other countries (*e.g.* Shaikholeslami and Kahyyer (2006).

Empirical work on integrative motivation and second language learning

Perhaps the unique contribution of Gardner's work and a critical construct in the area of L2 motivation research is the concept of integrative motivation. As discussed previously, integrative motivation embeds various attitudinal and motivational components, including integrative orientation (or motives) and attitudes towards the out group and NNLs in general. The work conducted and inspired by the socio-educational model, for the most part, has shown that integrative motivation, simply stated, matters in determining outcomes in L2 learning as measured through objective language tests and grades (Lalonde and Gardner, 1985). In a recent study, for example, Hernández (2006) examined the extent to which integrative motivation, instrumental motivation, and obligations predicted L2 oral proficiency and desire to continue L2 study amongst university students. Results show that *integrative motivation* was the only significant predictor for both language outcomes and desire to continue with language study.

Integrative motivation has also been shown to be related to behavioural characteristics that indirectly influence L2 outcomes. Gliksman, Gardner and Smith (1982), for example, found that students with higher levels of integrative motivation behaved differently in the classroom. They participated more in class, volunteering more information spontaneously, gave more correct answers, and were perceived by teachers to be more interested in learning than were students with lower levels of integrative motivation. In a more recent investigation, Gardner *et al.* (2004) explored the dynamic relationship between attitudes/motivations (*i.e.* integrativeness, learning situation attitudes, motivation, language anxiety, and instrumental orientation) and achievement in a group of students. Their results provide empirical evidence for the relative stability of attitudinal and motivational variables, not directly associated with the learning situation. However, they also find that changes in these affective variables are moderated by language achievement, such that students with higher levels of achievement are going to experience less dramatic changes in motivation than those with lower levels of achievement. Donitsa-Schmidt *et al.* (2004) provide further support for the bidirectional relationship between attitudes/motivation and L2 acquisition in a group of Israeli children learning Arabic. Their results showed that acquiring Arabic positively influenced attitudes and perceptions towards the Arabic language, its speakers and the community in general, and these, in turn, had a positive influence in their subsequent motivation to acquire the language.

Other work has investigated the relationship of integrative motivation to socio-cognitive constructs, such as self-confidence or self-efficacy. Clément and Kruideneir (1985) examined the role that self-confidence in the relationship between motivation and second language acquisition. Their work showed that in multilingual communities, linguistic confidence (operationalised as the quantity and quality of contact between members of L1 and L2 communities) mediates the relationships between motivation and L2 learning and interest (expressed through intercultural communication). Clément, Dörnyei and Noels (1994) extended the applicability to NNL learning contexts where there is indirect contact with the L2 culture through the media (*e.g.* most of the world that learns English).

Although integrative orientation or integrativeness is a major component of integrative motivation within the socio-educational model and a powerful predictor of L2 outcomes, researchers have questioned its definition, utility and measurement (Dörnyei and Csizér, 2002; Dörnyei, Csizér and Nemeth, 2006). Recall that integrative orientation is defined as the desire to be part of (or integrated into) the L2 speaking society that motivate an individual to learn a second language. Kreamer (1993) argues that the concept is too narrow and should be expanded to include general socio-political attitudes (*e.g.* close

social distance, equality in civil rights, and optimism about future peace). In his study of Israeli students learning Arabic, Kreamer (1993), found that general socio-political attitudes significantly influenced Israeli student's motivation to learn Arabic. McClelland (2000) and Yashima (2000) also argue for redefinition of integrative orientation suggesting that it should be expanded to include integration into a global community, rather than just into the L2 target community. Yashima (2002) found, for instance, that international posture (defined as a general attitude toward the international community) among English learners in Japan influenced motivation to learn English, willingness to communicate and frequency of communication. International posture was measured in terms of intercultural friendship, tendency to interact with foreigners, interest in foreign affairs and international activities. Recent research lends support to these new operationalisations suggesting that world-wide globalisation is redefining integrative orientations specifically and integrative motivation more generally. The English language (and American variety, in particular) is perceived as a globalised, world language (Dörnyei and Csizer, 2002; Lamb 2004). Thus, learners might not necessarily want to integrate into an Anglophone society, but rather do so into a more globalised international community through the acquisition of English (Lamb, 2004). Among Hungarian adolescents, for instance, the belief of English as a *lingua franca* has led to an increase in motivation to learn American English as an L2, but at the same time, it also has resulted in a loss of interest in the learning of other languages, such as German or Russian (Dörnyei and Csizer, 2002).

Others researchers have questioned the universality of integrative orientations as the most important motivating force: Are all individuals motivated to learn a language because they want to integrate into a community? Based on early critiques and, as stated previously, Gardner himself revised his model to place more emphasis on instrumentality. Recent research reveals that the motivating orientations adopted by an individual are a result of past experiences as well contextual and situational factors. In a recent study examining instrumental and integrative orientations in Iranians students' motivation to learn of English, Vaezi (2008) found that instrumental orientations played a more significant role in learning than did integrative orientations. The author argued that choosing instrumental over integrative orientations acted as a protective strategy on the part of the students to preserve their own cultural identity in light of negative perception of the United States in the region.

Moreover, researchers argue that there might be more orientations in addition to instrumental and integrative orientations. In their study of high school students learning Japanese Oxford and Shearin (1994) found that only a third of the students' reasons fit into instrumental or integrative categories. In a somewhat recent review of all Japanese literature on L2 motivation, Irie (2003) argues that one of the most salient reasons among Japanese university students who are learning English as a second language is foreign travel, which has been categorised in diverse ways in Japanese research. What seems evident from the literature is that learners acquire a second language for many reasons that are not necessarily subsumed under integrative and instrumental orientations (*e.g.* Crookes and Schmidt, 1991; Dörnyei, 1990; Oxford and Shearin, 1994). Indeed, Dörnyei (1998) identified seven dimension of motivational orientations identified in the literature. These included affective/integrative, instrumental, significant others, educational context, self-concept, macro-context, and goal related dimensions. In a more recent study, Humphreys and Spratts (2008) also outline a diverse array of orientations.

In an attempt to integrate the different conceptual models and distil the terminology that is often used to refer to different constructs, some researchers have recently questioned the distinction between integrative and intrinsic motivation as both to a large extent refer

to internal incentives that lead to action. In fact, Gardner's and Noels's conceptual model suggests some overlap between integrative and intrinsic orientations and Noels (2001) has found evidence of a positive correlation between the two orientations. Conceptually, integrative motivation includes identification with and positive attitudes toward the L2 community, whereas intrinsic motivation does not, thus suggesting that the two are distinct constructs (Noels, 2001; Noels, Clement and Pelletier, 2001). Recent research provided empirical evidence supporting the distinction between integrative and intrinsic motivation. For example, results of Pae's (2008) study of over 300 Korean English language learners demonstrated that although integrative orientation is closely aligned with intrinsic motivation than with extrinsic motivation, it differs significantly from both constructs. Booney *et al.* (2008) provide further evidence that although the two constructs are similar; they are distinct from one another differing in the outcomes they predict. Results of their study of 694 high school students enrolled in 36 different NNL classrooms (including French, Spanish, German, and Latin) showed that intrinsic motivation is the strongest predictor of use of extracurricular learning strategies. By contrast, integrative motivation is the strongest predictor of students' self-reported effort, as well as their use of cognitive learning strategies, collaborative learning strategies, and compensatory strategies. The finding that integrative motivation is the best predictor of compensatory strategies – and that intrinsic motivation does not predict compensatory strategies – is especially important for L2 motivation researchers. Students with an integrative orientation toward second language learning strive to immerse themselves in the L2 culture and to communicate with native L2 speakers, and compensate for lack of knowledge by employing a variety of strategies, including using gestures to signify their thoughts, and asking the native speaker to talk more slowly or repeat themselves. As a result, they are more effective and efficient at communicating with native L2 speakers and at gaining mastery of the language.

Although second language acquisition researchers have tended to depict motivation as a static trait, research findings demonstrate that motivation is, in fact, a dynamic construct that changes over time. For example, as individuals move through the different stages inherent in language learning, the degree and type of motivation changes (Tseng and Schmitt, 2008). Scholars have criticised the current conceptualisation of motivation as too narrow and limited that does not acknowledge the power relations between languages or the link between language and identity, and therefore that might not be applicable to immigrant groups. Bonny Norton (Norton Pierce, 1995; Norton, 2000, 2001), for example, posits that, as a construct, *motivation* is overly simplistic, as it implies that individuals have a unified identify – a fixed personality trait – that affects the type and degree of motivation they will have toward learning. Viewing language learning as a social process, Norton builds on Bourdieu's (1977) work on social, symbolic and political capital, and calls for the use of *investment* instead. As a construct, investment strives to capture the relationship between the L2 learner and larger social worlds. In examining students' investment in learning a second language, it is important to account for larger social, historical, political, and economic processes (including acculturation, racism, and discrimination) that impact their participation in a community, as well as their identity. When individuals learn to speak an L2, not only do they share information with native speakers of the language, they also strive to create a sense of identity within the community. Individual who invest in an L2 do so knowing that they will gain resources – both material and symbolic – that will increase their value in the social world. Thus, at its core, investment in an L2 is an investment in one's identity.

Group differences in L2 motivation

Few studies have explored group differences in L2 motivation, most likely because motivation is seen as a person-level rather than as a group-level variable. Nevertheless, there is a small but important body of literature in developmental psychology that examines achievement motivation with respect to learning in general suggesting differences in motivation across genders, ages, and cultures/ethnicities. There is a growing body of literature within the L2 field that shows that some of the developmental findings might also be applicable in the language learning contexts. All these findings are discussed in further detail below.

Gender-role socialisation results in average differences in the achievement motivation of males and females, with variations abounding in control beliefs, competence-related beliefs, and causal attributes (Wigfield *et al*., 2006). Research indicates that females, on average, have a higher internal locus of control for both success and failure than do males. Thus, females tend to assume more responsibility for failure than do males, who often attribute their failure to others or to events that are outside of their control (Connell, 1985). Because they assume more responsibility for their actions, females are more likely to attribute failure to a lack of ability. Moreover, following failure, girls are more likely to lower their expectations and avoid challenges (Spencer, Steele, and Quinn, 1999; Wigfield *et al*., 2006). These differences begin to emerge as early as kindergarten (Wigfield *et al*., 2006) and are often found in gender role stereotyped domains, such as maths and English, with females viewing themselves as less capable of maths, but more competent in English Language Arts than their male counterparts (Eccles *et al*., 1991; Wigfield *et al*., 1991). As a result, women tend to value English more than men, who are more likely to view maths, on average, as important (Wigfield and Eccles, 1992).

These findings extend beyond the valuing of L1 language skills among females. Similar trends have been found in L2 motivation research, with numerous studies indicating that female NNL students are, on average, more motivated to study a NNL than are their male counterparts (Mori and Gobel, 2006; Pritchard, 1987; Sung and Padilla, 1998). Females studying a second language score higher than males, on average, in a variety of motivation-related domains, including cultural interest, direct contact with L2 speakers, and integrativeness (Dornyei and Clement, 2001; Mori and Gobel, 2006). Girls appear to have a more positive attitude toward language learning (Gardner, 1985; Wright; 1999), and research indicates that in early adolescence, willingness to communicate in a NNL is higher among girls than boys, with boys experiencing more anxiety when asked to communicate in a NNL (MacIntyre *et al*., 2003). These gender differences have also been linked to context; whereas girls prefer L2 communication in the NNL classroom, boys demonstrate a preference for communication outside of the classroom (Baker and MacIntyre, 2000).

Gender differences have also been noted in language preferences. For example, among adolescents in Hungary, German and Russian are seen as more masculine languages, and are the preferred L2 choice of boys, whereas French and Italian are viewed as more feminine languages and are preferred by girls (Dornyei and Csizer, 2002). Interestingly, English is perceived by the same adolescents to be a gender neutral world-language (Dornyei, Csizer and Nemeth, 2006) and is the most preferred language. Nevertheless, once an L2 has been selected as a course of study, girls have superior attitudes toward L2 learning and are more committed to learning the language than are boys, irrespective of whether the language is thought be neutral, masculine or feminine in nature (Csizérand Dornyei, 2005; Dornyei and Csizer, 2002).

Another variable that creates group differences is the age of the learner. Reactions to success and failure in early childhood lay the foundation for the development of motivational beliefs and goals (Wigfield *et al.,* 2006). Children begin to demonstrate the first signs of self-evaluation of their success and failure between the ages of three and four years (Heckhausen, 1987). Nevertheless, during early childhood, children are very optimistic about their abilities. At the same time, however, they do not conceive of performance as determined by skill. It is not until middle childhood that children begin to distinguish between aptitude, effort, performance, and to understand that, together, ability and effort serve as the determinants of outcome (Dweck, 2002; Nicholls and Miller, 1984). Over the school years, competence beliefs for certain tasks decline, as children come to the realisation that ability can limit the impact of effort, and that the need for extra effort is indicative of a lack of innate competence (Nichols and Miller, 1984). This, in turn, affects motivation and interests. In fact, across the lifespan, competence beliefs serve as important predictors of interests (Mac Iver, Stipek and Daniles, 1991). Low competence beliefs lead to the devaluing of an activity, which, in turn, leads to the development of apathy or amotivation (Wigfield *et al.,* 2006).

Age-related differences have been noted in L2 motivation with different factors playing important roles in motivating L2 learning among members of diverse age groups (Kormos and Csizer, 2008; MacIntyre *et al*., 2003). As an illustration, Kormos and Csizér (2008) examined motivation among three groups of second language learners in Hungary, secondary school students, university students, and adult language learners. Their findings suggested that "international posture" (or the valuing of English as an international language) is predictive of motivation to learn English as a second language among university age students and adults. However, it does not predict motivation among high school students, for whom interest in English-language cultural products served as a strong motivating factor. Moreover, enjoyment for learning languages is an important source of motivation for high school and college students, but not for adult learners. In addition, integrativeness seems to become less important with age, with one's image as an "ideal L2 self" becoming of key importance. It is simpler for the "L2 self" to become integrated into younger students' self-image, as their image of themselves is still being formed and solidified. By contrast, adults have a fairly stable self-image, so their image needs to be adjusted to allow for the integration of their L2 self. Motivation to learn a second language varies among younger students, as well. For example, from the 7th to 8th grade, there is a clear increase in willingness to communicate in a second language and in competence beliefs regarding L2 learning (MacIntyre *et al.,* 2003). It is important for L2 educators to be cognizant of these motivational differences, so that they can best attract the interest of their students.

Finally, a particularly recent development is the examination of the relationship between motivation and culture/ ethnicity, is a relatively new area of study. In recent years, researchers have begun to examine culture and the development of self, motives and behavioural scripts, culture and the construal of success and failure, culture and how psychological needs are expressed, and culture and engagement in classroom learning (Wigfield *et al.,* 2006). However, the majority of studies examining the impact of culture and ethnicity on motivation have been conducted in the United States, where minority ethnic groups have differential power than the majority. Dis-identification stemming from unequal treatment serves to weaken motivation (Finn, 1989). Nevertheless, the motivational factors might work differently in other countries, as well as for voluntary minorities (such as immigrants) within the United States. While immigrant populations have to overcome both language and cultural barriers, these can be overcome more easily than racism, thereby influencing one's motivation to learn (Ogbu, 1986).

Recent work supports the idea that cultural variations exist in areas that are key components of achievement motivation. Community and family values influence the importance placed on a given task, and, by extension, one's motivation to achieve the task (Pintrich, 2003). For example, researchers have hypothesised that members of cultures that promote independent self-construals will differ in motivation from those who belong to cultures valuing more interdependent self-construals, with self-improvement and personal success serving as a primary motivator in the former group, in contrast to role fulfilment and the maintenance of group harmony in the latter (Elliot *et al*., 2001; Urdan, 1997). Thus, diverse socialisation goals might lead to variations in motivation. However, the reasons behind the differences have not been fully explored, and more research is necessary.

Most current models of L2 motivation stem from a Western perspective, and these typically focus on the learning of English as a second language (Rueda and Chen, 2005). It is only recently that researchers examining motivation have become interested in the degree to which their theoretical models might be applied to individuals from diverse cultural groups (Wigfield *et al*., 2006). The few available studies on culture and L2 motivation have for the most part questioned the validity of using the same constructs across various cultural/national/ ethnic samples. Some (*e.g.* Gardner) advocate for universality of the key constructs, whereas others do not (*e.g.* Hu, 2002a, 2002b; Rueda and Chun, 2005).

As an illustration, utilising Gardner's AMTB, Rueda and Chen (2005) studied motivation and the learning of Chinese among Asian and non-Asian college students in the United States, and found that the primary constructs are not valid across cultural groups. Key group differences were evident in instrumentality as a motivating factor. The Asian students envisioned learning Chinese as advantageous insofar as enabling them to communicate with Chinese-speaking relatives. By contrast, non-Asian students viewed NNL learning as important for education and finding a job, and thought that the learning of Chinese would be potentially helpful for travel to a Chinese-speaking country. In addition, there were group differences in intrinsic motivation to learn Chinese. Whereas intrinsic motivation was positively correlated with task value for Asian students, who thought of Chinese as a venue for learning more about Chinese cultural heritage, among non-Asian students there was, in fact, a negative correlation between task value and intrinsic motivation (Rueda and Chen, 2005).

Furthermore, the Asian sample was not comprised of one homogenous group, but rather it consisted of Chinese-Americans, non-Chinese Asian-Americans and Asians. Analyses highlighted differences in motivational belief between the various Asian groups. For example, among Chinese-American and Asian students, intrinsic motivation was positively correlated with instrumentality, but the two constructs were negatively correlated among non-Chinese Asian-Americans. These differences can be attributed to factors such as variations in acculturation and diverse cultural backgrounds. Unfortunately, the authors fail to delve into the underlying reasons behind these cultural differences. Also, whereas self-efficacy was the strongest predictor of effort among Chinese students, this was not true of the other groups. In fact, of all of the predictors, it was the least powerful (Rueda and Chen, 2005).

Moreover, as a result of the interdependent nature of their cultures, learners from Confucian heritage cultures (*e.g.* Chinese, Japanese, and Korean speaking countries) have been found to display motivational profiles that differ from their European and South American counterparts (Woodrow and Chapman, 2002). In addition, these findings provide further support for the idea that there is not one unitary learning pattern or motivational profile that encompasses all Asian populations (Littlewood, 2001; Woodrow and Chapman, 2002). In fact, different motivational patterns were evident among the various Confucian heritage groups. For example, Vietnamese participants displayed motivational patterns

that were more similar to European and South American cultures than to other Confucian heritage groups (Woodrow and Chapman, 2002).

Cultural differences in motivation extend beyond comparisons of Asian populations. Artelt (2005) analysed the OECD PISA 2000 data on 26 countries, and examined approaches to learning, including extrinsic and intrinsic motives for learning to read among 15-year-olds. Interestingly, the participants interpreted the questions they were asked in similar manners, irrespective of country. However, the meaning they ascribed to the key constructs of instrumental motivation and interest in reading differed by country. For instance, Korean students tended to say that they were interested in reading; whereas Brazilian tended to express a disinterest. Although there was a strong, significant relationship between interest and

Box 2.1. **Motivation in NNL "learning" and doxa in NNL "teaching"**

"What made you learn Korean?" was the first question that I, as a teacher, usually asked Korean language learners who came to the Korean Language Institute (KLI) of Yonsei University in Seoul. One of the most frequent answers I got was "I love Korean dramas and songs. I want to learn Korean to enjoy the Korean dramas and ballads better." These learners were intrinsically motivated to learn Korean because of their interest in the Korean popular culture. Others were externally motivated for economic reasons, for instance to get a better job or promotion in their workplace. As a result, after one year and a half at KLI, most students' outcome in Korean language proficiency was good enough to communicate with Korean native speakers very well (although the intensive curriculum should also be accounted for). Their motivation made them willing to invest all their resources, including time and money, resulting in successful learning.

On the other hand, my job as a teacher was not much easier, even if I had such motivated students. The students I taught came from all over the world. Every semester I met with students at different levels of Korean proficiency, coming from different societies with different doxa (following Bourdieu, who defines "doxa" as anything around a person that is cultural and so familiar that he or she considers it natural) and taught them Korean as a non-native language under my single Korean doxa. Not surprisingly enough, I faced different questions based on the students' own doxa. At this point, it was not enough for me to know what Korean doxa is, but it was more necessary for me to make conscious efforts to understand what my students' forms of doxa were. Being motivated, the students were also tolerant of Korean doxa. Hence, I had to understand and be tolerant of their doxa too, in order to become an interactive facilitator and cultivate their learning successfully and effectively.

During the same period, I was also teaching English as a non-native language to Korean native undergraduates at several universities in Seoul. Most students I taught were about 19-22 years old, and came to my class for their required coursework. Most of them were not intrinsically motivated, not interested in learning English as a non-native language per se; but some were extrinsically motivated, due to their main interest in getting better grades: those worked harder and indeed earned better grades.

My job as an English teacher was not more difficult than teaching Korean: students were all Korean native speakers, whose doxa I knew very well, as I am also a Korean native; I did not need to make conscious efforts to understand their doxa although I had to strive to motivate them. Consequently, I could sometimes use humour around "Konglish" based on Korean doxa, which triggered students' laughter and enhanced their attention. Motivation is a key factor in non-native language learning. As such, understanding of the non-native learners' doxa is as much a necessity in non-native language teaching as is the knowledge of the non-native language.

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performance within countries, these relationships did not hold when examining patterns across countries because of the cultural variations in the meaning of the constructs under investigation.

This is a critical finding, highlighting that although there appears to be some general mechanisms of motivation, when conducting cross-national studies cultural differences need to be taken into account when defining constructs. In other words, one construct does not fit all. Research has demonstrated that to encourage NNL learning, it is important to attract students' interest in the L2 culture (Hu, 2002a; Yashima, 2002), as international posture is a key predictor of motivation, which in turn influences achievement (Yashima, 2002). In this global society, members of diverse communities are eager to become competent speakers of world languages, such as English. Becoming a native-like speaker of any L2 requires the acquisition of the pragmatic norms inherent in the language. However, the pragmatic norms associated with American English might be perceived as antithetical to communication norms of some cultural groups. Maintaining one's native language and cultural identity is often seen as more important than adapting to the pragmatic norms of the L2 (LoCastro, 2001). Finally, for the study of a second language to be effective, it is important that the techniques used to teach the L2 are aligned with the teaching methods typically used by the cultural group. Using a method that is antithetical to cultural traditions or values, is based on different assumptions, or espouses different learning strategies, is counterproductive to the learning process (Hu, 2008b).

Note

1. The definition of being bilingual is also an elusive one. Most people think of a bilingual individual as one who has equal competence in two or more languages and is able to function equally in these languages across contexts. However, research shows that equal competence and ability to function similarly in two or more languages across contexts is more of an ideal than a reality. For a thorough review, see Edward (2004).

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Chapter 3

Motivational theories on language learning

By Natpat Chanjavanakul *

This chapter presents motivational theories beneficial for language learning with examples from author's experience to illustrate implications of theories. Four theories are presented in this chapter; stimulus appraisal, motivation and attention, self-determination, and mindset theories. Stimulus-appraisal theory explains how a person creates value system and how it relates to language learning motivation. Motivation and attention topic illustrates how stress and attention affect motivation in language learners, while self-determination theory suggests the importance of intrinsic motivation in language learning and how educators can positively influence learners' intrinsic motivation. Lastly, mindset theory shows how fixed and growth mindsets towards own abilities can help or hinder language learning. These theories provide us with useful implications for improving motivation in language learners.

* University of California, Los Angeles; Harvard University School of Education graduate

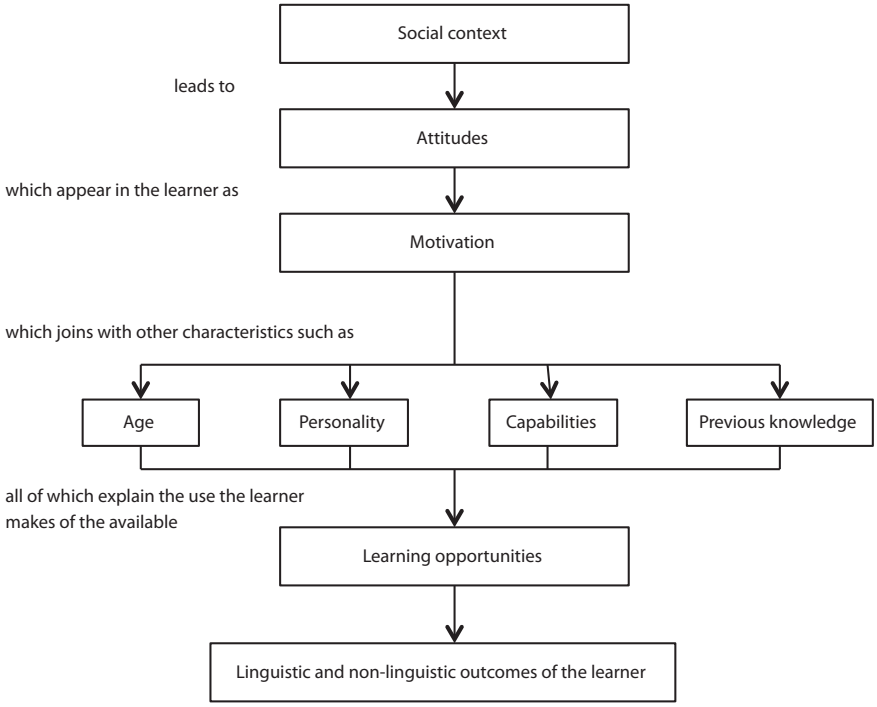
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Introduction

According to Mitchell and Myles (1998), Spolsky's general model of second language learning was used to describe the process of second language learning. The figure of this model is shown below (Figure 3.1).

Figure 3.1. **Spolsky's general model of second language learning**



Source: Mitchell and Myles (1998).

According to the figure, motivation is one of the major factors determining the success of second language learning. In this chapter, I will present motivational theories I have found useful in language learning with examples from my own experience to help illustrate the implications of these theories. There are four theories presented here: stimulus appraisal, motivation and attention, self-determination, and mindset theories.

Box 3.1. **Life in colours**

It is possible to learn through a utopian method. Having had to move across her country due to her parents' work constraints, Ara, 6-years-old, was full of fears when she arrived in Mexico City. Everything that she knew and loved had been left in Yucatán, where she had spent the first years of her life.

Settling down was not particularly difficult; as with every big city, Mexico City has its charm after all. The real challenge for her was her bilingual school. The girl was quite literally terrified: from day one she was welcomed in English, kids were playing in English, and of course every class, regardless of the subject matter, was taught in English. Ara's parents were delighted, but the little girl was devastated; she did not understand anything – or maybe just a few words, such as the names of colours and numbers, words she has heard during her years in kindergarten. She would tell how she could not go to the bathroom when she had to because she "did not know how to ask the teacher for permission to go"…

In Ara's native city, a touristic area, the educational system is, certainly, familiar with the need to learn languages, but for many reasons in this provincial place there are other priorities, and well-structured programmes dedicated to early non-native language acquisition (and also, afterwards, to keep the acquired skills alive throughout the school years) simply do not exist. Ara, in Mexico City, started with low grades; to her, English was "something" invasive, if not aggressive. And as we all know, a child experiencing anxiety cannot be receptive; hence something had to be done, because to crown it all, the girl was confronted with an education environment of higher quality than the one she had been used to. Moreover, she had to cope with sadness: she missed her grandparents, who had always been key figures in her early life.

While learning a new language in a foreign country is justified by survival, a non-native language in one's country of origin does not seem to make much sense, especially at such an early age: For her, it was "not fair to learn English when everybody around speaks Spanish". A "method" fitting Ara's needs and able to enhance her motivation was dramatically needed. Thus her mother then designed at home a little play with puppets, which was accompanied by a Coldplay song. The piece was a success with the little one, making it, in the girl's own words, a memory "so special and unique"– an event without precedent. Her mother was also singing in the car while driving her to the school every morning, and since it was quite frequent to hear that same song on the radio, the girl would listen to it until she started to express a wish to know what "the song was all about", thus developing her first personal motivation to understand the language. Obviously, the school had paved the way and enhanced her motivation (Ara's grades started to get better), but without a doubt her mother's "utopian method", as she calls it, launched the child's genuine desire to understand.

In three years, Ara learned English with a British accent, and reached a level of understanding which surpasses by far that of many adults in the country. Nevertheless, she is now confronted with another problem. Her family finally came back to her native city, where English is given little or no importance at school: there is only a one-hour English class a day, compared to the daily four hours she had when in Mexico City. "Looks like everyone is working in slow motion", Ara says. Within a few months, the little girl would lose her momentum, and Ara again starts to feel very sad. The "mother's utopian method" does not suffice anymore. At the age of 9, accumulating experience as memories are simply not enough; what is needed at that age is also to transmit a passion for life, a passion to learn not only the language of a country but also to learn its history as seen and written by the natives, and to understand its culture and traditions. And so, her mother started to take French classes. Today, Ara watches foreign (above all, Japanese and French) movies in the original language, and continues to read in English. She has started to realise that understanding a language is not only a necessity, but also a way of belonging to a modern humanity dancing around something called "globalisation."

Mayra Bustillos Garcia, Mexico

Stimulus-appraisal theory

Schumann (2001) examined brain processes relating to motivation of second language acquisition. In his review article, he proposes that the brain has a neural system that subserves two functions: stimulus appraisal and social cognition. Stimulus appraisal is the assessment of agents faced by an individual in emotional and motivational aspects. Appraisal will affect and guide what actions an individual will take in regarding to the stimuli. Social cognition is the ability to make assumptions about others' intentions and about interpersonal issues.

According to Schumann (1998), there are three types of motivation. The first two systems – homeostatic and sociostatic – are innate. On the other hand, the somatic value system is developed and acquired through life experience. Homeostatic regulation is the value system that directs how an organism behaves to maintain its balance and survival. This system guides an organism to breathe, fight, eat, rest, reproduce, etc. Basically, it involves basic needs for survival. It is easy to see that this drive is directly related to the biological makeup of an organism. Sociostats is a human drive to seek out interactions with others. Reports show that babies prefer their mothers' voices to other women's voices. Human beings have an innate drive to get attention and interact with other humans. However the somatic value system is not innate, but learned from interacting with one's environments. For example, when a toddler starts to explore, he or she will look for assurance from her mother. If the mother shows calm and pleasant expressions, the child will feel safe to explore. On the other hand, if the mother expresses concern and worry, the child will take that as negative appraisal and feel unsafe to explore new things. Since we all have different life experiences, we form different preferences and values in our value system. Our somatic value system makes us unique. It shapes our likes and dislikes based on our past experience. In addition, culture has an impact on the somatic value system. Once an individual learns cultural rules, they become a part of his or her value system. It is important to note that somatic values are based on homeostatic and sociostatic regulations because they are designed to enhance survival of organisms (Damasio, 1994 as cited in Schumann, 1998).

An individual needs a memory system to make associations between value system and experience. Leventhal (as cited in Schumann, 1998) proposed the theory of a schematic emotional memory, which consists of memories of emotional experiences. We formed this schematic memory based on our past experience and what emotion associated to it. This schematic memory will later act as a filter which helps us notice certain things and anticipate later experience. Scherer (as cited in Schumann, 1998) suggested five factors to assess stimuli; novelty, pleasantness, goal/need significance, coping mechanism, and norm/self compatibility.

These five dimensions can be used to evaluate the language learning process because language learners are constantly evaluating the values associated with the target language, native speakers, culture (as well as the language teacher and their own ability, learning methods and so on). For example, if a Chinese-language learner places high value on novelty, learning Chinese characters may be positively appraised and therefore result in increasing their motivation in learning Chinese. If, however, the learner places higher value on need significance than novelty, they may be more motivated to learn Chinese knowing that being fluent in Chinese could result in a higher-paid job.

Amygdala

The amygdala is involved in the appraisal of emotional aspects of stimuli, especially stimuli related to negative emotions such as fear. Schumann (2001) shows that the amygdala is sensitive to novelty. The amygdala may also play a role in long-term memory formation of emotional stimuli.

Orbitofrontal cortex

The orbitofrontal cortex involves knowledge about social norm, morality and the control of behaviours associated with these. The orbitofrontal cortex may also be involved in rewarding pathway. When an action stops to be rewarding, it will send signals to prevent unproductive actions.

Schumann (1998) proposed that the amygdala and the orbitofrontal cortex act together as a system. The amygdala may likely work in the appraisals related to pleasantness and fear and relate these aspects of stimuli to determine coping mechanisms. Research from animal studies indicates that the amygdala is highly responsive to novelty. Studies of patients with brain damages suggest that the orbitofrontal cortex plays a role in appraisal of coping ability and goal significance because patients with orbitofrontal damages often have difficulty in decision-making and keeping goals. These findings suggest that the stimulus appraisal system may have a biological basis, which hopefully will lead to further research in biological aspects of motivation.

Five aspects of stimulus appraisal (adapted from Leventhal and Scherer, as cited in Schumann, 1998)***:***

- *Novelty appraisal*: Assessing if the stimuli have been previously encountered or not.
- *Pleasantness appraisal*: How appealing, enjoyable, rewarding stimuli are.
- *Goal/need significance appraisal*: Goals and needs of actions. Reasons for taking actions.
- *Coping ability appraisal*: Strategies one uses to deal with problems.
- *Self and social compatibility appraisal*: How ones relate to their ideal self and social expectations.

The following is an example of appraisal in language learning:

I have studied English since I was in the first grade, but did not really pay attention to it until I was in the ninth grade. I examined my appraisal system and found that the most important motivation in this case was goal significance. At that time, I needed to excel in English in order to pass exams and get accepted to university. Novelty did not really affect my English learning even though there were numerous new things to learn. In addition, I felt that being better at English than my classmates was rewarding. This falls into self/social compatibility appraisal. Learning English was compatible with my internal standard and social norm. This made me put more efforts into learning English.

Since the stimulus appraisal system is built based on the individual's experience, each person's appraisal system is highly unique. This may be one of the reasons why one learning techniques do not work for everyone in the exact same way. Learning has to be individualised to suit a person's appraisal system, as it reflects his or her values and goals. Furthermore, teachers have their own appraisal system. Some teachers may value or prefer

certain teaching methods over the others. This will result in different teaching styles. In sum, it cannot be determined which language learning method is best because it largely depends on each individual's stimuli appraisal system.

Motivation and attention

Too much stress disrupts learning. Willis (2006) concluded from a research conducted with PET and fMRI scans that when the amygdala is over stimulated by stress, knowledge cannot go to the memory storage of the brain. Moreover, prolonged stress can lead to a loss of dendrites and synapses in the hippocampus. This shows that learners may not learn well in stressful circumstances. Willis (2006) suggested that lessons should be challenging, but not too stressful. Material should be engaging and reduce stress. Research shows that material that is familiar and meaningful will capture attention better than those that are irrelevant and meaningless (Mack and Rock, 1998). Therefore, it is desirable that language teachers find and use material that has some relevancy to the students' lives and that is challenging but not too difficult.

From my experience, I have noticed that I learned Norwegian much faster than Chinese, because I was living in Norway when I learned the language. Therefore, everything I learned from language classes could be put to use almost immediately. For example, I learned about how to buy a stamp at the post office (and the related vocabulary). I went to the post office the next day and tried to use what I had learned. Hence, I never really had to remember vocabulary or grammar by rote learning, but could use them after internalising them and was corrected if I was wrong. On the other hand, I learned Chinese while I was in Thailand. I did not have the opportunity to use what I had learned immediately, therefore, I had to remember everything by rote learning, which was not very effective. This example shows the importance of relevancy. Being able to use the target language on a daily basis in a way that is directly relevant to one's life promotes learning. In addition, this situation is appraised in necessity, significance and social compatibility aspects. I got rewards from being able to communicate my needs and being able to maintain my status in the Norwegian society.

Unfortunately, language learning does not always occur within communities using the target language. More often than not, language learning happens in a different country which uses a language other than the target language. Teachers can still help students see the relevancy of lessons to their everyday life. One way is to have students make their own conversation based on what they have learned. Teachers can also ask students to find relevancy themselves by asking them how they can use what they have learned. Another way to relate to students interest is to use technology. If students are interested in games, it may be worthwhile to relate language learning to the games they are interested in. I have many friends who devoted time and efforts to learn Japanese in order to play Japanese games. There was a period of time when drama from Chinese Taipei was popular in Thailand: the numbers of people learning Chinese then increased significantly. The fascinating thing is that some people did want to learn Chinese before, but never committed to it until this drama became popular. This shows that we can use stimuli that align with learners' interest to increase motivation in language learning.

Regarding stress, classroom settings can be stressful for students who are not good at what they are learning. Teachers can help students reduce stress to these students by acknowledging the accomplishment of personal goals rather than comparing with others. Teachers can give positive feedback such as compliments when students do better than the time before, even if they still do worse than other students. This will align with suggestions from the mindset theory discussed later in this article.

Self-determination theory

Deci and Ryan (1985) proposed the self-determination theory based on empirical psychological research. They concluded that people have an innate drive and emotional response to actively learn things. They called this drive "intrinsic motivation". The only essential reward is pleasure and enjoyment as we perform that activity. In addition, this theory indicates that social settings will promote intrinsic motivation when fulfilling three psychological needs: autonomy, competence and relatedness. This means that through the satisfaction of these three needs, people will have freedom to engage in self-determined activity (Brophy, 2004). If these three needs are not met, people are less likely to be self-determined.

In contrast to intrinsic motivation, there are four types of extrinsic motivation, ranging on a continuum from external control to autonomous self-regulation.

External regulation happens when actions are controlled by external rewards or punishments. In language learning, it could occur when employees learn language solely because they have been assigned to by their boss, otherwise they will lose their jobs.

Introjected regulation happens when people act because they think they should do something or feel guilty if they do not. In this level, no external force is required. But there is a felt pressure that is not from an internal self. Examples are students who complete their homework because they are afraid of getting bad grades.

Identified regulation happens when people view certain values as important to themselves. Examples in language learning can be people who learn language because they see learning languages as important to their selected goals, such as specific careers.

Integrated regulation is a result of the combination of identified values and regulations into one's self.

Teachers can use both extrinsic and intrinsic motivation to encourage students to learn. However, intrinsically motivated learning is generally more preferable over extrinsically motivated learning (Deci and Ryan, 1985). When a learning environment is controlling and focusing on external rewards and punishments, the learners' intrinsic motivation tends to diminish (*ibid*.).

Teachers can fulfil students' autonomy needs by emphasising choice rather than control (Brophy, 2004). Teachers can provide opportunities for students to make their own choices. For example, teachers can provide a selection of reading materials for students to choose to read in a reading class. This will promote autonomy in students.

Teachers can respond to the students' competence needs by using material that matches the students' level of skills (*ibid*.). Using material that is too difficult will decrease the sense of competence in students, while using material that is too easy will decrease the students' chances to learn. Teachers can also provide class environment that offer students immediate feedback for their performances.

Teachers can respond to students' relatedness needs by creating cooperative classroom environment (*ibid*.). Teachers can encourage students to work in small groups or pairs. This will provide students with opportunities to work together and create a sense of a learning community.

Mindset theory

Dweck (2006) proposed that there are two types of mindsets; fixed and growth mindsets. People with fixed mindset believe that human ability is fixed. They believe that people's abilities and characters cannot be changed. They may have great ability but they are not willing to challenge themselves to do things that they are not sure that they can do well because they do not want to fail. Since they see that ability is fixed, they think if they fail or make mistakes, it must mean that they are not talented or do not have that ability. This can prevent people from learning and growing. On the other hand, people with growth mindset believe that ability is something that can be improved. They like to learn and challenge themselves because they see mistakes as learning experiences. They are likely to see themselves as works in progress rather than finished products. Growth mindset helps people become lifelong learners.

This theory can help teachers and students think about learning language in a totally different way. Most people start to learn a language but quit before becoming fluent. In addition to motivation, I think mindsets play a major role in language learning. It is quite common to think that people are talented and naturally good at language learning or completely bad at it. This view is not only common in language learners, but in teachers as well. If students learn new vocabulary in a language class one week and have forgotten it the next week, they can think "I am so bad at languages." Or "I can never remember them all." This shows that they have a fixed mindset. They see themselves as finished products. They either have the ability to learn languages (or not). If this happens often, the learners' motivation to learn will diminish because they will come to think they are not good at language learning and never will be. Fixed mindsets prevent people from learning from their mistakes. On the contrary, people with growth mindsets may encounter the same problem, but they will be likely to think "I couldn't remember vocabulary. I need new strategies to remember words." or "How can I learn from this mistake?" By having a growth mindset, they will be able to maintain their motivation and continue learning languages.

Teachers can help students cultivate a growth mindset by acknowledging efforts to get answers right. Dweck (2006) indicates that labelling students as gifted or talented will eventually cause poor results, because this encourages fixed mindsets in students. They may feel good about themselves at first, but when they come to face problems or mistakes, which they eventually will, they will feel that they are not gifted anymore. Therefore, they will cease to put efforts into learning more advance things.

People can have a fixed mindset about one thing, but a growth mindset about another. For example, I have a growth mindset when it comes to language learning. I know I was not born "a language genius". I have to learn from my mistakes until I become fluent. But when it comes to my music ability, I have a fixed mindset. I have tried to learn the piano and other musical instruments, but every time I could not perform well, I always thought I did not have a talent for music. That has led me to quit learning everything related to music. Language learning requires perseverance; therefore, it is crucial for teachers to cultivate growth mindsets in language learners in order to help them succeed at it.

Summary of findings and implications

- The amygdala and the orbitofrontal cortex may play a role in stimulus appraisal system.
- There are five characters that can be used to evaluate stimuli; novelty, pleasantness, goal/need significance, coping mechanism, and norm/self compatibility.

- Teachers can make learning more appealing to learners by making materials and learning environments match the learners' appraisal system in five aspects as much as possible.
- There is no "one-size-fits-all" language learning method. The best method is the most individualised to suit the person's values and goals.
- Too much stress can decrease learners' attention. A low-stress learning environment is preferable.
- Learning materials that are relevant and meaningful are better at capturing learners' attention.
- Teachers should strive to create a low-stress and engaging learning environment.
- There are three psychological needs that have to be fulfilled in order to give learners freedom to engage in intrinsically motivated learning; autonomy, competence and relatedness.
- Teachers should give students opportunities to be autonomous learners by offering students a variety of choices.
- Teachers should determine the students' level of knowledge and skills and use material that matches the students' level.
- Teachers should encourage students to learn collaboratively with others.
- Growth mindset is preferred over fixed mindset in order to be successful learners.
- Teachers can cultivate growth mindset in learners by acknowledging and placing value in efforts rather than results.

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Chapter 4

Economic incentives for language acquisition

By Lourdes Rodriguez-Chamussy *, Luis F. Lopez-Calva **, Koji Miyamoto ***

This chapter reviews the literature on language proficiency and the economic incentives that potentially lead individuals to invest in the acquisition of language skills. The aim is to understand whether (and to what extent do) individuals respond to economic incentives to acquire non-native language skills. The empirical literature is limited and only provides indirect evidence on the impact of economic incentives. This chapter suggests that this is due to difficulties in locating variables capturing economic incentives, and the appropriate empirical methodology that would help identify the marginal effect of economic incentives on language acquisition, controlling for other determinants. We describe possible reasons behind this challenge along with a first reflection on strategies to better assess the impact of economic incentives.

* Formerly United Nations Development Programme (UNDP); Office of the Presidency, Mexico

** World Bank

*** OECD Centre for Educational Research and Development (CERI)

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Introduction

> I was unable to hear my own sounds, but I knew very well that I spoke English poorly. My words could not stretch far enough to form complete thoughts…I remained a child longer than most, I lingered too long, poised at the edge of language…Weeks after, it happened: one day at school I raised my hand to volunteer an answer. I spoke out in a loud voice. And I did not think it remarkable when the entire class understood. That day, I moved very far from the disadvantaged child I had been only days earlier. The belief, the calming assurance that I belonged in public, had at last taken hold (Richard Rodriguez, *Hunger of Memory*, 1982).

Hunger of Memory (1982) was written by a Pulitzer Prize nominee Richard Rodriguez, the son of Mexican working class immigrants in the United States. As a second generation Mexican-American, he entered school in Sacramento, California at the age of six, hardly speaking English according to his own recount. It was through education that he has made a rapid transition from a socially disadvantaged Mexican-American to a middle-class American. This autobiography describes Rodriguez's perspectives on the complex role of languages among immigrants in terms of family and social relations, and the importance of language acquisition as a means of social mobility in a highly competitive society.

Language proficiency refers to the result of a process of acquiring a language, whether it is learning a native language as a child or learning a second language later in life. This chapter will focus on non-native languages. For the native-born population, this refers to second (or third) languages. In the case of immigrants, this refers to the host countries' language (or "destination-language") whereas for the indigenous minorities, this refers to a dominant (and in most cases official) language.

While most research on the determinants of educational outcomes focuses on the learning environment (*e.g.* teacher quality, material inputs, class size and learning organisations), a more important input in the education production function may be study efforts which

Box 4.1. **Wanting to learn for the joy of learning**

As an English as a "foreign" language (EFL) learner in Ecuador, my interest in languages started at a very young age. My mother always tells the story of how I was self-motivated to learn English and looked for an alternative way to learn it since the elementary school where I was enrolled in did not provide a strong curriculum in English. I started learning English since kindergarten since English is a main subject in public and private schools in Ecuador. However, most of the curriculum for non-bilingual schools back in the 1980s was composed of an hour of English per week where the teacher would focus on providing students with a vocabulary list and having them repeat it in writing for an hour. It was not a successful method, so I asked my mother to enrol me at an English language academy. I do not recall ever thinking about monetary returns or professional competitiveness as factors influencing my interest in learning English. I wanted to learn for the joy of learning and because of an innate interest in NNLs and cultures.

Denisse Romero, Ecuador-United States

can be induced by giving appropriate incentives (Kremer, Miguel, Thornton, 2004). Two incentives that are relevant for language acquisition are intrinsic and extrinsic motivations (OECD, 2007). Economists typically argue that individuals do not make extra efforts for free and instead work harder, more persistently, and more effectively if they earn more money for better performance (Camerer and Hogarth, 1999). Psychologists on the other hand believe that intrinsic motivation is the critical element of motivations and that extrinsic/financial motivations can even be detrimental for intrinsic motivations. While we acknowledge the potential importance of intrinsic motivation and its interaction with extrinsic motivation, this chapter will focus on extrinsic motivation, and hypothesise that it has an important effect on linguistic proficiency of non-native languages.

The literature on extrinsic motivation to raise linguistic proficiency is very limited, partly reflecting the conceptual and empirical difficulties of identifying this particular motivation. Yet, its policy relevance is undeniable, and the interest in this issue triggered an important research agenda that has resulted in useful lessons. The aim of this chapter is therefore to assess what we know about the economic incentives related to language acquisition, and to clarify the challenges in empirically identifying them for different groups of individuals including native-born, foreign-born and indigenous population.

The remainder of the chapter is structured as follows. Section 2 provides a background to this theme by addressing why linguistic proficiency is important in an interconnected world and discussing why we need policies to raise linguistic proficiency. Section 3 describes the conceptual framework for the analysis of economic incentives as a determinant of language proficiency. Section 4 summarises the empirical evidence on economic returns to language skills and the extent to which individuals respond to expected increases in earnings when investing in learning a language. Section 5 provides a first reflection on strategies to overcome the main challenges for an empirical assessment.

Background: Globalisation and the role of languages

Developing linguistic competencies has become increasingly important by virtue of the process of globalisation, which involves cross-border movements of people, goods, services, capital, technology and knowledge. Increasing flows of information, communication and transactions among countries and groups of people imply necessarily more people learning a second or a third language. Surveys suggest for instance that English is studied by 600 million people in the world and this number could reach two billion people by 2020. In OECD countries, by the year 2005, close to 8% of the population was foreign-born. If we take specific countries like Canada, Spain and the United States, between 15% and 20% of the labour force is composed of immigrants, which imposes important language challenges. But the challenges involved in the links between globalisation and language, as stated above, go beyond the movement of people. Trade and investment flow have an important language-related component. The literature shows, for example, that countries with a common language trade more (*e.g.* Rankel and Rose, 2002). Helliwell (1999) analyses bilateral trade between 22 OECD countries between 1988 and 1992 and finds that "[S]haring a common language has a large and significant effect on trade intensity. Two countries sharing a common language are estimated to have two-way trade flows more than 1.7 times as large as those between two otherwise similar countries." Also, Hutchinson (2002) examines the effect of the number of English speakers in a country on bilateral trade with the United States between 1994 and 1996, showing that the proportion of the population that speaks English is a significant factor for both exports and imports between the United States and the 33 countries analysed in that sample.

Indeed, the European Commission in 2007 carried out a study on multilingualism and business, which found clear links between languages and export success. European small and medium enterprises (SME) lose significant amount of business as a result of communication barriers. About 11% of European SMEs that export their goods or services (nearly 2 000 businesses were surveyed) may be losing business because of lack of language skills. According to their results, average loss per business over a three year period is more than 300 thousand euros. Thus, the increase in flows of people, goods and services implies important challenges for language policies, both from an economic and a cultural perspective.

Policy relevance

Why is it important to address the issue of linguistic proficiency for policy purposes? Chiswick and Miller (2007a), for example, point out the importance of identifying groups "at risk" of lacking proficiency in an official language to potentially provide a basis for designing more effective public policies regarding immigration, language training, the labour market and social integration. In a broader perspective the UNDP (2004) established the relevance of culturally-sensitive, rights-based, policy approaches towards immigration and language. Such different views, expressed by the statements cited above, can be grouped into efficiency and equity implications of language-related policies. Language policy should not only be viewed in its manifestation through the immigration debate, but as a key component of a comprehensive and inclusive development policy.

The efficiency aspects of language-related policies have to do with the individual returns of language acquisition and the impact on productivity, which links it to social returns. Like other dimensions of education and investment in human capital, individual decisions potentially have externalities, *i.e.* have an impact on the aggregate performance of the economy. The individual, however, does not incorporate such aggregate effects when making her own decisions, which leads to the need for public intervention to achieve socially optimal levels of language networks. The language composition of the economy has potential effects on the attraction of specific foreign direct investment, technology transfer and local adoption of new technologies, market penetration and reduces the cost of training and labour force enhancement (a well documented example of the role of language skills in an investment decision is the case of Intel microchip processors plant in Costa Rica; Sparr, 1997; Lopez-Calva, Larrain and Rodriguez-Clare, 1998). Language can also be seen as a semi-public good – non-rivalry is satisfied but excludability is in principle possible. These network effects of language have been analysed in the literature and show the relevance of policy interventions from an efficiency perspective (Berry, 1990, 1997; Chiswick and Miller, 1998; Brach, Fraser and Paez, 2005).

Moreover, the policy concerns for language acquisition also relates to *equity considerations*. As long as societies have positive levels of aversion to inequality, either *ex ante*, equality of opportunity considerations, or an *ex post*, compensatory perspective, access to language acquisition and the levels of language proficiency are expressions of how "fair" the social system is in terms of providing equal access to all. This is valid not only from a normative, equal opportunity perspective, but also because social cohesion and the sense of belongingness to a social contract are influenced by a basic sharing of language.

Focus on economic dimensions

From past research it is known that learning has both extrinsic and intrinsic motivations for individuals (OECD, 2007). Putting intrinsic motivations aside, one of the reasons why a person may want to engage in the acquisition of a language – though not the only one – is related to the economic returns this investment may bring about. If learning a language responds, among other things, to a rational decision defined by cost-benefit calculations, the returns from language acquisition would have to compensate the costs, for this decision to be realised. In that respect, the framework is similar to any other type of "human capital" investment. Thus, from an economic perspective, language is a skill that must be treated as human capital due to the fact that: *a)* it is non-tangible, "embedded capital", non-transferrable *b)* it has to be created by sacrificing resources – time and financial resources, and *c)* its manifestation through labour market participation has measurable returns and can also make consumption itself more productive.

Indeed, the acquisition of a language is commonly related to higher earnings or rewards in the labour market and with better conditions for economic participation in general. A recurrent example to illustrate this point is the immigrants' proficiency of the dominant language in the host country. However, in countries in which several languages are spoken, the question that arises relates to the acquisition of the majority-language by minorities, an issue that has received relatively less attention in the literature (examples of works studying this issue are Angrist and Lavy, 1997; Leslie and Lindley, 2000; Chiswick and Reppeto, 2001). Also among native-born populations speaking the dominant language, there has been an increased interest in raising linguistic proficiency in second languages for economic competitiveness.

An in-depth analysis on the economic dimensions is expected to shed light on the following three policy-relevant questions:

1. Do individuals raise linguistic competencies (i.e. by investing more, and/or putting more efforts) in response to economic incentives?
2. To what extent do individuals respond to economic incentives (independent of other incentives)? Do individuals (native-born/immigrants/indigenous) respond differentially to economic incentives? Is this response heterogeneous depending on the education level and other socio-demographic characteristics?
3. Do economic incentives diminish intrinsic motivations (and for whom)? If so, is the overall effect of economic incentives on linguistic proficiency positive?[10]

Conceptual framework to assess the role of economic incentives to enhance linguistic proficiency

According to the approach followed hereby, language skills are not only a part of individuals' ethnical identity, but they are also part of their human capital. As explained above, this can be justified because language skills satisfy the three conditions of the characterisation of human capital, namely cost, productivity or returns and their embedded nature (Chiswick and Miller, 1995). Indeed, acquiring and learning a language is costly, in terms of time as well as money. Secondly, language skills are productive in the labour market and also in consumption activities. Speaking the dominant language of the country will make it easier to find a job and generally one would also expect that it would be a better paid job. As a consumer, speaking the local language should make an individual more efficient at finding higher quality goods and services, at lower prices. Lastly,

language skills are embodied in a person since they cannot be separated from the person and cannot be transferred – as in the case of physical capital. The discussion on what determines investment in language proficiency can be guided by a model describing the factors that influence an individual's decision to invest in human capital acquisition.

Following the literature on the determinants of destination-language proficiency amongst immigrants summarised in Chiswick (2008), these factors are grouped into three categories: exposure to the language of the host country, efficiency at learning this language, and economic incentives – payoff – for learning the new language.[11]

The setting considers that exposure to the destination country language increases language proficiency. One aspect of this is exposure before migration. For example, in English-speaking destinations, immigrants from former United Kingdom and United States colonies, as compared to immigrants from other regions, are found to be more proficient in English. The most important aspect of exposure however happens after migration. Proficiency increases with duration in the destination country and with the expected future duration. Intensity of exposure relates to the environment in which immigrants live. Those who live in minority-language areas and avoid using the destination language and those who get married before migration have lower proficiency in the dominant language. The presence of children seems to have an ambiguous impact on parents' proficiency as there are several effects at play.

Efficiency refers to one's ability to turn exposure into language learning. Younger age at the time of migration, higher level of schooling and shorter linguistic distance between native language and the destination country language positively affect immigrants' language proficiency in the destination language. The reason for migration is also important. It has been shown that employed migrants have higher levels of proficiency than refugees and family migrants.

There are expected benefits for individuals, both as workers and consumers, resulting from the productivity attribute of language skills as a form of human capital. These economic incentives would partially explain the level of skill and proficiency in destination-language [12].

Although most of the evidence for determinants of language proficiency comes from the study of immigrants, the described framework can be enhanced for the study of majority language acquisition and bilingualism. In fact, many of the variables related to exposure and efficiency at learning could be grouped further into cost-related variables, while the comparison with the returns will provide the net incentives related to language proficiency. For example, the efficiency at learning the new language can be influenced by a person's natural ability for learning or by her educational level. Both aspects would indeed lower the cost of acquisition, while making the incentives higher for a given level of language returns in the market. For the specific case of economic incentives, one can expect that individuals in general will be motivated to improve their proficiency in a second language due to the expected increase in wages, levels of employment, and the expected decrease in the costs of consumption – or improvement in "consumption quality". As we discuss in below, availability of data has limited the empirical analysis on the significance of economic incentives as a determinant of language proficiency.

Empirical evidence

Are there labour market returns to being proficient in languages?

The literature on labour market returns of language skills is substantial. Although the magnitude of the estimated effect differs amongst studies, findings point to the general conclusion of significant returns to language proficiency. Annex 4.A1 presents a summary of results for a wide range of works.

A large proportion of the literature on this area of inquiry analyses evidence on the economic returns to language proficiency for immigrants; however there is some evidence for majority language acquisition and bilingualism. The main implications from the variety of studies are:

1. Immigrants who are more proficient in the destination language earn significantly more – between 5% and 20% for a wide range of studies.
2. The effect is found to vary across gender, ethnic groups and immigrants' country of origin.
3. Significant positive effects on immigrants' earnings are consistent for studies using self-reported and test-based language proficiency measures.
4. Empirical results suggest that language proficiency is endogenous in the determination of earnings.
5. Instrumental variables (IV) analysis confirms that least squares may underestimate the effect of language proficiency on earnings. The interpretation for the cause of the OLS estimator downward bias depends on the specific variables used to instrument language proficiency in each study and can be related to measurement bias, endogeneity bias and poor instruments.

In this section, we present a brief review of the data sources, measurement and methodologies that have been used in the literature conducing to the general conclusions just described.

Data sources and measurement

Several aspects to language skills, namely speaking, hearing, writing and reading, therefore important issues relate to how language proficiency is defined and measured. Assessment of these skills indicates an individual's language proficiency. The most common data available and used as a measurement of language proficiency are self-reported responses to questions about individual's speaking fluency, as presented in various country surveys and censuses. The question is usually in the form: "How well do you speak English?" The possible answers, as for example from the Survey of Income and Education include "very well", "well", "not well", "not very well" and "not at all".

In the United States for example, the Survey of Income and Education (SIE) and the Integrated Public Use Microsample Series (IPUMS) of the United States Census have been the most commonly used sources, because they provide information on earnings as well as self-reported assessment of English-speaking fluency. There are several problems associated with this type of measurement of language skills. Firstly, self-reported values can lead to bias; and secondly some studies have suggested that speaking fluency is not the only factor and possibly even not the most important factor in determining one's language proficiency (*e.g.* Chiswick, 1991; Dustmann, 1994).

Other sources and forms of data capturing different aspects of language proficiency than just speaking have been used. For example, Chiswick (1991), in addition to SIE and United States Census data, includes data from a survey of illegal aliens apprehended in Los Angeles in 1986 which asks questions regarding not only individuals' English speaking skills, but also their reading skills. Similarly, self-reported responses to questions about writing German language skills are used by Dustmann (1994) to analyse the returns to German proficiency in West Germany. In the United Kingdom, data from the 1994 Fourth National Survey of Ethnic Minorities, used by Leslie and Lindley (2001) and Shields and Wheatley Price (2002), include an interviewer-assessed measurement of individuals' English speaking fluency and thus eliminate the measurement error arising from the respondents being asked to provide their own assessment of their language skills.

Clearly, the use of test-based results would be much more favourable than the self-assessed measurement as it would eliminate the possible bias resulting from self-reported responses. Rivera-Batiz (1990) uses data from the National Assessment of Educational Progress Young Adult Literacy Assessment survey which provides a test-based measurement of English reading proficiency of 21 to 25-year-old United States immigrants and second generation individuals. Two drawbacks of such data can be mentioned. First, the sample is likely to be very small and second, it may be expensive and difficult to include assessment of the speaking and listening dimensions of language proficiency. For instance, Rivera-Batiz (1990) uses data that includes information for 241 individuals aged 21 to 25.

In terms of data sources, the availability of panel data represents an important advantage for empirical analysis. This type of data allows for a more robust estimation of the effects because the estimation can eliminate bias due to unobserved characteristics that are constant over time. Dustmann (1994) uses the 1984 German Socio-economic Panel and finds that immigrant men and women who speak German well or very well have 6.9% and 7.1%, respectively, higher earnings than those who speak German badly or not at all.

Different variables for language fluency have been used in the empirical literature. Some studies measure language deficiency, rather than language fluency. The most basic variable used is a simple dummy variable taking values of 0 or 1 depending on whether individual is fluent or non-fluent (used by *e.g.* Chiswick and Miller, 2003; Dustmann and Soest, 2002; Chiswick and Miller, 1995; Grenier, 1984). Another way is to identify separate categories of language skills, four or five, usually based on the answers to a question asked in a survey regarding one's language fluency (used for example by Kossoudji, 1988; Dustmann 1994; Leslie and Lindley 2001). Some studies create a continuous variable of language fluency, ranging from 0 to 1 (Carliner, 1996; McManus, Gould and Welch, 1983). It is also possible to construct an index of language proficiency based not only on the fluency level, but also on other questions asked such as what is individual's primary language and what language is spoken at home (Tainer, 1988).

Estimation methodology

The general setting used to empirically analyse the consequences of language proficiency for labour market outcomes has been the estimation of an equation in which earnings are a function of characteristics of the individual and his or her level of destination-language proficiency. Analysing the returns to language skills – and human capital skills in general – presents important challenges. Empirical research on the economic returns to language proficiency is thus clouded with the obvious problem of endogeneity. In the one hand, earnings and language proficiency are jointly determined:

individuals who expect higher earnings in the future from investing in learning the dominant language are more likely to acquire the language skills and become more proficient. On the other hand, individuals with higher overall ability (difficult to measure in empirical studies) are also more likely to invest in new language acquisition. The methodology of instrumental variables has been used to obtain consistent estimates. Moreover, given that most of the studies are based on immigrants there is also the concern of selection bias. Individuals who did not migrate are not observed in the data; therefore some studies implement adjustment methods such as the Heckman correction to account for the selection problem.

Using the 1990 United States Census data for individuals who immigrated to the United States as children Bleakley and Chin (2004) find positive effect of English language skills on earnings, but argue that standard OLS estimates are subject to a severe downward bias due to measurement error and a smaller upward bias due to endogeneity. The IV analysis estimates that improving English skills by one unit leads to an increase in wage of 33%, as compared to 22% when OLS is used. Chiswick and Miller (1995) estimate the effects of English language fluency on earnings for 25-64 year old foreign-born men in Australia and find evidence that earnings and dominant language fluency are determined jointly. Using convincing instruments for the particular scenario of Catalonia, Rendon (2007) finds that the probability of being employed increases between 3 and 5 percentage points for individuals who read and speak Catalan.

Dustmann and van Soest (2002) argue that there are three possible source of bias for the OLS estimates: unobserved heterogeneity affecting both speaking fluency and earnings; time-varying measurement errors and time-persistent errors. To address this issue of unobserved heterogeneity, they use parental education and partner and household characteristics as instruments. The authors conclude that the time-varying measurement errors lead to a substantial downward bias of the impact of German language speaking fluency on earnings which overpowers the positive bias associated with unobserved heterogeneity. The bias due to time-persistent error is found to be quite small. Thus the standard OLS estimates underestimate the effect that language fluency of immigrant men has on their earnings. Similar results were also found for immigrant women.

Analogous analysis of the returns to language skills has been carried out for immigrants in the United Kingdom. For example, Shields and Wheatley Price (2002) use data on English language fluency from the Fourth National Survey of Ethnic Minorities from 1994 which is unique in that it provides an interviewer-assessed measurement of English fluency. Using OLS estimation it is found that those who speak English fluently have 8.9% higher hourly wage than those who are not. However the corresponding IV estimation is 16.5%. Two sets of instruments are used: language of the conducted interview and whether the individual is married to a United Kingdom-born woman. Using selectivity-corrected estimates the authors find no significant evidence of endogeneity, suggesting that the bias in OLS estimates is more likely to be due to a measurement error rather than unobserved heterogeneity affecting earnings and language fluency.

Heterogeneity in the effect

A large proportion of studies shows that the effect of language proficiency on earnings is heterogeneous across gender, ethnic groups and immigrants' country of origin. For example, Tainer (1998) shows that in the United States, Hispanic men who improve their English language fluency by one level (there are five possible skill levels) experience a 17.4% increase in their annual earnings, compared to 12.7% for European immigrants.

Leslie and Lindley (2001) find that fluent non-white immigrant men in the United Kingdom earn 10% less than fluent white United Kingdom-born men. Rivera-Batiz (1990) finds that on average, an increase of one standard deviation in the test score, or an increase of 74-76 points (maximum number of points is 500), leads to a substantial 13.5% increase in earnings among men and a 20.5% increase among women. Furthermore, immigrants from Spanish-speaking countries earn less than their counterparts from English-speaking countries.

For Hispanics in the United States, Borjas (1984, as cited in Rivera-Batiz, 1990) finds no effect of English proficiency on hourly wages. Using the 1976 Survey of Income and Education data, Reimers (1983) finds that not speaking or understanding English very well lowers the earnings gap between whites and ethnic minorities by only 2% to 6%, depending on the ethnic group. Gwartney and Long (1978) find no significant effect of lack of proficiency in speaking English as a primary language on the earnings of Chinese, Filipino, African-American and American Indian males in the United States, but the impact is positive and significant for Japanese, White and Mexican-American males.

In relatively recent work, Duncan, Hotz and Trejo (2005) suggest that adjusting for education and English language proficiency results in very similar earnings and employment levels between Hispanic immigrants and United States-born whites. The earnings gap between Hispanic immigrant men and United States-born white men is reduced from 59% to 5% after taking into account their education and English language skills.

Bilingualism

Carliner (1981) studies the earnings returns to English and French proficiency amongst immigrants in Canada. Estimates show that wage differences between monolingual English speakers, bilingual English speakers and bilingual French speakers are small, however monolingual French speakers and immigrants whose native language is neither French nor English earn between 9% and 16% less than those who only speak English.

Using the standard earnings function estimation and data from 1983 Census of Population and Housing of Israel, Chiswick (1998) estimates that immigrants who speak English as their first language and Hebrew as a second language have slightly higher earnings than monolingual Hebrew speakers, on average. The highest earnings overall belong to those whose first language is Hebrew, but who also speak English. English speakers are furthermore found to have an advantage over Arabic speakers. These results are likely to indicate the international value of speaking English.

Chiswick, Patrinos and Hurst (2000) estimate the effects of language skills of indigenous people on earnings and other labour market outcomes in Bolivia. The authors find no significant difference between earnings of bilingual men and those who speak only an indigenous language, which is possibly explained by the small number of men who only speak an indigenous language. Bilingual women earn about 25% more than women who speak only indigenous language. The relative disadvantage of indigenous bilingual men could also be due to their lower proficiency in Spanish suggesting that there are significant returns to becoming more proficient in Spanish, just like the evidence shows for women. An alternative explanation for this difference in earnings is given by the general discrimination of indigenous people in the labour market or by their lower quality of schooling.

Chiswick and Miller (1998) show that in the United States, individuals who speak a language other than English and who speak English "very well" and "well" have 7.5% and 12%, respectively, lower earnings than monolingual English speakers, on average. This

effect of bilingualism holds within ethnic groups. A potential explanation is that bilingual individuals are in fact less proficient than monolingual English speakers or are discriminated against due to their accent. If at least part of the difference in earnings was in fact due to their lower proficiency, it would be an important confirmation that improving proficiency in the destination-language could lead to closing of the monolingual-bilingual wage gap.

Do individuals respond to labour market returns?

Despite the evidence of significant economic returns to language proficiency, empirical evidence on the extent to which individuals respond to economic incentives to acquire specific language skills is remarkably scant. Identifying the role of economic incentives on the acquisition of language skills, and in general on the decision to acquire human capital, is challenging for several reasons. Essentially, adequate econometric techniques have to be used to deal with the issues of endogeneity. Moreover, due to data limitations the research has focused on indirect measures of economic incentives.

As discussed in previous sections, from a conceptual perspective, the economic incentives for language acquisition can be direct or indirect. The direct incentive relates to returns to the skill via higher wages. Indirect incentives have to do with the strengthening of networks (social capital) – which also have a return – and the reduction in costs and expenditures for specific services, related for example to health (see Brach, Fraser and Paez, 2005). Two variables measuring economic incentives have been used in the existing literature: education as a proxy for expected wage increment for language proficiency and expected duration at the destination.

The first approach entails, as Chiswick and Miller (2007a) discuss, using the complementarity between language proficiency and education in generating labour market earnings.[13] In that framework, the education variable (schooling) captures the effect on incentives to invest in destination language skills (Chiswick and Miller, 1995, 2002, 2003). For instance, estimations using data for immigrants in Australia suggest that each additional year of education is associated with an increase in the fluency rate of 2.5 percentage points (Chiswick and Miller, 1995). The authors find the effect of educational attainment on language fluency to be stronger for immigrants from Vietnam, China, Cuba and Mexico, and lower for immigrants from Africa, South Asia, the Middle East, the Philippines and Europe. They suggest the impact of the educational attainment variable is mediated by the initial language deficiency, so that education is more important for lower initial levels of language proficiency.

The use of this alternative is likely to suffer from endogeneity bias since a) both education and linguistic proficiency are likely to be jointly determined and b) unobserved heterogeneous characteristics such as ability is likely to affect both education and language proficiency[14]. Furthermore, from the conceptual framework, we can see how the education variable is not only related to economic incentives but contains elements of the efficiency and exposure categories described in section 3, hence making the interpretation of the coefficient very difficult.

A second approach, predominant in the existing empirical research due to data availability, focuses on the length of time over which the benefits of language proficiency are to be realised. Variables frequently used for the analysis are marital status, children, country of birth, and geographical distance of the country of origin as proxies for probability of return to the region of origin or expected duration at the destination.

For instance, Chiswick and Miller (1995) use dummy variables indicating country of birth as proxy measure for expected future duration. Chiswick and Miller (2007a) report the results of a study using the 1991 Census of Canada: the authors find that the greater the geographic distance between country of origin and Canada, the more likely that an immigrant will be able to conduct a conversation in an official language, and the more likely that he will use an official language at home. Chiswick and Miller (2007a) results for the United States based on the 1980 United States Census of Population Public Use Microdata Sample C show that immigrants who were married-overseas had lower level of language fluency. They find this effect to be statistically significant for immigrants from Europe, Mexico and Cuba, while for most other birthplace groups the sign of the effect is also negative but not significant.

As with the education variable, the use of "expected duration at the destination" is likely to suffer from endogeneity bias, since the "length of stay at the destination" and the "degree of investment in languages" are plausibly jointly determined. In addition, unobserved ability is likely to affect both the expected length of stay and linguistic proficiency.

Lastly, an alternative way to overcome the lack of individual data used in the literature is to estimate individual measures of economic incentives through the analysis of the residuals (see Chiswick and Miller, 1995). The technique implies estimating the language proficiency variable as a function of all the potential determinants for which data exists. The residuals, this is the part of language proficiency that was not explained by the variables included in the regression, are interpreted as a measure for the economic incentives that were missing as explanatory variables in the regression. Potential problems that would arise by using this strategy include *a)* consequence of the potential measurement error in one or several variables used in the regression analysis, and *b)* specification bias in estimates induced by the fact that variables not related to incentives were not included in the model and their effect goes to the residuals.

Strategies to better assess the role of economic returns

Given the limited evidence on identifying the role of economic incentives on language acquisition available in the literature, this section will provide some reflections on possible ways to improve the assessment. The objective of a study on economic incentives for language proficiency would be to provide a measure of how much an individual's language proficiency would have been affected if the expected earnings for acquiring a unit of proficiency changed, holding other things equal. The most important problem for establishing the magnitude of the impact of incentives on language acquisition is that a counterfactual is never observed. Therefore, the methodological approach to analyse the response of language acquisition/proficiency – or investment in language acquisition by individuals – faces important challenges empirically.

What are feasible research directions that would help reach such objective? Two aspects should be considered to discuss such methodological aspects, namely:

1. The availability of data measuring "economic incentives"; and
2. The identification[15] of the effect of economic incentives, isolating it from other determinants.

Given that we prefer direct measures of economic incentives (in contrast to measures used the literature), the first challenge is to identify a variable that appropriately captures "language proficiency wage premium." The second challenge is to address the identification

issue, one way of which would be to identify/construct exogenous changes in the "language proficiency wage premium." The following section provides three possible options:

Using experimental (randomised) controlled-data

The ideal way to identify the effect of economic incentives on language proficiency is by using experimental data. In an experimental setting, a sample should be randomly split into one group subject to a specific incentives profile, while other group facing a different incentive or, ideally, no incentive at all. Only in such case would the change in the dependent variable be convincingly attributed to the incentive. Of course, such a setting is only available whenever a specific intervention is designed to be evaluated which is the case of some training and education programmes designed as randomised experiments.

To our knowledge there is no study in the literature that evaluates the specific case of language acquisition or language proficiency, however randomised trials have been used to evaluate school scholarships and other education programmes. Kremer, Miguel and Thornton (2004) examine the impact of a merit scholarship programme for adolescent girls in Kenya. Their results suggest that effort – investment in learning – responds to financial incentives: Girls eligible for the scholarship showed significant an average gain of 0.12 to 0.19 standard deviations in academic standard scores and these gains persisted following the competition.

Angrist and Lavy (2007) study an experiment that used school-based randomisation design offering awards to all students in treated schools who passed the exam known in Israel as the "Bagrut". They find that students responded to incentives by taking more tests and being more likely to accumulate the number of credit units required for success in passing the exam.

In a related study, Leuven, Oosterbeek and van der Klaauw (2009) examine the effect of financial incentives on achievement among first year university students. They conduct a randomised experiment assigning students to three different groups in such a way that the ability distributions are identical. Students in one of the groups are eligible for a bonus equivalent to 681 euros upon completion of all first year requirements by the start of the next academic year. In the second group the reward is 227 euros. The third group is a control group, where students could not earn a reward. Results suggest a small and statistically insignificant effect of the large reward on achievement. The authors argue that this is the result of dynamic spillovers and heterogeneity in the effect for high and low ability students.

Finding events potentially treated as natural experiments

There are specific situations that could be used in a way in which the incentives which different groups are faced with vary exogenously. This is by using a natural experiment or by constructing quasi-experimental datasets that reflects exogenous shocks due to exogenous policy/structural/institutional changes. One example looking at the effect of family networks on language acquisition could illustrate they way in which data could be used: Kuziemko (2007) analyses the transmission of English language skills from children to their parents in Californian immigrant households. The author follows an interesting approach by using a policy change in California which in 1998 called for replacing the bilingual education system with English-only education. Data from the 1990 and 2000 United States Censuses allows measuring the impact that this exogenous variation in children's language learning had on their parents' language skills. The main finding in

this chapter remains that parents are less likely to learn English when they have English speaking children at home.

The labour economics literature provides some examples that could be methodologically implemented, though they do not specifically analyse the effect of incentives on acquisition of language. In the context of the search models for instance, Acemoglu (1996, 1999); Moen (1999); Charlot, Decreuse and Granier (2004) and Cardona and Sanchez-Lozada (2006) have studied economic incentives for the acquisition of skills (schooling) when wages are negotiated. Although these are mostly theoretical pieces, they provide some predictions to be tested in a setting with the presence of unions or other bargaining mechanism. The ideal setting to empirically test the importance of economic incentives on language proficiency would be one in which the union or some agent exogenously sets a wage premium to language skills. The analysis of course would require availability of data on the individuals' language proficiency.

Instrumenting: Finding a valid instrument for "language skills-premium"

The use of instrumental variables for returns has been discussed above. Again, the difficulty relies on finding valid instruments, with strong explanatory power for identification and one in which exclusion restrictions are satisfied. One specific idea is discussed below, related to geographical variation in wages, in addition to the previously discussed exogenous policy-changes option.

Using geographical "language proficiency wage premium" among immigrants

We begin with the variable that would better reflect the concept of economic incentives: expected wage returns to improved language skills, or expected returns to training in language proficiency (education). In principle, it is possible to estimate aggregated measures (by region and occupation) of "language proficiency wage premium." The difficulty, however, is to argue that such wage variations are exogenously determined.

An example where regional wage differences might be considered exogenous relates to Mexican immigrants in the United States. Historic migration of Mexicans to the United States has been shown to have a regionally well-defined pattern. Recent empirical research has shown the location-persistence of migrants from specific Mexican states, due to networks and other factors. In that respect, the wage profile for language skills, if they differ, for example, between California and New York, is exogenous for Mexicans in these two states. Thus, using a good indicator of language-proficiency wage premium and language acquisition effort for Mexicans in California and New York, could be one way to tackle the issue of endogeneity, as long as the empirical approach controls for other relevant variables. In this case, even when individual data on language proficiency exist, variation in wages or language-premium will only show geographical, not individual, variation.

Notes

1. Tackling the last question goes well beyond the scope of this report, and will be left for future work.
2. The level of wealth is also included in the setting, though this could be seen as a measure of the relative importance of the economic incentive, with a decreasing relative effect. Wealth could, however, increase the "consumption incentive" driver.
3. This decision-making framework, implicit in the analysis, considers returns as given for the individual. There are no effects due to the aggregate effect of people deciding to acquire the language and having an impact on returns.
4. More educated individuals have higher expected wage gains from being proficient in languages.
5. An example of study using plausible exogenous variables to estimate returns to education is Duflo (2001).
6. It is worthwhile recapitulating the main identification problems that the empirical analysis conveys, *i.e.* endogeneity. This includes *reverse causality*: those with higher language proficiency are more likely to gain higher earnings. If an instrumental variable (IV) solution is suggested, the question remains of what are possible instruments for economic incentives. Using simultaneous equations technique, one might estimate the effect of incentives but this requires identifying valid instruments for two equations, one on linguistic proficiency and the other on economic incentives. The empirical literature does not provide a solid guidance to possible instruments to use. Another source of endogeneity is measurement *error* which is likely to be the case for both economic incentives and reported language skills. Again, an IV approach may be a solution, but finding valid instruments is not easy. The last source of endogeneity is unobserved heterogeneity which is common to the study of human capital acquisition in general that refers to the identification problem that unobservable characteristics such as ability pose. A possible solution is to either use of individual fixed effects models (whenever panel data is available) or use IV.

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Annex 4.A1

Summary of the evidence

Group	Country	Authors	Main findings	Year	Source
Destination language acquisition (immigrants)	USA	McManus *et al.* (1983)	Immigrant men with maximal English language deficiency earn two-thirds that of what native United States men earn	1976	Survey of Income and Education (SIE)
		Kossudji (1988)	Fluent English speakers earn 18% to 66% more that those who speak little or no English	1976	SIE
		Tainer (1988)	Increasing English fluency by one unit (out of possible five) increases earnings by 17.4% for Hispanic immigrants and 12.7% for European immigrants	1976	SIE
		Chiswick and Miller (1995)	Immigrants who speak English very well earn 16.9% more than those who speak English less then very well	1980	Integrated Public Use Microsample Series (IPUMS) of the United States Census
		Rivera-Batiz (1990)	Increase of one standard deviation in the test score (74-76 points out of maximum 500) leads to an increase in earnings of 13.5% for men and 20.5% for women	1985	National Assessment of Educational Progress Young Adult Literacy Assessment
		Chiswick (1991)	Reading fluency increases earnings by 30% (37% and 42% for Mexican and other Latin American immigrants, respectively)	1986	Sample of illegal aliens detained in Los Angeles
		Bleakley and Chin (2004)	Immigrants who speak English very well earn 67% more than those whose English is poor (IV estimates)	1990	IPUMS, United States Census
		Duncan *et al.* (2005)	English language skills and education reduce the earnings gap between Hispanic immigrants and United States-born white men from 59% to 5%	2000	IPUMS, United States Census
	West Germany	Dustmann (1994)	Immigrant men with good or very good German speaking and writing skills earn 10.5% more than those with poor language skills	1984	German Socio-Economic Panel
		Dustmann and van Soest (2002)	Immigrant men with good German speaking skills earn 14% more than those with intermediate skills (IV estimates)	1984-1993	German Socio-economic Panel

Destination language acquisition (immigrants) *(cont.)*	United Kingdom	Shields and Wheatly Price (2002)	English-fluent immigrant men earn **16.5%** more than non-fluent immigrant men (IV estimates)	1994	Fourth National Survey of Ethnic Minorities
		Leslie and Lindley (2001)	Fluent non-white immigrant men earn **10%** less than fluent white United Kingdom-born men	1994	Fourth National Survey of Ethnic Minorities
	Australia	Chiswick and Miller (1995)	English language fluency increased earnings by **5.3%** in 1981 and by **8.3%** in 1986	1981, 1986	Australian Census of Population and Housing
		Chiswick (2008)	Immigrant men who speak English well and very well earn **25%** and **10.5%** less than English only speaking men, respectively	2001	Australian Census of Population and Housing
	Canada	Chiswick and Miller (1995)	English speaking fluency increases earnings by **12.2%**	1981	Canadian Census
		Chiswick and Miller (2003)	Official language (English or French) fluency increases earnings by **13%**	1991	Canadian Census
		Carliner (1981)	Non-native English or French immigrant speakers earn between **9%** and **16%** less than native speakers	1971	Canadian Census
Destination language acquisition (immigrants) *(cont.)*	Israel	Chiswick (1998)	Immigrant men who speak Hebrew as their only or primary language earn **35%** more than those who do not (IV estimates)	1983	Census of Population and Housing of Israel
		Chiswick and Repetto (2000)	Immigrants who can write a letter in Hebrew earn **12%** more than those who cannot; those who cannot speak or write Hebrew earn **20%** less	1972	Census of Population and Housing of Israel
Majority language acquisition (indigenous people)	Bolivia	Chiswick, Patrinos and Hurst (2000)	Spanish speaking men and women earn **23%** and **28%** more than indigenous bilingual men and women, respectively; bilingual women earn **25%** more than only indigenous speaking women	1993	Integrated Household Survey
	USA	Chiswick and Miller (1998)	American Indian men speaking English very well earn **16%** less than monolingual speakers	1990	IPUMS, United States Census
Bilingualism	USA	Chiswick and Miller (1998)	US-born men who speak language other than English at home earn between **7.5%** and **12%** less than monolingual speakers	1990	IPUMS, United States Census

Chapter 5

Bilingual education policy and language learning in Estonia and Singapore

By Jennifer Worden *

Within the last decade, conversations about globalisation have shifted and evolved in several ways as countries have experienced increasing demographic changes. The heightened presence of non-native language learners (NNLL) moving within and across borders has implications for many areas of society, including education, social and health services, and national and international security. By exploring the academic literature base and collecting cross-cultural and cross-national data on current trends and experiences, we will be better equipped to ensure that our institutions and their constituencies are prepared to meet the needs and reap the rewards of multilingualism. The cases of Estonia and Singapore offer two lenses through which I examine how educational and linguistic policy can interact with other factors including immigration patterns, identity formation, language use, socio-economic development, and political policy.

* Harvard University Graduate School of Education

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

Within the last decade, conversations about globalisation have shifted and evolved in several ways. For one, globalisation has moved from a hypothetical future, to be embraced or defended against, to a reality. More interestingly, I think, the conversation has evolved from focusing almost exclusively on economic models and consequences to exploring the experiences of the ever growing number of people moving within and across national borders. Bilingualism or multilingualism is now the norm for large percentages of the global population, with estimates that as much as 2/3 of the world population speak at least two languages (Baker, 2006). Further, the heightened presence of non-native language learners (NNLL) moving within and across borders has implications for many areas of society, including education, social and health services, and national and international security. It will become increasingly important to understand the role these individuals and their families play in shaping culture, social norms, and political outcomes. In turn, the role education, ever a socialising force, may play in shaping future outcomes for NNLLs and the societies in which they reside should be of paramount interest to policy makers, political actors, and citizens alike (see Hinton, this volume).

Given these facts, it seems prudent that we fortify our knowledge base regarding multilingualism and NNLLs to assist governments and educational policy makers in making informed choices when formulating policy and evaluating current systems. Indeed, a simple search of several educational databases on the terms "multilingualism" and "education" returns 2 308 articles in peer reviewed journals published in English alone. By exploring the academic literature base and collecting cross-cultural and cross-national data on current trends and experiences, we will be better equipped to ensure that our institutions and their constituencies are prepared to meet the needs and reap the rewards of multilingualism. A first step towards this end is the collection and analysis of not just academic knowledge, but also lived experiences. The cases of Estonia and Singapore offer two lenses through which I examine how educational and linguistic policy can interact with other factors including immigration patterns, identity formation, language use, socio-economic development, and political policy (for a discussion of related issues in the context of Peru, see Belmont, this volume). I embed the examination of these two cases within a larger analytical framework calling for the proactive pursuit of informed Non-native Language Learning policies.

Why multilingualism?

There is a case to be made for encouraging multilingualism beyond that of reacting to forces already in motion. Cognitive Neuroscience continues to show us that the benefits to being bilingual or multilingual are deep and far-reaching (*e.g.* Bialystok, 2009; Mechelli *et al*., 2004; Ransdell, Barbier and Niit, 2006; Rodriguez-Fornells *et al*., 2006). Overall, metacognitive skills and metalinguistic abilities tend to be more complex in bilinguals (Bialystok, 1988, 2001; Cromdal, 1999; Kotz, 2001; Ransdell, 2006). Evidence also supports Goethe (as cited in Vygotsky, 1962) who stated, "those who do not know other languages know nothing of their own". Bilinguals are able to draw on greater metalinguistic

and metacognitive resources to transfer skills to other areas, in particular literacy (see della Chiesa, Chapter 25, this volume). Additionally, these and other advantages appear to transfer beyond linguistic competence to other cognitive areas such as attention and memory (Bialystok *et al*., 2009). Moreover, there is some evidence that the process of learning a second or third language may increase and extend neuro-plasticity, allowing for increased cognitive flexibility and memory retention that extends across domains (Kovelman *et al*., 2007; Kovelman, Baker and Petitto, 2008; MacSwan and Rolstad, 2005; Mechelli *et al*., 2004; Moreno, Rodríguez-Fornells and Laine, 2008; Rodriguez-Fornells *et al*., 2002). There is a caveat of course: there do appear to be some disadvantages to bilingualism, most notably in terms of vocabulary development (Bialystok *et al.,* 2009). A larger concern, though, is the type of knowledge we have been focused on gathering. Information about relative cognitive advantages and disadvantages of the bilingual brain are interesting and important, I would not argue otherwise. Of equal interest, and perhaps ultimately, of greater importance, is what happens outside of the laboratory. We need to understand more about how linguistic competencies influence cultural competencies and how this interaction plays out in the real world, in classrooms and voting booths. Towards this end, I now turn to the experiences of two states with large numbers of NNLLs, Estonia and Singapore, to explore some of the implications of language policy and practice in Education.

Estonia

Estonia first became an independent state in 1918, but in 1940 was made a Soviet Republic and did not regain independence until 1991. During the half-century under Soviet government, the ethnic and linguistic make up of Estonia changed dramatically. From 1940 to 1989, the indigenous Estonian population dipped from 92.4% to 61.5% (Hogan-Brun, 2007). In 1989, just before independence, 36% of the entire population of Estonia was foreign-born (Kempennian *et al*., 2008), with the majority of this group being composed of immigrants from Russian or other Soviet republics. This politically privileged Russophone minority used Russian in both public and private spheres, leading to a de facto state of asymmetrical bilingualism wherein Estonians were required to learn Russian for socio-economic and political survival but Russians frequently saw little use in learning Estonian (Hogan-Brun, 2007; Kempennian *et al*., 2008). Indeed, by 1991, 34.8% of the total population identified Russian as their first language or mother tongue (Hogan-Brun, 2007). It should be noted that while Estonian was not actively persecuted from 1940-91, the lack of a policy supporting its importance and its use in public spheres meant that socially and psychologically Estonian became a de-privileged language, even among Estonians.

Following independence, Estonian government officials moved quickly to reassert cultural and linguistic sovereignty, highlighting an awareness of the importance language has politically, socially, and psychologically. Estonian became on 18 January 1989 the official language of all state organisations. Stringent linguistic requirements were placed upon immigrants, as standards were set through language exams for employment or higher education, and/or those seeking to become citizens. Particularly affected by these policy changes were members of the resident minority ethnic communities, primarily Russian speakers. Of these, some chose to remain Russian citizens, but many chose Estonian citizenship (Kempennian *et al.,* 2008) which meant that they needed to move quickly from monolingualism (Russian) or bilingualism (Russian, and mother tongue) to either bilingualism (Russian and Estonian) or trilingualism (Russian, mother tongue, and Estonian) in order to pass the naturalisation requirements. The percentage of non-Estonians speaking Estonian rose from 14% to 37% between 1988 and 2000 (Kempennian *et al.*

2008), a not insignificant amount. More recent studies have not cited exact figures for an overall shift, although at least one has noted a decline in the use of mother tongues other than Russian or Estonian, with minority language loss apparently occurring primarily in the generation immediately prior to independence (Kuun, 2010). It should be noted that there was resistance, both within Estonia and from the international community, regarding the strict linguistic demands made immediately following independence and the Estonian government did relax some requirements in response (Kempennian *et al*., 2008). Educational policy in Estonia following independence has been fairly progressive in terms of supporting bilingualism/multilingualism and NNLLs, although improvements could be made.

Education remains the only sphere in Estonia where both Estonian and Russian are afforded equal status as official languages of instruction, at the basic level (*ibid*.). Higher education is taught solely in Estonian, although University rectors do retain some decision-making power in language choices. As of 2007, the Russophone community in Estonia accounted for approximately 28% of the overall population (Hogan-Brun, 2007) at which time about 70% of these children attended Russian language schools (Kempennian *et al*., 2008), where they have been required to study Estonian as a non-native language (Hogan-Brun, 2007).

The right to be educated in your mother tongue is guaranteed by the 1992 constitution and the 1995 Language Act. Indeed, linguistic human rights (for more on linguistic human rights, see Skutknabb-Kangas, Phillipson and Rannut, 1994) are well-codified in Estonian law (Rannut, 2008). One manifestation of this commitment to linguistic diversity is the provision of choices between minority language schools, Estonian language schools, bilingual Estonian-Russian schools, and Estonian immersion schools. Officially, the state supports early and late immersion programmes, which have been integrated in 26 schools to date (Hogan-Brun, 2007). There are 71 Russian language schools, although upwards of 80% of these are de facto bilingual schools, teaching some subject matter in Estonian in addition to Estonian as a non-native language. There are 21 additional explicitly bilingual schools (*ibid*.). In practice, although minority language schools are officially supported, recent studies (*e.g.* Kuun, 2010) indicate that multilingualism in Estonia is quickly becoming de facto bilingualism with minority mother tongues being abandoned.

Thus, the linguistic and educational policy landscape in Estonia is not without flaws and challenges for the future. A move to primarily Estonian instruction in all secondary and higher level schools has been legislated but due to systemic challenges, implementation has now been postponed twice. Russian language instructors are ill-equipped to provide the mandated 60% of instruction in Estonian and attitudes within certain communities indicate that there is some political and psychological resistance to such a plan (Hogan-Brun, 2007). Moreover, falling birth rates across ethnic groups in Estonia mean that competition for students is increasing, a potentially positive development as educational institutions will need to ensure high quality if they are to attract students. The decline in minority language acquisition and maintenance may, in part, be due to these factors. A further possible challenge to continued bilingualism (Estonian-Russian) is the falling enrolment in Russian minority language schools as ethnic minorities increasingly send their children to Estonian language schools in the hopes that it will ensure greater future opportunities (*ibid*.; Kempennian *et al*., 2008). Kuun (2010), in a study of a single community, found that students attending Estonian language schools whose home language was Russian performed poorly on reading and writing tasks in Russian, their home language. Rannut (2008) has also identified possible indicators that widespread language shift from Russian to Estonian is already occurring in ethnic minority communities. Conversely, attitudes have also indicated that support for bilingual programmes continues to increase both

among indigenous Estonians and ethnic minority groups and these programmes appear to be of high quality (Mehisto and Asser, 2007). Further research is needed to understand the likelihood of continued language shift.

What are the effective outcomes of what appears to be widespread official support of bilingualism and NNLLs in Estonia? Notably, while salaries for Russian speakers are somewhat lower than for Estonian speakers, educational attainment levels appear to be equivalent and parental attitudes seem to be supportive of bilingualism (Kempennian *et al*., 2008). Bilingual students have been shown to be meeting national expectations as set forth by educational curricula and literacy outcomes for these students has been shown to be significantly higher than a monolingual (Russian) control group (Mehisto and Asser, 2007). On the most recent PISA results Estonian students scored well above the OECD average in Reading, Maths and Science and tied with Switzerland in Reading (13th rank) (OECD, 2009). In short, bilingualism appears to be working in Estonia. However, if bilingualism is to continue, policy should be put in place to ensure the Russian language continues to be valued, both among ethnic minority resident groups and among indigenous Estonians. Without explicit policy privileging bilingualism, continued language shift from Russian to Estonian is a very real possibility. As we continue to gather data on the cognitive, affect, and socio-political advantages of bilingualism, this outcome appears increasingly worrisome.

Singapore

Singapore has been called the most globalised nation (Vaish, 2008). It is home to four primary ethnic groups (Chinese, Malays, Indians and Eurasians) and has four official languages (Mandarin, Malay, Tamil and English) (Dixon, 2005; Vaish, 2008), although there are many more than four languages spoken in Singapore. It is one of a handful of countries which has a state mandated explicitly bilingual educational system which is widely hailed as one of the most successful, particularly in terms of mathematical and scientific performance (Dixon, 2005). On the 2009 PISA exams, Singapore scored within the top ten countries, well above the OECD average in Reading, Maths, and Science (OECD, 2009). For these and other reasons, Singapore presents an interesting argument for bilingual education. However, like Estonia, Singapore faces challenges in both implementation and outcomes.

Singapore became an independent nation in 1965, not entirely through its own choice, when, following the end of British colonisation, it was expelled from Malaysia following political contention over the rights of ethnic Chinese citizens. Upon independence, Singapore made several explicit socio-political choices, many of them driven by economic realities, around its highly diverse ethnic and linguistic citizenship (Dixon, 2005). Singapore chose to adopt multiple languages as official state languages and immediately designed a bilingual education policy (*ibid*.), which would promote English as a *lingua franca* and simultaneously seek to promote retention of three additional official languages. Also notable was an explicit awareness of, and commitment to the preservation of, the cultural capital linked to language (Vaish, 2008). Thus, from the establishment of independence in Singapore, there was policy in place aimed at equally privileging multiple ethnic and linguistic groups. As we shall see, the policy is not perfect, but it is an admirable attempt at mandating multiculturalism and it has been highly successful at creating a bilingual education system.

By 1965, 57% of primary level students in Singapore attended English language schools and this number continued to increase through a combination of practicality on the part of parents and government policy until 1987, when all content was provided in English

by government mandate. A combination of economic value and international prestige led to the widespread acceptance of English as the language of education in Singapore (Dixon, 2005). Additionally, all children are to receive some instruction of content matter in their "Mother Tongue" (Malay, Mandarin, or Tamil), which is assigned to them by the government according to their ethnic group. The term "Mother Tongue" in this particular context is somewhat misleading, however, as it may or may not correspond to the child's home language. Scholars are becoming increasingly interested in this peculiarity, and at least one recent study has focused on the implications of linguistic policy on Academic English in Singapore (Hornberger and Vaish, 2009). Effectively, all Singaporean students are bilingual; moreover, there is a significant likelihood that they are almost all NNLLs, learning content in English and one other language, neither of which may be their mother tongue, that is the language they speak at home with their family. What is particularly surprising to some, then, and what some would argue is a strong argument for the cognitive and academic benefits of bilingualism itself is the general academic success of Singaporean students. When compared to 38 other countries on the 1999 IEA Third International Math and Science Study-Repeat (TIMSS-R) Singapore placed first in mathematics and second in science (Dixon, 2005), an impressive feat for students who are often learning content in an non-native language.

However, although impressive in its commitment to bilingualism, the Singaporean system has effectively resulted in less overall linguistic diversity. In the late 1970s the government successfully pressured ethnic Chinese Singaporeans to gradually transition to Mandarin as the dominant language of discourse, rather than the multiple dialects previously spoken by this group. The ethnic Indian community has also shifted away from a multiplicity of previously used dialects. The ethnic Malay Singaporeans were, as of the 2000 census, the ethnic group which has most successfully maintained their mother tongue as a predominant home language (*ibid*.).

Moreover, across ethnic groups, language shift in the younger generations is occurring even more rapidly, with English increasingly becoming the language preferred by young Singaporeans (Vaish, 2008). Dixon (2005) notes that for ethnic Indian children, Tamil has been reduced almost exclusively to an academic language used for exams but rarely engaged in informally. Vaish (2008) in a study of language maintenance as it relates to religion in Singapore found that for many Singaporeans English is increasingly used as a *lingua franca*, with mother tongues increasingly being reserved for religious and other cultural activities and ceremonies. It will be important to carefully observe continuing language shift with Singapore and to update policies as necessary should the Singaporean state wish to maintain true linguistic diversity rather than nominal academic bilingualism.

Discussion

As evidenced by the cases of Estonia and Singapore, language policy planning to maintain cultural and linguistic diversity is possible and can lead to very positive benefits, but it is rarely a straightforward process. While concerned with educational policy in particular, we have long known now that there are multiple factors which affect educational outcomes. A population's cultural beliefs, socio-economic status, perceptions of status in reference to a dominant group or culture, and access to social services such as health care and welfare assistance, and many other factors can significantly influence educational and economic and social outcomes. NNLLs are even more complex in that in addition to navigating these factors, they simultaneously contend with the pressures and difficulties associated with second or subsequent language acquisition. That is, we should recognise

that learners are engaging in education not in a vacuum, but in a highly interrelated framework of multiple actors and influences. If educational policy around migrant populations and NNLLs in particular is to be most effective, then policy makers should seek to understand these contributors to educational outcomes on a case by case, or country by country basis. In order to make this possible, it will first be necessary to acquire the relevant information and to carefully observe and analyse data for patterns and successes.

Box 5.1. **Case study of "zainichi" Koreans in Japan**

J. Worden asserts that "language policy planning to maintain cultural and linguistic diversity is possible and can lead to very positive benefits". She also suggests that issues of bilingualism and multilingualism may vary depending on the historical, political, socio-economic, and cultural traits of a given society. In relation to these ideas, I will discuss issues pertaining to bilingualism and multilingualism using a case-study of "zainichi" Koreans, a language minority group in Japan.

It is very hard for minorities whose native tongue is not a dominant language to preserve their own language in the host society, and it is even harder if the native tongue is stigmatised in certain social or cultural contexts. Many diasporic descendents of Korean immigrants do not speak Korean well, but we cannot blame this on any lack of effort on their behalf. Diasporic Koreans rarely have access to effective Korean language instruction, and they often do not have access to sociolinguistic environments that are conducive to acquisition of communicative competency in the Korean language. "Korean Japanese" ("zainichi Kankokujin" and "zainichi Chousenjin," referring to ethnic South and North Korean residents of Japan) may have experienced some of the least favourable material, political, and social conditions to acquire or maintain competency in the language of their imagined homeland.

A few years ago, I visited Korean elementary and high schools in Kyoto, Japan. The students were very enthusiastic to learn Korean language and culture, and they performed Korean music and danced for me and some visiting Japanese teachers. Whenever I encountered students in the hallways, they tried to speak to me in Korean even if they spoke it poorly. It was clear from their statements and attitudes that they definitely identified themselves as Koreans, even though most of them did not speak fluent Korean. Most members of the first generation of Korean Japanese are involuntary minorities who were brought to Japan during the Japanese occupation of Korea (1910–45). Korean minorities are not a colonised people in Japan today, but institutional and social discrimination towards them still exists. Also, the socio-economic status of Korean minorities in Japan is not as good as that of Korean immigrants in the United States. It was very impressive that both teachers and students at Korean schools in Kyoto struggled to retain Korean language ability under such unfavourable conditions. Unfortunately, the Japanese government still does not certify or fund these schools.

Della Chiesa points out that "language is inseparable from cultural identity" (Chapter 1, this volume). Language seems to play an essential role in self-identification among members of minority ethnic groups. In the case of Korean Japanese, their desire and efforts to maintain their mother tongue may be derived from the belief that language is part of their crucial cultural heritage, that which they use to identify themselves as "Korean." Considering that Korean Japanese are an ethnic minority subject to discrimination in employment, marriage, and voting rights, language may signify resistance of their marginalised status. Non-native language learning and teaching embraces an understanding of the values and histories of different peoples. Problems faced by linguistic minority groups that are linked to their historical, political, and socio-economic experiences need to be considered in relation to "global awareness," which we pursue in language learning in the era of "globalisation."

Keumjoo Lee, Korea

It has been noted that education is an area wherein policy is generally not far-sighted, that it often responds cyclically to varying political agendas or to immediate concerns within a community (OECD, 2006). Increasingly, the presence of ever burgeoning numbers of non-native language learners is taxing the resources and abilities of the schools and communities in which they are being educated. For a growing number of international communities, this has become a pressing concern. The investment made today in improving the educational and socio-economic outcomes of non-native language learners sows rewards which may be reaped for generations to come. Moreover, in an increasingly globalised world, the policies of one country or group of countries regarding these learners can affect societal, political, and economic futures far beyond the reaches of their own boundaries. Therefore, it seems advisable that we seek to synthesise the existing knowledge on the role these populations are playing across sectors and borders, and that we build new knowledge on the most effective ways of improving outcomes for non-native language learners and their host countries.

I should also note that part of the difficulty in establishing programmes around non-native language learners is one of semantics. It is important to both define what we mean by non-native language learners – and what we don't mean. Simultaneously, it is important to recognise that these definitions and other terms, such as bilingual, immigrant, and transnational, are often charged with socio-political connotations that are particular to a time and a place. Therefore, we also need to move beyond definitions and classification systems and strike at the heart of the matter, which is: what outcomes do we expect functional members of society to meet? These expectations of participation hinge on both language and identity. By creating institutional scaffolds to support the development of language skills and identity formation, we assist not just the individual, but the society at large; not just one society, but the global community.

In short, both because of current trends in migration and multilingualism and because of what we know about the benefits – societal, individual, and neuro-cognitive – of multilingualism it seems prudent, even necessary, to continue to explore what policies and experiences promote successful acquisition of a second or subsequent language. Part of this process will involve exploring and extending the research base, the greater part will be in examining the experiences of multiple countries in order to identify successes and trends much as we have done here with Estonia and Singapore, although it would be most useful to systematically gather and analyse similar data across countries and cultures. In doing so, we seek to improve future outcomes for all, and in particular to facilitate non-native language learning as a means to social, political, and economic well being.

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Part II

Cultures, Languages and Identities

Chapter 6

Seeing the world through our hands: A cross-cultural gesture review

By Matthew Shapiro *

Our spontaneous gestures greatly enrich our speech. A burgeoning new field of research investigating communicative gestures has begun to uncover the ways we use our hands to communicate. Recently, this field has broadened its focus to include cross-cultural analyses of gesture use. In this review, I summarise recent findings stemming from this body of literature. I then discuss the role of gesture in second language instruction and acquisition, arguing that a focus on gesture can augment non-native language pedagogy. Lastly, I present neuroscientific findings providing evidence that gesture does indeed facilitate the process of communicating in a second language. I hope to convince the reader that gesture has already taught us abundance about how people around the world communicate and, in turn, students will communicate more effectively with people around the world if we teach the importance of integrating gestures in their speech.

* Harvard University School of Education graduate; science teacher, Madrid, Spain

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction to the gesture

I would like to start this review with a thought experiment. Imagine you overhear the following story, but for the purposes of this experiment, you cannot see the speaker:

> "Me and Tom were waiting in the boat for a while before Tom finally spotted something. We went as fast as we could to get there, and then I cast my rod as far as I could. Before I knew it, I was reeling that sucker in. Man was that fish wild! You wouldn't believe it, but when I got the fish on the boat, I swear it was THIS big!"

Now imagine you hear the exact same monologue, but this time you can see the speaker:

> Me and Tom were waiting in the boat for a while before Tom finally spotted something (speaker forcefully points straight ahead). We went as fast as we could to get there (speaker clutches an imaginary throttle with the right hand at hip level and moves it slowly forward) and then I cast my rod as far as I could (speaker flicks right hand at ear level in a casting motion). Before I knew it, I was reeling that sucker in (speaker uses both hands to indicate strenuously tugging on his fishing rod). Man was that fish wild (speakers makes a series of short arcing motions with his right hand). You wouldn't believe it, but when I got the fish on the boat, I swear it was THIS big (speaker places both hands about two feet apart at chest level with palms facing each other).

Hopefully the point of this thought experiment is clear: nonverbal communication, specifically gesture, adds critical meaning to speech. From the speaker's gesture we have the added information that: Tom pointed off the bow, the fishermen were in a motorboat, the fish was difficult to reel in, as the speaker was reeling the fish in it was jumping in and out of the water, and of course most importantly we know the size of the fish! Also note that the casting motion the speaker made was redundant with the speech and did not add any extra meaning.

When people think about gesture, what generally comes to mind is what researchers refer to as *emblems*. Emblems are standardised, culturally defined movements that take the place of speech (Gullberg, 2006). Common emblems include the ring formed by the index finger and thumb, which can mean "OK", "zero", or "body orifice" depending where in the world this emblem is displayed. Yet emblems are only a small class of gestures, and unlike all other gestures, they are not spontaneously formed to accompany and complement speech. Notice how none of the gestures in the above example are conventional emblems, and all are spontaneously formed to complement the ongoing speech. People underestimate the extent to which they unknowingly perform spontaneous co-speech (*i.e.* non-emblem) gestures, but they are a critical component to communication. In fact, speech is negatively impacted if speakers are not permitted to gesture (Goldin-Meadow, 2003). Perhaps even more telling is that every culture is known to use co-speech gestures in some form (Kita, 2009).

There are many categorisation systems used to characterise spontaneous gestures; I will use the system defined by McNeill (1992). The first category, *deictic gestures*, include various forms of pointing; the second category, *beats/rhythmic gestures*, are hand movements

that punctuate speech to add emphasis to certain words or phrases; the third category, *iconic gestures,* include acting out motions (as in the fisherman casting a rod) and physical information, such as shape, size, and spatial positions; lastly there are *metaphoric gestures*, which illustrate abstract concepts such as temporal markers or relationships of equality. Amazingly, gesture and speech temporally coincide with near exactitude; as the speaker utters a word the accompanying gesture is executed (McNeill, 1992; Nobe, 2000; Chui, 2005). These gestures add valuable context to speech, yet they are often meaningless without speech. I will use the metaphor of gestures acting as the harmony to the melody of speech. Harmony can accentuate the melody, giving it depth and power, yet harmony alone could never carry the tune. Moreover, the harmony must be in temporal sync with the melody or a beautiful piece is transformed into cacophonous noise. In essence, speech certainly carries most of the communicative weight, but gesture enriches speech in numerous ways.

There is significant debate within the gesture community as to whether gestures are produced for the speaker or for the listener (Gullberg, 2006). Some theorists posit that gestures are actually produced by the speaker to aid in the fluent production of speech. Although this may sound unlikely, congenitally blind speakers, who have never had any visual exposure to others' gestures, will gesture to blind listeners (Goldin-Meadow *et al*., 2001). Yet, even if gestures are produced to facilitate the thought process of the speaker, they are undeniably useful in communication. Many argue that speech and gesture are so tightly linked that they must be considered as forming a "composite language signal" (Kendon, 2004). Of course this argument hinges on the existence of differences in gesture across cultures and across languages. There is still considerable research to be conducted in this field, but early findings have uncovered a multiplicity of cultural and linguistic differences in every gesture category.

Throughout this chapter, I will argue that studying gesture cross-culturally not only reveals fascinating differences in non-verbal communication, but, due to gesture's spontaneous nature, allows us to glean differences in underlying mental representations that would otherwise go undetected. I will summarise the major findings currently garnered from this burgeoning field and suggest multiple areas for future study. Lastly, I will argue that gesture needs to be considered in second language instruction. To support this point, I will present evidence from the behavioural sciences as well as neuroscience. When analysing language, gesture often goes overlooked; however, by the end of this review I hope that the reader will gain an appreciation for the essential communicative role played by the movement of our hands.

Cross-cultural gesture differences

Within cultures there seem to exist certain implicit rules governing the use of gesture (Gullberg, 2006). Individual gesture use may differ, yet when cultures are analysed holistically gestural norms emerge. There is a significant amount of overlap between cultures in how gesture is used. For example, spontaneous co-speech gestures complement speech across cultures, and all cultures use gestures that depict both physical and abstract referents. Yet even gestures that we might expect to see conserved across cultures, such as pointing, show subtle and fascinating variability in use. Kita (2009) has done extensive analysis of gesture throughout the world and has created categories to classify these cultural differences. Rather than use Kita's exact categories, I will group these differences around McNeil's (1992) classification system. However, not all of Kita's findings can be placed into McNeill's system and therefore the sections on linguistic constraint and gestural taboo roughly align with Kita's categories.

Emblematic gesture

Emblems are really in a gesture class of their own, as they are the only type of gesture that carries an unambiguous meaning in the absence of speech. While emblems have a limited ability to transcend cultural boundaries, they are shared by more contiguous geographic areas and therefore act as a way to spread culture. The effect of such culture sharing can be long lasting. For example, the southern and northern parts of Italy have different head movements for negation, and it is hypothesised the head movement seen in southern Italy is a remnant of ancient Greek settlers. Support for this claim comes from the identification of the same head nod in other parts of the world settled by the ancient Greeks.

The number of emblems used in a culture varies considerably and some environments may be more conducive to creating emblems than others. Having a close kin community with little mobility, situated within a noisy atmosphere, seems to make an especially potent locale for the emergence of emblems. Imagine living in a neighbourhood with considerable noise but also many people with whom you wish to engage. You might develop a series of emblems to facilitate communication, and since there is little mobility, these emblems can be passed on to future generations. Indeed the genesis of such emblems seems similar to the development of sign languages (see Broad; Scott, both this volume) such as the language developed by the Nicaraguan home signers studied by Coppola and Newport (2005).

Deictic gesture

Deictic, or pointing, gestures can show considerable complexity. While we might assume that pointing is universally used to draw the addressee's attention to the speaker's referent of interest, some cultures have up to six different pointing gestures all with contrastive meanings. For example, in Italian culture, index finger pointing with palm down identifies a referent as being the centre of focus to the conversation, while index finger pointing with the palm vertical lets the addressee know that the referent is relevant, but not the focus of the current discourse. Clearly there are amazing cultural subtleties in pointing gestures and learning such subtleties could be an important and overlooked part of second language acquisition (Gregerson, 2009).

Spatial iconic gesture

The different usage of spatial gestures may reflect deeper differences in cognitive spatial reasoning (Kita, 2009). For example, direction can either be encoded *relative* to the individual's frame of reference (*e.g.* left *vs.* right; *relative frame of reference*) or *independent* of the individual's frame of reference (*e.g.* north *vs.* south; *absolute frame of reference*). Languages and therefore cultures vary in how they conceive frame of reference. Pederson *et al*. (1998) performed an experiment to explore these perceptual differences. In their study, they placed three toys on a table (a cow, a sheep, and a horse from left to right) and asked individuals with different frames of reference to rotate 180º and recreate the order of the toys. Participants with a relative frame of reference conserved the left to right orientation (cow, sheep, horse), while individuals with an absolute frame of reference conserved their north to south orientation (horse, sheep, cow).

What if we asked these participants to describe the order of the toys after the experiment was concluded? While this question was not asked, observations of how people within these cultures gesture suggest an answer. A person with a relative frame of

reference would likely state the order as "cow, sheep, horse", accompanying the speech with a lateral movement of their hand from left to right, punctuated by the utterance of each animal's name. A person with an absolute frame of reference would likely state the same order (cow, sheep, horse), yet indicate their accompanying gesture with a movement of their hand from front to back. Observations from speakers of languages which do not have linguistic distinctions between left and right have shown gesturing along the sagittal axis (front to back) is commonly used. Moreover, speakers of these languages will even extend the gesture space behind their bodies.

These findings lend credence to the always contentious Whorfian hypothesis, which proposes that language influences how we perceive the world (Gordon, 2004). Although this hypothesis has tantalising ramifications for linguistic theories, evidence supporting Whorf's claim has historically been scant. However, a slew of recent studies investigating numeracy and spatial cognition have begun to provide evidence that language does in fact shape our world. Gordon (2004) performed a series of numerical experiments with members of a tribe deep within the Brazilian rain forest who speak a language with no words for numbers beyond three (so called "one, two, many" counting systems). Gordon arranged a certain number of objects on one side of a stick, and asked the tribesmen to match his array on the other side. The performance on this task dropped precipitously as Gordon increased the number of objects, and the tribesmen could not successfully match an arrangement with more than ten objects. In light of these results, speakers of absolute languages may be unable to encode relativistic spatial differences that are engrained in the perceptions of relative language speakers. By allowing insight into non-verbalised mental representations, therefore illuminating the effects of otherwise hidden culturally determined cognitive constructs, gesture offers a particularly unique perspective on the Whorfian debate.

Gesture taboos

We have all been told that it is not polite to point but few of us have been told that it is not polite to point with your left hand! In some West African cultures, usage of the left hand is considered taboo in many instances, such as eating or giving and receiving (Kita, 2009). People within this culture go through great pains to eliminate left-handed gesture, and prefer awkward right-handed gestures. To minimise their salience, left-handed gestures are generally reduced to minor flicks of the wrist at waist level. Moreover, Ghanaians engage in rare two-handed pointing because left-hand use is considered acceptable only when neutralised by the right hand.

Other cultural norms seem to have a large impact on gesture rate. Goldin-Meadow and Saltzman (2000) found that Chinese mothers gestured at a higher rate than their American counterparts when interacting with their children. The researchers speculated that this finding may have origins in the Confucian Chinese culture, which, in contrast to American culture, emphasises the ability to change human nature. Thus Chinese utterances had a higher proportion of instructional words, and gestures were produced at a higher rate to correspond with these utterances. More studies of this nature could elucidate fascinating relationships between gesture and cultural norms, including the impact of gesture space on accepted proxemic boundaries.

Gesture and linguistic constraints

Languages vary on how they express motion and can be divided into two linguistic categories: satellite languages and verb-framed languages (Brown and Gullberg, 2008). Description of motion can be divided into *manner*, how the motion was conducted (*e.g.* crawling or climbing) and *path,* the direction of the motion (*e.g.* forward or backward). Satellite languages, such as English, include manner in their verbs and indicate path through a prepositional phrase (the child climbed [manner] up [path]). Verb-framed languages, such as Spanish, include path in their verbs and either don't indicate manner or indicate manner in a second clause (the child ascended [path] as it climbed [manner]). These differences have two interesting gestural consequences. The first is that satellite language speakers will often perform one gesture encompassing manner and path (mimicking climbing with their hands while simultaneously moving their hands upwards), while verb-framed speakers will perform two distinct gestures to accompany the two clauses (first they gesture path with an upward point, and then gesture manner with a climbing motion; Kita, 2009).

There is debate within the literature about whether gestures can be used to substitute for manner not explicitly stated in the language, or whether gestures lack the same manner content as their corresponding languages. Kita and Ozyurek (2003) showed that English speakers who are likely to indicate manner in their speech are also likely to gesture with manner, while Japanese and Turkish speakers who are less likely to indicate manner in their speech are also less likely to gesture with manner. When describing a cartoon where Tarzan *swings* on a vine, English speakers both used the word "swing" and coupled their utterance with an arcing gesture. Turkish and Japanese speakers, whose lexicons do not have the equivalent word for "swing", spoke with less descriptive words such as "go" and coupled their utterance with a simple lateral movement of the hand.

Conversely, McNeill (2001) performed a study where Spanish speakers apparently showed manner in their gesture upwards of 75% of the time even though it was not present in their speech. This supplanting of potentially complex semantic and syntactic verb-framed speech with relatively simple gestures has been termed the *manner fog hypothesis*. McNeill also found that English speakers indicate manner in gesture less when manner is included in their speech, suggesting that gesture serves to accentuate the significance of manner in the speaker's utterance. This phenomenon has been termed the *manner modulation hypothesis*. Brown and Gullberg (2008) attempted to replicate McNeill's findings with monolingual Japanese speakers and found this same effect only 11% of the time. It remains unclear whether these findings contradict each other due to a small sample size or methodological differences, or if different languages show different degrees of manner fog. Hopefully further research into this area will show whether the manner fog and manner modulation hypotheses are tenable. Such a finding would provide evidence that the same gesture could be used to accomplish different communicative goals depending on the language that contextualises the gesture.

Metaphorical temporal gestures

Time is an abstract concept which we reify by employing metaphors (Lakoff and Johnson, 1980). In nearly all languages, spatial metaphors indicate that the future is ahead of us and the past is behind us. For example, one might say, "Christmas is coming up soon" as if 25 December were a destination that we would soon reach. Although we frequently use similar phrases, we rarely reflect on their metaphorical quality. Moreover, speakers will make a forward gesture motion when they are discussing the future and backward gesture motion

when they are discussing the past (Kita, 2009). However, some languages reverse their metaphorical temporal representation, mapping the future as behind, and the past as ahead. In Aymara, a language spoken in the Chilean Andes, last year is referred to as "front year." When a native Aymaran speaker discussed old times *in Spanish*, he pointed forward. This finding shows that metaphorical gesture usage is consistent with metaphorical speech, and that speakers maintain their native gesture usage, even when speaking a non-native language.

Gesture in plurilingual speakers

If each language comes equipped with its own set of gesture norms, then how is gesture employed for those who speak multiple languages? The effect of multiple languages on the mind of single speaker has long fascinated language researchers, and, due to their spontaneous nature, gesture would be a fascinating way to investigate this linguistic interaction. Unfortunately, there has been little research into the cross-linguistic effects of gesture; however recent studies have begun to shed light on the subject. Like the Aymaran speaker discussed above, early reports indicate that speakers maintain their L1 gestural repertoire when speaking a second language (Gullberg, 2006). While this finding may not be surprising, it does suggest that, at least in some cases, bilinguals map their second language onto their first language, and therefore do not truly adapt the linguistic framework of the second language. Future research efforts should focus on whether language fluency relates to gestural fluency. Perhaps the ability to gesture in a second language could be the mark of true fluency, since this faculty would suggest the speaker is actually "thinking" in their non-native language. Investigating the language-specific gestures of individuals raised in a bilingual home could elucidate this hypothesis.

Adding to the difficulty of gaining gestural fluency is the complete disregard for gesture in second language instruction. Indeed most gestures, including conventionalised emblems, are not taught in typical language classes and thus are only learned through immersion, if at all. Thus "fluent" usage of gestures may actually represent a form of cultural literacy (Gregerson, 2009). Gaining such literacy may be beyond the scope of a typical language classroom because often times the teacher has mastery of the language but not the culture, and therefore is unequipped to teach the relevant gestures. The solution to this problem would be total immersion, but obviously this is not possible for most language learners. Even if it is unrealistic for teachers to formally instruct their students on the gestural norms of an unfamiliar culture, gesture has an invaluable place in non-native language instruction.

Gesture in teaching and learning a non-native language (NNL)

Imagine yourself in a foreign culture, where you literally speak only two words: yes and no. This is an extreme situation but many people find themselves in a similar predicament when they travel. A common coping strategy is to go through a long gestural dance with the person you are trying to communicate with. Perhaps this includes deictic pointing to items on a menu or iconic representations of quantity. From this hypothetical experience we might ask ourselves how gesture use changes during second language acquisition (SLA) and what role gestures play in compensating for deficiencies in speech?

Some studies have indicated that gestures progress from iconic representations of objects and events for low level speakers, to beat or rhythmic gestures to accentuate the speech of fluent speakers (Gullberg, 2006). This notion was challenged by a study conducted by Gregerson (2009), which investigated the usage of gesture in individuals

who were beginner, intermediate, and advanced speakers of Spanish. The researchers had students in different Spanish classes role-play characters in a crime scene and coded for gesture use with regard to type and frequency. They found that beginners gestured less than more advanced speakers and beginners did not use gesture in a compensatory role. Instead the hands of the beginners were restricted by anxious gestures (fidgets, hand-wringing). On the other hand, advanced speakers were more confident as they progressed through the exercise and gestured naturally.

This finding has real implications for language instruction because gesture can be critical in communicating with someone in another language. While formal instruction in gesture may be beyond the range of most teachers, novice NNL speakers need to understand the important communicative role their hands play. In terms of production, non-communicative gestures, such as circling of the hands, indicate to the addressee that the NNL speaker is trying to retrieve a foreign word from the lexicon (Gullberg, 2006). The addressee will either patiently wait for the speaker to find the missing word, or help the speaker retrieve the word. In terms of comprehension, gesture is often redundant with speech and anyone who has ever attempted to communicate in a non-native language understands the importance of redundancy (Gregerson, 2009)! A redundant gesture can help the NNL listener who may have missed the spoken word but can understand the accompanying gesture, or the mother tongue listener, who may have missed a poorly pronounced or incorrect word but likewise understood the accompanying gesture. Unfortunately many second language classrooms use audiotapes, which completely overlook the valuable information conveyed in the video channel. Using videotapes will likely be more beneficial to the language learner, when considering the myriad ways that gestures, saying nothing of other forms of nonverbal communication, aid the learning process.

As mentioned in the introduction, gesture may serve as a critical cognitive tool to augment the formation of speech thoughts. There are many theories as to how gesture influences speech production, however the most relevant to second language learning is the cognitive load theory proposed by Goldin-Meadow *et al*. (2001). Her team performed a study where participants solved a maths problem, and were then given a list of words to remember. The participants were next asked to explain how they solved the initial problem, after which they were asked to recall the word list. During the explanation of the maths problem, half of the participants were told not to gesture and these participants performed significantly worse on their recall of the word list. Goldin-Meadow reasoned this effect was due to gesture's capacity to bear some of the cognitive load of the task, which is carried solely by speech when gesture use is prohibited. This explanation proposes that gesture and speech form a single integrated system and work together to convey meaning, and free up cognitive resources for other tasks. If a student attempts to speak a second language without allowing gesture to take some of the cognitive load, he or she they may be neglecting this system and therefore sacrificing critical cognitive resources.

Beat gestures provide another subtle, yet potentially overlooked application of gesture in non-native language instruction. Visual beats help accent language prosody by drawing attention to important words and accentuating the rhythmic patterns inherent in language (Krahmer and Swerts, 2007). As a student learns a new language, they are exposed to a rapid assailment of new sounds, with an accent and rhythm that is likely to be drastically different from their mother tongue. If beats can mark key words, as well as help the listener follow the speaker's verbal rhythm, then these gestures could be a powerful teaching tool. However, the listener would have to simultaneously integrate speech and gesture effortlessly as one composite language signal. There is recent neuroscientific evidence that suggests that we do just that.

Gesture and the brain

The formal study of gesture is a relatively new field, and the study of gesture in the brain is even more nascent. Many brain regions have been linked to gesture usage, with different categories of gesture eliciting different activation profiles; however, the superior temporal sulcus, located at the critical juncture between the occipital, temporal and parietal lobe is activated by a variety of gesture tasks (Holle *et al*., 2010). Furthermore, when speech and gesture are combined, the signal produced is greater than the additive sum of the two signals produced when both acts are performed in isolation. Essentially, the whole is more than the sum of its parts. This pattern is known as *bimodal activation*, which is seen as a hallmark of multisensory integration.

Another fascinating phenomenon associated with bimodal activation occurs when the stronger signal is impaired, forcing the weaker signal to show still greater activation. This effect, known as *inverse effectiveness*, was studied by Holle *et al.* (2010). Participants in an fMRI scanner watched videos in which the gestures were clearly visible but the intelligibility of the speech varied. The speech manipulation was employed because speech is the stronger of the two signals, and therefore the researchers hypothesised that the gesture signal would show the greatest activation pattern when the speech was difficult to hear. Their hypothesis was confirmed, suggesting that the coordination of gesture and speech followed the bimodal activation pattern, characterised by inverse effectiveness. Although the role of gesture in second language acquisition was not considered, these findings have definite implications for the language learner. My claim is further strengthened by the researchers' finding that gesture enhanced speech comprehension, measured through a written test, only when the speech signal was attenuated. I propose that when we listen to a non-native language, the speech signal is "impaired" due to the novelty of the sounds being uttered, yet the gesture signal remains largely intact, especially for iconic and beat gestures. Therefore, it is possible that our brains employ the compensatory strategy, characterised by inverse effectiveness, to increase our ability to understand a non-native language only when the speaker gestures.

Kelly, McDevitt and Esch (2009) looked specifically at the role of gesture in second language learning through event related potential (ERP). They presented participants with a list of Japanese words accompanied with iconic gestures. For example, when they introduced the Japanese word for cup, they accompanied the utterance making a c-shaped gesture with their hand. The participants remembered more words when speech was accompanied by gesture, than with speech alone. The ERP component showed that late positive complex (LPC) brain wave signal was stronger when participants recalled words spoken with gestures. LPC activity is associated with the recollection of words in long-term memory. The researchers believed that when gesture accompanied speech, the participants had the imagistic component of the gesture to strengthen the memory created upon hearing the new word. Foreign words are generally unfamiliar sounds, however an iconic gesture can often transcend linguistic boundaries, strengthening the formation of a memory trace essential in long term memory encoding.

Conclusions

Foremost, I hope this review has proven that gesture has much to teach us about how we comprehend and communicate information. Gesture research underscores the uniqueness inherent in every culture, not solely in how we speak but how we understand our world. The cross-cultural study of gesture also highlights fascinating linguistic

differences and supports the need to preserve endangered languages. Differences in language and gesture inform us about the cognition and perception of those outside and inside the cultural majority. By studying gesture, we can learn about our own minds, and by teaching gesture, we can shape the minds of our students. While gesture has been mainly ignored by educators, it has the potential to significantly bolster language instruction. There are certainly many areas that need further exploration, which is to be expected in such a young field. However, one clear conclusion emerges: the integration of gesture and speech together is a far more powerful communicative tool than speech alone.

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Chapter 7

Ideologies and alphabet reforms in Central Asia

By Rauan Kenzhekhanuly*

Despite its long history, alphabet reform is a largely untouched area of linguistics. The implications of changing scripts extend far beyond linguistics into the realm of economics, science, education, religion, technology, politics, and ideology. Which of these factors is the most central in determining whether or not a society changes its alphabet, even when there is a risk of illiteracy? Why are alphabet reform processes successful in some nations and not in others?

* Wikibilim Foundation, Kazakhstan

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

This paper seeks to answer these questions by drawing on research and analysis of alphabet reforms in Turkic speaking countries, some of which changed their alphabets four times in 80 years. Also it is an attempt to apply for a notion of "competing discourses" to the upcoming change of the Kazakh alphabet from Cyrillic to Latin. This type of reform is subject to extensive speculation in Kazakhstan.

Introduction

The area of linguistics focused on the nature of writing (script) is in its infant stages. A generally-accepted definition of lettering does not exist. The definitions range from the representation of writing systems as a method of language transmission through symbols, to an extremely complex social and cultural phenomenon. Knowledge about script and orthography revision is especially lacking. Therefore, there are practically no ready-to-use recommendations or universal tools to guide script reform.

It is necessary to take into consideration a variety of factors correlated with scientific, technological, religious, historic, economic, educational and other measurements in order to identify the true drivers of script reform and to choose implementation strategies. Hidden ideological motives often play a prominent part in this process as well. The British linguist Mark Sebba in his book *"Spelling and Society"* points out that examination of the social and cultural aspects of script are important parts of understanding transformation of a written word and have largely been neglected (Sebba, 2007).

Decisions about orthography revision are not easy to make. Keeping an established script, with all its shortcomings, appears preferable to making changes that would render the literate population illiterate overnight. The German orthographic reform of 1996, which affected not more than 1% of the lexicon, led to a constitutional crisis in Germany. The French spelling reform of 1990, which affected an insignificant part of grammar and only 2 300 words, also faced serious obstacles in its implementation (*ibid*.). In these cases though, we are not speaking of alphabet change, only about minor changes in spelling within the existing frameworks of the spelling system. There are a few examples of successful reforms of orthography; the 1928 alphabet change in Turkey provides one. What were the reasons for the successful reforms?

It is worth noting that immediate success as well as complete failure in spelling reforms rarely happens. Innovation tends to give rise to an outcry; but after time and revision, the new system becomes conventional. Therefore, the success or failure depends on the reform efficiency in overcoming obstacles and the amount of time it takes for the new rules or alphabet to become the convention. It is rare to find a group of people who have repeatedly changed alphabets. However, some among the Turkic speaking peoples (Azerbaijanis, Balkars, Baskirs, Chuvashes, Crimean Tatars, Gagauzs, Karachays, Karakalpaks, Kazakhs, Kumyks, Kyrgyzs, Tatars, Turkish, Turkmens, Tuvans, Uyghurs, Uzbeks and Yakuts) have changed the alphabet four times in 80 years. Based on the experience of the previous and current alphabetic reforms in some Turkic countries (Azerbaijan, Kazakhstan, Kyrgyzstan, Turkmenistan, Turkey), we will try to identify the conditions necessary for the successful transition from one alphabet to another. Using the notion of the "competing discourses" in

understanding of the reform motives, we will analyse the different approaches of Kazakh alphabet reform that are currently under consideration.

Linguistic materialism

From a historic point of view, a script is a result of the political expansion of ancient cultures. Any script is a microcosm that is representative of the culture and history of its people, and of the system of values in which it is used. It provides insight into the questions "who are these people?" and "which orientations will they have in the future?" Therefore, colonisation and assimilation policy use the script as the main tool. The reverse anti-colonial movement often addresses the reform of written language. Change of the spelling is an essential companion of the formation of a new national or state identity. Therefore, a political constituent of the reforms is a cornerstone that may predetermine success. Provided that the ideological motives are appealing, change of the script may serve as the symbol of renewals; new alphabet is often a powerful driver of social transformations. The complicated alphabet history of the Turkic peoples in the 20th century demonstrates this in particular, and sheds light on the forces that determine the success of the alphabet reforms.

The most dramatic script reforms, from the point of view of efficiency of implementation, occurred in the Soviet Union in 1920s and 1930s. Undoubtedly, the rapid implementation of these large-scale transitions was made possible by the state machine. But it is necessary to recognise that they were also based on a powerful scientific foundation that synthesised the experience of the Czars' Russia and the achievements of linguistics experts of that time. The linguist Vladislava Reznik, who studied the language policy of the USSR in the 1920s, called the Soviet reforms "the progressive language project" of that time (Reznik, 2001).

The end of Czars' Russia and the beginning of the Soviet epoch coincided with the blossoming of the so-called idealistic linguistics in the West. The Swiss linguist Ferdinand de Saussure, who is often called the father of 20th century linguistics, is one of the main theorists of the idealistic linguistics that defines language as an abstract system. According to his theory, a language exists regardless of its native-speakers and cannot be changed and regulated from outside. Consequently, as it cannot be regulated from outside, there cannot be a language policy as a tool of language processes management. However, the Soviet scientists did not agree with this theory and entered into intellectual polemics with the author. At the very beginning of the communist era, linguist Lev Yakubinskiy published "Ferdinand de Saussure about impossibility of language policy", a paper which became a manifesto of Soviet linguistics (*ibid.*). As a result, the basic principle of the Soviet linguistic approach became an active intervention aimed at the construction and reconstruction of language. Armed with this principle, the Soviet ideological machine turned the sixth part of the world (population and territory) into a unique linguistic laboratory where it was possible to carry out experiments with dozens of languages. The results of the experiment were amazing: more than 70 peoples of different cultural and religious communities changed alphabets twice within 20 years. High levels of literacy (nearly 80% in 1939) were reached in that short period of time. The unprecedented experiment created new written languages on the basis of the analysis of their dialects. Due to this experiment, dozens of languages, both Siberian (Nenez, Buryats, Tungus etc.) and Caucasian (Avar, Dargin, Laks, Abkhaz, Adygey, Cabardin-Cherkes, Chechen etc.) obtained a systemised grammar and terminology. Based on their experiences and the idea of language as a social phenomenon, the Soviet scientists put sociological linguistics into a separate section of linguistics and called it a Marxist approach to language (*ibid.*).

The Latinisation: "Great revolution in the east"

The USSR peoples' commissar of enlightment Anatoly Lunacharsky wrote that Vladimir Lenin called the Latinisation of the peoples of Central Asia, the Caucasus and Siberia the "great revolution in the East" (Lunacharskyi, 1930, pp. 20-26). The ideologist of this "great revolution" was Lunacharsky himself; the world revolution had to bring the "world alphabet" – the Latin one – to the "liberated humankind". At the end of the 1920s, a special commission composed of the leading soviet linguists investigated the possibility of switching the Russian language to the Latin alphabet with the consent of Lenin and at the direction of Lunacharsky. After studying the issue, the commissions decided that the introduction of the international Latin alphabet for the Russian language was profitable in the ideological, political, pedagogical, polygraphic, artistic and economic relations. It was specified in the minutes of the final meeting of the sub commission on the Russian alphabet Latinisation on 14 January 1930 that "…transition of the Russian people to a single general alphabet on Latin base is unavoidable in the short run…", "to recognise the transition of the Russian script and printing to the general alphabet common for all USSR peoples on the Latin base as the first stage to create the worldwide international alphabet" (Yakovlev, 1930, pp. 208-219). The result of the commission's work evolved into the programme and three variants of the Russian alphabet on the basis of Latin graphics. However, these plans were never implemented in Russia itself because the political situation changed and Stalin refused the idea of a "world revolution".

The Latinisation of the languages of at least some of the peoples included in the Soviet Union was ideologically important for the USSR of that time, however. Abolishment of the Russian Orthodox Church and transition to the Latin alphabet indicated the political and cultural readiness of communism to take over Western capitalism. However, by a twist of fate, "a ghost of communism wandering through Europe" ended up Latinising not Russia, but Central Asia, the Caucasus and Siberia.

At that time, the idea of switching the USSR people to the Cyrillic alphabet was not fathomable. The documents of the same commission on Russian language Latinisation called Cyrillic graphics "leftover of the class graphics of Russian feudal-landlords and bourgeois class – a graphics of autocratic oppression pressure, missionary propaganda, great Russian national chauvinism and forced Russification of most nationalities within the USSR" (Zhirnov, 2010). In view of the same class ideas, the Arabic script used by the Turkic speaking peoples for centuries was called a leftover of the middle age obscurantism.

Despite a long history of usage, many Eastern enlighteners challenged the suitability of Arabic graphics for the Turkic languages long before 1920. But the idea of transitioning to Latin graphics to make it match more closely with the Turkic languages' phonetics was unlikely to find wide support. Without intervention of external political motives, the Turks would more likely adapt the conventional Arabic graphics according to their needs: before Latinisation, various reforms of the Arabic script reform were prepared by the Azerbaijani, Kazakh, Tatar and other peoples. However, everything was dependent on the political environment that favoured the Latin alphabet at the beginning of the 20th century.

The Bolsheviks succeeded in swaying the intelligentsia toward the Latin alphabet. The work of the social and scientific organisations advocating for Latinisation was rewarded (Sharifov, 2007). The reform supporters carefully formulated reasons for which the Arabic script could not serve as a basis for the Turkic script. In particular, they demonstrated that the Arabic alphabet does not have a sufficient number of vowels; it is not convenient for the Turkic languages because vowel harmony (see glossary) actively works. Additionally,

the Arabic alphabet is difficult to write and to teach since there are many diacritic marks (see glossary). Therefore, the Arabic script was not suitable considering the rising rate of literacy. Moreover, the Latin alphabet represented an embodiment of the industrial epoch and the most convenient script for polygraphic business development. Since 1924 the Latin graphics began to receive official status in Turkic speaking republics, one-by-one.

The active phase of the Soviet East Latinisation coincided with Turkey's decision to change Arabic script into Latin graphics. In 1928, Mustafa Kemal Ataturk, in presenting his initiative to the Parliament members, said that the reform was of paramount importance because it marked the final movement of Turkey away from the Arabic and Persian literacy and its reorientation "towards civilisation". In the same speech Ataturk noted that the "brotherly peoples" of Central Asia had already switched to the Latin alphabet and that Turkey should not fall behind. A range of specialists consider that the graphics then adopted by Turkey is a modification of the "Yanalif" ("new alphabet" in Turkic) alphabet developed and adopted in the USSR in 1926 as a unified alphabet for the Turkic peoples (Henze, 1977). Turkey's decision to adopt the Latin alphabet was dictated by ideological motives and was part of a clearly articulated plan aiming at the country's political modernisation, its reorientation and social restructuring.

By the time the Turkic peoples of USSR switched to the Latin graphics it had met all of the conditions required for a successful reform. The internal, ideological, and external political motives drove the process, and were strengthened by the linguistic, economic, technological and pedagogical expediency. The low level of resistance, as a result of the low rate of general literacy, and the highly centralised power augmented the favourable conditions. The economic price of the reform was evaluated as one new battleship, but there was no dilemma between the Latin graphics and the strengthening of the naval power for the Soviet state at that time. The political benefit of the campaign was very high; the Latinisation of these peoples was a message about the forthcoming revolution addressed to the world community.

Cyrillisation: To unite and isolate

Moving further away from revolutionary ideals in the 1930s resulted in the discussion on the use of Latin graphics to fade into the background for Russia. Instead, high costs became the formal reason to slow down the Latinisation and later terminated its spread. In 1930, the Political Bureau (under the chairmanship of Stalin) resolved to discard the issue of the Russian alphabet Latinisation (Atayev, 2008). At the same time, Turkey's approach to the capitalistic West grew cool towards its relationship with the USSR in the middle of the 1930s. Thus, the USSR's safety was under threat as many Soviet Turkic republics shared almost the same alphabet with Turkey.

Starting from 1936, the peoples of the Soviet East one-by-one began asking Moscow to permit them to replace the Latin alphabet with a new alphabet based on the Cyrillic script. The underlying motive was again ideological. According to a new general line, the Latinisation of the East Soviet peoples separated them from the "basic" (Russian) Soviet society. The Cyrillic alphabet adaptation for all peoples living in the USSR territory would serve as the basis to form the single Soviet people and their indestructible union. Another important motive for changing the alphabet was education. Since Russian was the language of academia and science in the USSR, teaching Russian was a priority in schools.

In 1939, it was declared that as the USSR peoples' cultural level grew, the Latinised alphabet no longer satisfied the needs of the language's development since it did not meet

all conditions for approaching to the Great Russian people culture. In circumstances where Stalinist terror dominated, and both the political and the scientific elite of the USSR were killed, no discussions were commenced. The campaign was limited to printed speeches approving the idea of refusing the Latin alphabet. By 1940, the complete transition to the Cyrillic alphabet had been finalised. Some western scientists call this alphabet change "alphabetical Russification" with reason (Izmailov and Karimov, 1999).

The peculiarity of the approach to the Cyrillic alphabet's creation is that each language got a unique alphabet. In the environment of the ideological pressure, this characteristic of new written reform represented an elusive independence to the peoples. Having a unique alphabet represented an acknowledgment of a national language, literature and cultural self-sustainability, and as a result, the existence of an independent people. But in return, each people was obliged to accept the Russian alphabet as a basis for its orthography. All Russian sounds were included in the national alphabets. For example, the Kazakh alphabet had nine letters in excess, Tatar and Uighur – eight; Karakalpak – six; Uzbek – four; and Kirghiz – three. This was done in order to study and to teach Russian in an environment where speaking another language was easier. This was also done so that elements that borrowed from Russian language would be written and pronounced without distortion. This became a very efficient tool of Russification and cultural assimilation of the people. By the end of the Soviet epoch, the language of science and office, especially the common languages of almost all Turkic language in the USSR, was a mixture of the native language and Russian.

The Soviet linguist Yuriy Borovkov, in his article "To the issue of the Turkic languages unification in the USSR" ("К вопросу об унификации тюркских языков в СССР") (1956) wrote how the Cyrillic reform could create absolutely different languages on the basis of the orthographic variations of languages that were very close phonetically. "Kazakh and Karakalpak languages, which were phonetically absolutely similar to each other, became absolutely different languages in spelling: different alphabets gave rise to different orthographic solutions for the identical words" (Borovkov, 1956).

The Russian magazine "Power" ("Власть") in the article "On Russian language Latinisation" ("О латинизации русского языка") wrote: "herewith, (during Cyrillisation) we did not speak about Russification and enslavement of the peoples. In fact, everything went naturally. On closer view it was possible to note that whatever regime was started in Russia – enlightened monarchy, social republic or democratic federation – as a result would be an empire" (Zhirnov, 2010).

The Soviet linguists created the model of "Matryoshka alphabet" (Russian nesting dolls) through the Cyrillic reform. The Cyrillic alphabets created for separate peoples represented the technology of script in native language instilled into the Soviet (Russian) cover. This technological peculiarity of the Cyrillic reform significantly influenced the evolution of the national, cultural and political identity of the USSR peoples. It is well known that the language a person speaks and writes influences his/her way of thinking (the linguistic relativity also known as the "Sapir-Whorf hypothesis") and the shaping of his/her identity (see della Chiesa, Chapter 25, this volume; Boroditsky, 2011). Does this mean that through the "Matryoshka alphabet" the soviet ideologists came to the model of "Matryoshka identity," placing the national identity within the veil of Russian cultural and soviet political identity? Perhaps a wish to "jump out of" this Matryoshka as soon as possible led a range of independent countries of the post-soviet space to immediate reform of the alphabets after the USSR fall?

The Latinisation: New era

The Turkic speaking peoples started using the Arabic script after adopting Islam from the 7th century on. The Semitic languages adopted Arabic alphabets in a very different manner than Turkic languages, and did not meet all of the same standards. Therefore, despite the fact that Arabic script had been used for centuries, the Turkic speaking peoples were seeking for their scripts reform to be more active as the era of the general literacy was approaching.

Azerbaijan

Historian Teimur Atayev wrote: "Implementation of the ideas of the world revolution and moving the Turks away from their historical roots (and Muslims away from Islam) were started in Azerbaijan, located at the junction of West and East. In 1922, the New Azerbaijani Alphabet Committee started acting, and one year later the Latin alphabet was declared obligatory as the state's one" (Atayev, 2008).

At the end of February 1926 in Baku (the capital city of Azerbaijan), the first All-Soviet Union Turkic Congress met, including the delegations of all Soviet Turks. Apart from the Soviet linguists, and Turcologists from Turkey, Germany, Austria, Hungary and Persia (a country known as Iran since 1935) participated. There were 131 delegates in total. The only issue on the Conference agenda was the possible transition of the Soviet Turks' to a new Latinised alphabet.

A bit more than half a century later, after the Soviet Union collapse, Azerbaijan appeared to be a pioneer of the Latinisation again, but this time it occurred among the independent Turkic countries. On 8 December 1991, in the Bialowieza forest, the USSR was abolished. On 25 December 1991, the Law of the Azerbaijani Republic "On restoration of Azerbaijani alphabet with the Latin graphics" was passed. Such a transition is a symbol of the country's exit from Russia, from the Russian dominated area, and from Russian cultural influence. The new orientators are the USA, the then European Community (EC) countries, and Turkey. After Azerbaijan (which has a prominent native population, more than 90% of which are Azerbaijani) gained independence, the most important symbol of the country's new sovereignty was its switch from the Cyrillic alphabet to the Latin one.

Among the newly formed Turkic countries, Azerbaijan is the closest to Turkey in geographical and spiritual terms. Therefore, the choice between versions of Latin alphabets was easy. Without hesitation, Azerbaijan adopted a slightly adapted Turkish alphabet. The first nationally elected president of Azerbaijan, Abulfaz Elchibey (a former Soviet dissident, avid Panturkist and openly pro-Western leader) offered to re-name the Azerbaijanian language a Turkish one. Eagerness for the Latin alphabet in the republic did not decrease even after Geidar Aliyev came to power and the official communications with Turkey became more moderate. The 1990s, uneasy from the political and economic point of view, were also the transition period in the alphabet change. At that time the Cyrillic alphabet still in use mirrored the Latin alphabet, and mass media and signs on the streets represented a bright mixture of different alphabets. Especially in the Russian newspapers, notes on the failure of the script reform in Azerbaijan began appearing. Inertia became stronger; people began to speak about the loss of the cultural legacy that had been created on the basis of the Cyrillic alphabet.

But in spite of the "special" status of the relations between Baku and Moscow, Geidar Aliyev took measures to promote the Latin alphabet in 2001, and the use of the Cyrillic

alphabet has been prohibited since 2002. Shortly after, very few people regretted the transition to the new alphabet and Azerbaijanians began promoting the Latin alphabet among other Turkic peoples.

For a majority of the population, the new alphabet was a symbol of departure from the colonial history and an entrance into the world community and its dynamic development. The example of Azerbaijan was a unique convergence of historical experience and linguistic, social, internal and external political factors which created the favourable basis for a comparatively successful transition from the Cyrillic alphabet to the Latin one.

Uzbekistan

At the end of the 1980s, the Uzbek intelligentsia discussed the possibility of switching from the Cyrillic alphabet and Uzbek script to the Latin alphabet. In the 1920s, they had discussed the unsuitability of the Arabic graphics for the Uzbek language, and decided that "the Cyrillic alphabet does not reflect all phonetic peculiarities of Uzbek speech" (Sharifov, 2007). Some people in the early 1990s offered to return to the Arabic script; they were concerned that the ancient manuscripts in the archives would be inaccessible for younger generations.

Researchers often correlate the Latinisation as a state policy with Turkey's economical and political power. In autumn 1991, the first summit of the Turkic-speaking countries' leaders took place in Ankara. The conference of the Turkic-speaking countries' linguists held in the summit wake was devoted to one issue: transition of the countries' members to the Latin graphics. The possibility of using the Turkic alphabet composed of 34 letters with supplementary characters was suggested.

In September 1993, Uzbekistan passed the law "On the introduction of the Uzbek alphabet based on the Latin graphics" ("О введении узбекского алфавита, основанного на латинской графике"). It was said in the preamble thereof: "…based on the positive experience of 1929-40 transition of the Uzbek script to the Latin graphics, taking into consideration the wishes of a wide public, (the Law) is aimed at the creation of the favourable conditions; it accelerates the all-round progress of the Republic and its entrance into the system of the world communications" (Sharifov, 2007).

The population was inspired by its newfound independence, and the momentum gained by political, social, and economic reforms contributed to the idea of the script change. That is why it was decided not to conduct a referendum in this sense. Eighty percent of the Uzbek population supported the social transformations and refused the formerly compulsory cultural values as well as Russian language and script. At the same time, rejecting the Russian language did not mean a "turn" to the Western values. The society was looking for a new way to become closer to the Turkic world. The international environment and external political landmarks of the country were also favourable. The strategic partnership with Turkey was promising, the country hoped for quick economic growth and rapid development of the national culture, science and art.

Uzbek journalist Omar Sharifov assumed that Uzbekistan's transition to the Latin alphabet was given as a present to Turkey. Besides, the adoption of the Latin alphabet blocked the possibility of returning to the Arabic graphics (that were advocated by supporters of the Islamic way of life). But, having just started the reform, the Uzbek powers began to create more obstacles.

The difficult adaptation of new graphics was concealed in a poorly executed scientific examination that prepared a draft of the alphabet. The existing Uzbek alphabet does not resemble any previous Uzbek alphabets (the Uzbek Latin alphabet of the 1920s was updated to create the new one). It differs significantly from the Turkish and Azerbaijani alphabets. On the basis of technical expediency, the Uzbek specialists used the English alphabet for their new alphabet without adding excessive diacritics or other alphabetical characters. This change ensured that the Uzbek language could be written on a standard English keyboard. But, as it is known, there are only 26 letters in the English alphabet, and the new Uzbek alphabet has 29 letters, including the apostrophe. Karakalpak language, being the language (also Turkic) of an autonomous republic within Uzbekistan, got a new alphabet simultaneously. The Latinised Karakalpak alphabet consists of 38 letters. Officials decided to use digraphs (see glossary) to mark the missing sounds in both Uzbek and Karakalpak alphabets. As a result the rules of the orthography of languages have become more complex, and spelling of many words became longer (some words became longer by a half or even twofold).

In 1993, Uzbekistan made a decision to change the Cyrillic alphabet to Latin one. In 1995, due to the confusion in using some of symbols, Uzbekistan had to upgrade and represent a new variant of the Latin alphabet adopted before. The reform financing was insufficient so the government officially forced private companies to take part in the realisation of the project. As a result, society's support started to decrease rapidly. The process became stuck and the government had to postpone the date of completion three times. Currently, two alphabets are used in the country in parallel. Choice of the alphabet for printing in mass media depends on the editor; the name and headings of the publications are sometimes printed in Latin alphabet, but the texts are printed in the Cyrillic alphabet. Which alphabet is chosen depends on the author of the book; the majority of the authors prefer to publish their works in Cyrillic since the reading population is more familiar with the Cyrillic alphabet. Outdoor advertisements, signs on shops and companies, road signs and announcements are mixed in both languages and alphabets.

The Latin alphabet is well used mostly by the young generation of schoolchildren who graduated from high schools after 2005. Parents often complain about their inability to help children in doing their homework since they are not familiar with the new alphabet. The intelligentsia representatives lament over the dramatic decrease in literacy level due to the Latinisation, and the young appear to be somewhat cut from their family roots. "[…] There was a decrease in the education level both in schools and higher educational institutions. The reason lies in the lack of schoolbooks in the Latin alphabet; only a few are published, and the scientists do not show any initiatives since they understand that due to very slow process this is senseless" (Uldashev, 2007).

As I have noticed, these days, only few people spend their time in libraries – for instance, I usually see only two to three people sitting in the large reading halls. Moreover, those who are taught at school in the Latin alphabet are already unable to read and understand the hundreds of thousands and millions of books available in the library. To be able to read these materials these people have to learn the Cyrillic alphabet. From the literacy viewpoint, this transition had a negative impact on the education system (Aliev, 2007).

Now it is impossible to return to the Cyrillic alphabet since there are already many people who are not familiar with it. Speeding up the spreading of the Latin alphabet may generate a larger wave of discontentment; this may also push people to turn towards Russian rather than to Uzbek; as a consequence, the area of application of the Uzbek language will be limited. "This is a similar to what is called *'Zugzwang*' in chess game: any player's move leads to worsening of the situation" (Sharifov, 2007).

The Uzbek linguists complained that the script reform was caused by political considerations only; therefore, it failed. Interestingly, in other countries such Turkey and Azerbaijan, it was precisely the political background that played a prominent part in the transition from one alphabet to another, and which led to success. But in the case of Uzbekistan, the external political reasons of Latinisation weakened after the cooling of the relations with Turkey in the second half of the 1990s.

This trend was intensified by an impairment of the diplomatic contacts with the United States and the shutdown of American military bases in 2005. The pursuance of a pro-Russian foreign policy left the Uzbek Latin alphabet completely "bereaved". The modern, domestic Uzbek political processes left the issues concerning the new alphabet without any further consideration. The Latin alphabet did not serve as a tool to accelerate "the progress of the republic and its entrance into the world communication system" (as is stated in the Law). Thus, the reform initiated by the state and widely supported by the society appeared to be no longer unnecessary.

At the same time, it is entirely possible that the political situation in the country may change in the future, after which the alphabet issue would again appear to be an ideological tool in demand.

Turkmenistan

In 1993, the political decision to switch Turkmen language from the Cyrillic alphabet to the Latin was implemented. During the school year 1995-96, the school programme started the transition to the new script. The first book in the Latin alphabet was published in Ashkhabad in 1995. This book, devoted to the personality of the president of that time, was called "Turkmenbashi – a fate of Turkmenia". Until quite recently the popular periodicals and the majority of books in demand among the readers in Turkmenistan were being printed in both alphabets. An official prohibition on the Cyrillic alphabet usage was not declared. However, there are no Internet resources using the Cyrillic alphabet in Turkmenistan. In general, the experience of alphabet change in Turkmenistan is still the least studied due to the lack of information available. Similar to Uzbekistan, the first variant of the Turkmen alphabet based on the Latin graphics had to be updated and modified since it included inconvenient characters which do not exist in other Turkic alphabets. The modern Turkmen alphabet is far from the Uzbek alphabet and it is only partly similar to the Turkish one. It is composed of 30 characters, 8 of which contain diacritic marks; no digraphs are used.

In the case of Turkmenistan, the Latinisation process basically had a political reason. But it had a specific purpose too. The script reform in Azerbaijan and Uzbekistan (although formally and only at the beginning) symbolised a wish to limit the Russian influence and to force integration into the global world. The Latin alphabet in Turkmenistan symbolised the end of the Soviet era with Russian language domination, but it was not necessarily meant as a means to open the door to the world. In circumstances where the political neutrality was officially declared, the Latin alphabet in Turkmenistan became a part of the strategy directed towards the formation of the unique state ideology. The Latinisation of the Turkmen language may be evidence that, from the political, religious and cultural point of view, the status of the Latin alphabet could be free from all of these. Time will show whether this situation will change in the future due to changes in the ideological paradigms.

Tatarstan

The reforms considered above were implemented or are being implemented in the sovereign Turkic speaking countries (Azerbaijan, Uzbekistan, and Turkmenistan). But there are Turkic speaking peoples who live as a part of other countries. The Republic of Tatarstan is a constituent part of the Russian Federation; meanwhile the Tatars are the second largest (after the Russian people) ethnic group of today's Russia. The number of the Tatars in the Republic of Tatarstan exceeds a half of the 4 million population. The Latinisation of the Tatar language at the beginning of the 21st century failed, because of political reasons, thus perfectly demonstrating the political nature of linguistic problems. In particular, the alphabet change may be closely correlated with the issues of the state integrity, its security and ideology.

In summer 1997, the World Tatars Congress took place in Kazan (the capital city of Tatarstan), and the participants thereof voted for a transition of the Tatar language from the Cyrillic alphabet to the Latin one. The thorough preparatory work was followed by the Latinisation Law (adopted in 1999 by the State Council) which came into force in 2001. However, the decision of Tatarstan to change the Cyrillic alphabet to the Latin one generated a great wave of protest in Moscow. The deputies of the Russian Federation State Duma, famous community workers, pro-Kremlin mass media ganged up on the Republic of Tatarstan, accusing it of disloyalty and fomentation of nationalism. The Latinisation of the Tatar language was named "a threat to Russia's integrity" (Mullagalieya, 2011). Besides, the choice of a Latin alphabet close to the Turkish one was considered an attempt of Tatarstan to come closer to Turkey. In particular, the chairman of the language policy ethnic minorities and indigenous peoples subcommittee, Kaadyr-ool Bicheldei, stated that this was a frightening tendency (Khasanova, 1997). Publications about the reform inexpediency by Tatars who live both in Tatarstan and abroad started to appear in the media. The supporters were trying to prove the contrary, accusing the federal centre of arranging anti-reform campaigns.

In March 2002, the Russian Federation State Duma introduced changes and amendments into the Languages Law. It was stipulated by this Law that all languages of the Russian Federation which has the official status are to use the Cyrillic alphabet. Therefore, the Tatar language as a state language of the Republic of Tatarstan was deprived of the possibility to be switched to the Latin alphabet. In spite of the discontent of most Tatars, Russian liberal political forces, and human rights advocates, the amendments introduced into the Law came into force in autumn 2002.

The situation with the Latinisation of the Crimean Tatar language is somehow different. The four thousand people living in Crimea (a Black Sea peninsula in Ukraine) consider this land to be their historical motherland; meanwhile it has neither its own state, nor autonomy as a part of Ukraine. However, the Crimean Tatar language was switched to the Latin graphics by the decision of the Kurultay (unofficial representative body of the national government) in 1991. The enthusiasts who advocate preservation and development of the native language and culture are preparing all aspects related to the extension of the new alphabet usage. Besides, the Crimean Tatars' Kurultay supports the removal of the Black See (Russian) Fleet from Sebastopol and encourage Ukraine to join the North Atlantic Treaty Organisation (NATO). Consequently, the alphabet Latinisation in this case is a part of the Crimean Tatar minority to preserve their culture and identity (Jemilev, 2009).

As can be seen, in both cases, the language transition to the Latin alphabet was stipulated by a strongly marked political background. For Tatarstan, as a part of Russia, the Latin alphabet legalisation would strengthen its sovereignty. Meanwhile, the Latin alphabet

is important for the Crimean Tatars as an important attribute evidencing that this people exists. All participants of the "script struggle" are very well aware of its significance. This is not a fancy; this is a matter of life and death of the native language and culture. In each case, the peoples' fates are either to be dissolved in a non-native language environment or to try to create their own cultural and information field.

Disputes over Latinisation of Kazakh language

As noted before, there are no theories to explain the failure or success of alphabet reform nor are there ready-made solutions for those considering an alphabet transition. The Australian linguist Eira's (1998) work in "Power and approaches: search for a model of script choice" speaks about the necessity to take into consideration a variety of competing discourses. She calls six aspects of great importance in understanding of script reform backgrounds: scientific, political, religious, technological, historical and pedagogical (Eira, 1998). Certainly, the range of aspects listed above may not be universal and in each case needs to be amended according to the country specifics. The debates on the theme of Kazakh language Latinisation also have their own specific issues.

As of the beginning of the year 2011, more than 63,1% of Kazakhstan's population of 16.4 million are Kazakhs; Russians represent nearly 23,7%; the remainder part of the population (less than 15%) is a complex mix of more than 100 ethnic groups (Statistical Agency, 2010). However, the level of official language knowledge of the population is still quite low. Apart from demographic factors, there is a geopolitical element which significantly influences this issue. The Kazakhstan-Russian state border, with its 7 591 kilometres, is the longest land frontier in the world. The country continues to be under influence of information in Russian, and a part of the cultural area of the Russian language. Therefore, the internal Kazakhstan language policy is very delicate. The authorities are looking for some "gentle efforts" to promote Kazakh language development as the state language. Certainly, it is necessary to raise the status and expand the field of application of the language to avoid impairing the rights of those people who do not speak Kazakh.

Since Kazakhstan became an independent country in 1991, it has been discussed whether or not to switch the Kazakh orthography from the Cyrillic alphabet to the Latin one. Herewith, each new stage of the discussion is being initiated by the government. During the session of the Peoples' Assembly in 2007, Kazakhstan's president Nursultan Nazarbayev offered to go back to this matter for the third time, and commissioned the government to study it carefully. The government prepared a plan composed of five stages, with the reform to be formally completed in 2021. The project was valued at USD 300 million (Bartlett, 2007). However, no further actions were taken, apart from discussions of this matter. In November 2010, the Minister of Cultural Affairs Mukhtar Kul-Mukhamet stated that "We will come to this sooner or later; life rules lead us to do so." The Minister's statement was interpreted as the next message of the President to lead society to the necessary reform. When making this statement, the Minister noted that the Latinisation of Kazakhstan's state language had nothing to do with policy (Kulmuhammed, 2010). Is this possible? Based on the idea of the "competing discourses", we will try to answer this question and to consider other aspects of the alphabet reform in Kazakhstan.

Science: Phonetics and orthography

Before the 1920s Latinisation period, when the Arabic graphics were used, the Kazakh language suffered from a lack of sounds (there were not enough symbols to match Kazakh sounds); meanwhile, in case of the Cyrillic alphabet, there was a problem of excess of letters, which were derived from the Russian language. Having studied the frequency of the letters usage in different alphabets, Seitkassym Baibekov came to the conclusion that nearly 17% of the letters of the modern Kazakh alphabet such as "Э", "Ю", "Я", "Ф", "Ч", "Ц", "Ъ", "Ь" were very seldom used. They are met less than 100 times in a text composed of 100 000 characters; as a comparison, this index is 4% in English and 9% in Russian (Baibekov, 2010). Moreover, these letters continue to be tools of extreme importance in Russian. Therefore, many supporters of the Latin alphabet who are also national patriots advocate this reform namely for this reason. At the same time, it may appear unreasonable to delete all letters that do not have Kazakh origin. Such letters as "в" ("v") or "ф" ("f") used in borrowed foreign words have become a part of the language. Therefore, the truth in this matter is more likely to be found somewhere in between.

From the viewpoint of orthography, it is widely discussed how to design the specific letters of the language in the Latin graphics. One proposal is to design them with diacritic marks; this would make the alphabet closer to the Turkish one. This variant makes the reading easier (Kazakh could be as "shallow" as Turkish) but the "digital appearance" of the language is complicated because the use of the standard Latin keyboard and fonts seems impossible. Using this alphabet requires to install additional symbols on keyboards. Special computer applications would have to be developed and included. Therefore, the orthographic aspect is interconnected with the issue of how to provide the alphabet with technological attractiveness.

Another solution is based on the marks available on the standard keyboard (26 letters and apostrophe) and use of the digraphs. This would make Kazakh a language with a so-called "deep script", however. In 1989, Frost and Katz (1989) conducted research on the influence of orthography depth upon visual and audio perception of the words. The orthographic depth hypothesis divides written languages into "deep" and "shallow" depending on the connection between phonemes and graphemes. The less the language follows the alphabetic principle (one sound for one character), the deeper it is. Some authors suggest that shallow script may provide advantages to those who start learning to read and write with them, especially for people with dyslexia (OECD, 2007). Spelling and pronunciation consistency makes reading acquisition easier. At the same time, deep script may give advantages to those who passed the stage of reading acquisition. Some suppose that deep orthography develops analytical abilities. It is thus very difficult to decide which variant of the script is better.

Technology, globalisation and modernisation

As noted above, alphabet changes are often accompanied with arguments in favour of modernisation and technological advantages of the new alphabet. Supporters of Kazakh language Latinisation are sure that the Latin alphabet, as the basic graphics of information technologies, Internet and global written communications, will promote the state's language development.

The Kazakh Cyrillic alphabet is inconvenient to use when operating a computer. For example, the upper (numerical and alphabetical) line of keys to be used to must have 42 letters on the keyboard. As a result, when operating a computer in Kazakh, it is necessary to switch

from one language to another in order to have an access to the numbers or other characters such as -,/,\, $, %, @, “” etc. Besides, different models and versions of the computer operating systems and applications identify the Kazakh Cyrillic alphabet differently. Kazakh texts are often incompatible between different computers. Similar problems surface with mobile telephones and their applications. Therefore, electronic communications (e-mail, SMS) are kept in a discretionary Latin alphabet. *De facto,* the language lives within several alphabets. The Kazakh Diaspora, in other countries of the world, uses both the Arabic graphics and the Latin alphabet. Andrew Lih, author of the book *The Wikipedia Revolution: How a Bunch of Nobodies Created the World's Greatest Encyclopedia* describes the situation with Kazakh language to demonstrate how some languages have to re-write one and the same articles of encyclopaedia for several times (Lih, 2009).

Economics

We have already discussed above cases in which the economic cost became the formal reason to stop implementing the script reform. When there is a political decision leading to the alphabet change, the reform's economic price has never been an obstacle to implement it since it was a matter of state sovereignty and future society building. This is the case with Kazakhstan, where the government is not worried about the cost of the Kazakh language Latinisation process, estimating it to be USD 300 million, although the opponents of the idea use the economic arguments in order to strengthen their positions.

It is interesting that the Latin alphabet proved to be an efficient marketing tool and serves as a driver of trade in societies where the Cyrillic alphabet is used. For example, results of studies held by Russian marketers revealed that a customer's loyalty to a product is higher if its name is written in the Latin letters, while the Cyrillic spelling of a brand name is often associated with a low quality product (Belyakov, 2010).

Political aspects

The external policy of Kazakhstan is based on a multidirectional strategy; the country supports warm and close relations with strong neighbours (Russia, China) as well as with the United States and the European Union (EU) countries. Being located between Europe and Asia, multiconfessional and multicultural Kazakhstan is on the border of the centres of Confucianism, Orthodoxy and Islam. While supporting relations with strong neighbours, Kazakhstan does not stop sending “messages” to other countries of the world that it does not wish to come under the influence of Russia and China and does everything possible to restrain too much Islamisation of its society. The government annually sends thousands of students to the leading universities of the world. Kazakhstan is the only post-Soviet republic which has a State Programme called “The Way to Europe”. The aim of this programme is to bring Kazakhstan to a new level of strategic partnership with leading European countries (MFA RoK, 2008). In 2010, Kazakhstan became the first country among non-European and predominantly Muslim countries to preside the Organisation for Security and Co-operation in Europe (OSCE). Essentially, the ideological landmarks of the country are not limited geographically. Certainly, Kazakhstan aims to be an independent member of the world community.

Similar to the brotherly countries, which changed the Cyrillic alphabet to the Latin one at the beginning of the 1990s, Kazakhstan (to begin with the Kazakh elite) desires to leave the Russian “alphabet space” and to start forming its own information and culture space connected directly to the global medium.

The international and inter-confessional concord and political stability are the most important priorities of the state in the *internal policy*. Kazakhstan will celebrate the 20th anniversary of its independence in 2011. Certainly, political stability which makes it possible to implement economic reforms successfully is a great achievement of these years. Stability in a multi-ethnic society with an extremely complex composition became possible due to the balanced internal and external policy of the state, including, but not limited to, the delicate national and language policy issues. At the same time, extreme caution in the internal policy caused the national and state identification uncertainty to be preserved. Being called Kazakhstan, the state may not declare the "Kazakh" state identity based only on the official Kazakh language. At the same time, the "Kazakhstan" identity is being formed slowly as a result of its use of the Russian language. The state language in its current condition is not fit to be the basis for civil identity. It has to be transformed into a communication tool able to satisfy the basic communication requirements of a modern person. Therefore, Latinisation may become a significant constituent part of that agenda.

Language policy

Currently, the language situation in Kazakhstan consists of three levels. Kazakh language has the most limited field of application in spite of its state status. It remains a language of household communication and formal education, but is only a part of the media language, as well as an important element of national literature and culture. Russian language is significantly more widely applied: it predominates in higher education (even if the language of education is Kazakh, the study materials are in Russian), it is the language of science, mass communication (information, cinema and entertainment), business and state administration. To an increasing degree, the Russian language becomes a projection of the English-speaking global information, educational and cultural area. As such, it is supported by the economically profitable translation activities. This is demonstrated by the correlation between three languages in the online encyclopaedia Wikipedia, created by enthusiasts all over the world. At the present time, the total number of articles in this encyclopaedia in all languages of the world exceeds 17 million; of which 3.5 million are in English, 1.2 million are in German, 1.07 million are in French, 650 thousand in Russian, 156 630 in Turkish, 54 329 in Azerbaijanian, and only 7 000 in Kazakh (Wikipedia, 2011).

Therefore, if the Kazakh language is the native language of a given citizen of Kazakhstan, he/she may able to use his/her native language only until school graduation. Immediately after this, attempts to learn more and to become a career-oriented professional naturally force the individual to enter the area of the Russian language. As the information and education needs to grow, people are entering into the wider space of the English language. It is worthwhile to note that there are almost no natural tendencies for moving backwards. A citizen of the country who doesn't speak the state language has no need to learn it because there are no mandatory requirements in public or private sectors. It is wrong to charge the citizens who are not interested in the state language with lack of patriotism. Under the present circumstances, language policy has to aim not at creating methods and free-of-charge educational classes to learn Kazakh, but at creating the conditions where it is a physical necessity to speak the state language. The language is interesting if it opens the possibilities to access more knowledge, communication and professional success. This is why the funds and efforts have to be directed towards the development of mass translation businesses. It is possible to vitalise the language only by enriching the content it contains.

The information and technological convergence inevitably leads to reformatting all knowledge into a digital flow to be transmitted to the displays of different devices. The Latin alphabet, as the most user-friendly one with regard to the information technologies, generates favourable conditions for content extension and development in the state language.

Conclusions

Alphabet change, especially when it amounts to a rotation of different civilisations' scripts, represents a political action characterised by deep ideological background. As a matter of fact, this means to be severed from the identity (one which was forced, foreign, or obsolete etc.) and to accept another (conventional, updated, friendly etc.). Therefore, the ideological components are a key factor to success or failure of the script reform. The alphabet reform has to be built with highly sophisticated ideological mechanisms which display well-defined goals and tasks.

In the case of the above-mentioned reforms related to the transition from the Cyrillic alphabet to the Latin one by the Turkic republics during the post-Soviet epoch, it is evident that the Soviet identity is rejected and the Russian influence is limited immediately. Having achieved independence, each country started seeking for its own way of development with in-process formulation and correction of the tasks. This process still continues. Sooner or later historians of all countries will write that their alphabet's Latinisation has become a symbol of renewal and an important factor of the independent state development.

The transition period has passed by smoothly in Kazakhstan. The governing orientations of this period were "patience", "tolerance", "stability" and "multidirectional political strategies". Having accumulated a rich political experience and economic base, the country is turning to new values, which have to strengthen the country independence and development as a full-fledged member of the world community. Will the Latinisation of Kazakhstan state language be able to become a tool that will form its new state identity and an efficient constituting part of its modernisation as an independent state? Time will tell.

Glossary

Diacritic – "A diacritic (also diacritical mark) is an ancillary glyph added to a letter. Some diacritical marks, such as the acute (´) and grave (`) are often called *accents*. Diacritical marks may appear above or below a letter, or in some other position such as within the letter or between two letters. The main use of diacritics in the Latin alphabet is to change the sound value of the letter to which they are added. Examples from English are the diaeresis in *naïve* and *Noël*, which show that the vowel with the diaeresis mark is pronounced separately from the preceding vowel; the acute and grave 'accents', which indicate that a final vowel is to be pronounced, as in *saké* and poetic *breathèd*; and the cedilla under the 'c' in the loaned French word *façade*, which shows it is pronounced /s/ rather than /k/. In other alphabetic systems, diacritics may perform other functions" (Wikipedia).

Digraph – A pair of characters used to write one phoneme, or else a sequence of phonemes that does not correspond to the normal values of the two characters combined. The sound is often, but not necessarily, one which cannot be expressed using a single character in the orthography used by the language. Usually, the term "digraph" is reserved for graphemes whose pronunciation is always or nearly always the same. When digraphs do not represent a distinct phoneme, they may be relics from an earlier period of the language when they did have a different pronunciation, or represent a distinction which is made

only in certain dialects, like *wh* in English. In some language orthographies, digraphs are considered individual letters, meaning that they have their own place in the alphabet, in the standard orthography. In others, like English, this is not the case. Some schemes of Latinisation make extensive use of digraphs (*e.g.* Cyrillic to Roman for English readers), while others rely solely on diacritics (*e.g.* Cyrillic to the modified Roman used for Turkish) (Wikipedia).

Vowel harmony – "a type of assimilatory phonological process involving vowels that occurs in some languages. In languages with vowel harmony, there are constraints on which vowels may be found near each other" (Wikipedia).

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Chapter 8

Verlan, l'envers: Reversing language and reflecting culture

By Sarah Fuchs *

This chapter explores the social and cultural implications of the contemporary use of verlan. Verlan is the language game which inverts the syllables of words in order to encode the French language. Not just a game, verlan usage pervades everyday language, music, and culture of the beur population, the children of immigrants from North Africa, who live in the suburbs of cities such as Paris and Marseilles, France. The author finds verlan to be inextricably linked to modern French language and culture, as it reflects of the mixed identity of those who most often use it: not quite French, but not entirely magrebin (North African) either. Rather than subverting it, the culture with which verlan is most closely associated enriches French culture, just as verlan adds nuance and complexity to the French language.

* Harvard University School of Education graduate; English as a Second Language (ESL) teacher, Brooklyn, New York

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

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Introduction

Verlan is a language game that has taken hold in popular French in the latter half of the 20th century. For some, this phenomenon is just a game without any bearing beyond its presence in pop culture; for others, its popularisation is more than a passing fad. It is a sign of a social and cultural shift destined not only to influence the French language, but also French culture and society. Not just a game, *verlan* has its own linguistic patterns that do not exist in proper French; it is not, however, an autonomous language that functions independently of French. Rather, it is inextricably rooted in the language of its origin. While much of the available research focuses on the linguistic nature of this game, it is even more important to understand the context within which *verlan* has attained a more common usage, and secured a place in popular French.

Although *verlan* is deeply rooted in French cultural and even literary history, it was a particular population that really embraced *verlan* and popularised its use by integrating it into their everyday language, music, and culture. Referred to by their verlan name, they are *beurs*, children of immigrants from North Africa, who live in the suburbs of cities such as Paris and Marseilles. As *verlan* is deeply connected to the French language, it does not exist separately from the French language, I wonder if it is similar for culture. In particular, is modern French history and culture inseparably linked to the culture and people in which *verlan* is based? In this chapter I will provide an emphatic and supported response to that question: "Yes."

This chapter does not attempt to address everything related to *verlan* and the context within which it has taken hold, nor does it offer and exhaustive description of the language game itself, but I will try to show that *verlan* is not merely a secret code used for drug and crime-related activities or crude jokes. It is merely a part of the whole culture, which some may see as subversive, others as countercultural, others as natural. I will, rather, define *verlan* and provide a brief historical background, then discuss the current social and cultural contexts of its contemporary usage.

What is *verlan*?

> "Il faut s'y habituer, il faut apprendre à la comprendre." [You have to get used to it, you have to learn to understand it.] – From the film *Pixo*, by João Weiner and Roberto Oliveira, about graffiti art, also known as *la pixadora*, in Brazil.

Verlan[1] is part of the oral code of modern popular French. That is to say, while not an accepted element of proper French, it belongs to the French used on a daily basis by the French people. A speaker uses *verlan* to reorganise the sounds of French words, thus creating new words and encoding the original words. *Verlan* is considered a language game, comparable to Pig Latin in English. *Verlan* is also considered a *code argotique* – the word *code* refers to a communicative system that two or more people employ; the word *argotique* refers to the secretive nature or the intent of excluding others from understanding what is being talked about, or the colloquial nature of the code (Lefkowitz, 1991).

In other words, *verlan* is a form of slang that systematically changes words according to established rules. Boudard and Etienne define *verlan* as:

> … un procédé destiné en principe à rendre plus impénétrable encore le langage secret qu'est par essence – ou plutôt que devrait être – l'argot du milieu. Il consiste à « retourner » les mots les plus importants de la phrase, préalablement décomposés en syllabes. Ce procédé pourtant fort simple déroute les auditeurs dépourvus d'entraînement, même s'ils ont étés prévenus… C'est ainsi que le langage à l'envers se transforme en verlan.
>
> […a process intended, in principle, to make even more impenetrable the secret language that is in essence – or more so, that must be – the argot (slang) of the underworld. It consists of "turning" the most important words of a sentence, already decomposed into syllables, inside out. This process, though quite simple, puzzles the listeners without training, even if they have been warned… It is thus that the inverted language (language in inverse) is transformed into *verlan*.] (Lefkowitz, 1991, p. 49).

Verlan intends to confound a listener by making words impossible for the untrained ear to decipher. Often, even when the listener knows about *verlan* and how it is formed, it is still difficult to recognise a *verlan* word and, once it's heard, to decode it correctly. On the other hand, *verlan* is so commonly used in popular French discourse today, it is not hard to pick out some of the more common words, such as *meuf*, *keuf*, or *vénère*.[2]

In the process of *verlanisation*, words are decomposed into smaller units of syllables, or sub-syllabic units of onset and rhyme, or by letters, depending on the length and syllabication of the words. The order of these units is then inverted to make a new word. The transformations alter the French language by turning French words into a lexicon that is not recognised as a part of the official language and that doesn't conform to the same linguistic rules. On the other hand, *verlan* is not a complete language on its own and it does preserve some rules of phonology, morphology, syntax, and semantics.

Verlan is a systematic and rigorous process by which French is transformed into an exclusive code. It follows its own rules of correct formation, usage, and interpretation. Words are verlanised through several different processes, depending on the original French word. For words with two syllables, the transformation is simple enough: just exchange the order of the syllables. This is illustrated well by examples of words such as *pourri* (corrupt) >> *ripou*, *métro* (metro) >> *tromé*, and *toubab* (a term, of sub-Saharan African origin, for a white person) >> *babtou*.[3] In the case of monosyllabic words that end in a consonant, or closed syllables, the silent e at the end of the word is enunciated, or one is added, so that the word "becomes" dissyllabic (Mela, 1991). These two "syllables" then exchange position. For example, *louche* (pronounced /luʃ/) becomes *chelou* (/ʃəlu/) and *lourd* (pronounced /lur/) becomes *relou* (/rəlu/).[4] For monosyllabic words ending in vowel or semi-vowel sounds, the words are divided into units of onset and rime, onset being the initial consonant sound and rime being the remainder of the word, and these two units are interchanged (*ibid*.). Examples include *chaud* (hot), which becomes *auch* (/oʃ/), and *pue* (smells, stinks), which becomes *upe* (/yp/). For polysyllabic words, there are a couple of options for *verlanisation*: first, the order of the syllables may just be reversed; second, the word can be divided into two blocs of sounds or syllables, and these two blocs can be exchanged (*ibid*.). In most cases, the final vowel sound, if there is one, is dropped from the word, for example *arabe* becomes *bereu* (/bərə/), which is then truncated to *beur* and the medial vowel changes in quality from a closed vowel sound (/ə/) to an open one (/œ/).[5]

Table 8.1. **Examples of words in French and verlan**

Original Word	Meaning	*Verlan*
arabe (n. or adj.)	Arab, Arabic	beur
chaud (adj.)	hot	auch
louche (adj.)	seedy, shady	chelou
lourd (adj.)	heavy	relou
métro	metro	tromé
pourri (adj.)	corrupt	ripou
pue (puer, verb)	to smell bad, to stink	upe
toubab	sub-Saharan African term for a white person	babtou

It is also possible to reverlanise words that have already been encoded in *verlan*, a practice that is especially effective in rendering unknown once again *verlan* words that have already entered the lexicon of the general public. Lefkowitz (1991) lists users of *verlan* who may not be members of the initiated group, including former President Mitterrand,[6] students of prestigious *colleges* and *lycées* in Paris, advertisers, filmmakers, producers of other media, journalists, and more. Also to be included in this list are academics who would study the phenomena. As others employ *verlan* in their discourse, the code loses its exclusivity and becomes accessible to many. It is even possible to find some *verlan* words in dictionaries of popular French. The LaRousse online dictionary of the French language has entries for *beur*, *meuf*, and *keuf*.[7] That these words are included in a French language dictionary implies their adoption into popular French. In particular, since *beur* has become so common in usage, it has been re*verlan*ised to *rebeu*. This not only perpetuates *verlan* as a linguistic phenomenon, ensuring that not all *verlan* words become adopted into the common language, but it also reinforces the exclusion effect of the code.

Table 8.2. **Examples of words in verlan and their reverlanised forms**

Original Word	Meaning	*Verlan*	Re*verlan*ised
arabe (n. or adj.)	Arab, Arabic	beur	rebeu
femme (n.)	woman	meuf	femeu, feum
flic (n.)	slang term for police (cop)	keuf	

A scene from *South Park*, a television cartoon that often pokes fun at popular culture trends in the United States, offers a commentary on an effect similar to *reverlanisation* in American hip hop language culture. The exchange occurs between two characters, Mr. Garrison and Chef, who is black:

Mr. Garrison: Chef, what did you do when white people stole your culture?

Chef: Oh, well, we black people just always tried to stay out in front of them.

Mr. Slave: How did you do that?

Chef: Well, like with our slang. Black people always used to say, "I'm in the house" instead of "I'm here." But then white people all started to say "in the house" so we switched it to "in the hizzouse." Hizzouse became hizzizzouse, and then white folk

> started saying that, and we had to change it to hizzie, then "in the hizzle" which we had to change to "hizzle fo shizzle," and now, because white people say "hizzle fo shizzle," we have to say "flippity floppity floop." (*South Park*, episode 708, original airdate, 22 October 2003).

This example reveals an intention to keep the coded language inaccessible to outsiders. It also illustrates the evolutionary nature of popular language in general, and especially for codes intended to disguise discourse. Unlike this example, however, the rules of *verlan* allow the users of *verlan* to renew the lexicon and introduce "new" words without having to go outside of the frame already in place (Mela, 1991). The code remains opaque to the "uninitiated" as it continues to evolve and as changes are made to the code. The exclusive code serves to reinforce social stratification as well, because using it or not using it helps to identify a person as a part of one social group or another – to those within the group as well as to those outside of the group.

Box 8.1. **Another border-creating function of language?**

The honorific system in Korean is even difficult to native Korean speakers. Therefore, teaching the honorific system is an essential part of the Korean language curriculum and is pretty heavily covered. Because of this, Koreans naturally ask ages when they meet new people and the society maintains a quite strict hierarchical order depending on age. But people do not ask about age when meeting with someone obviously older. If someone does so, it would be considered impolite. There is no doubt that asking age is a part of Korean culture, but it should not be generalised.

Yoon-Sun Sung, Korea

The pronunciation of the original syllables of a word is generally preserved, unless the pronunciation generally doesn't exist in French, or would sound "more French" otherwise. Consonant clusters that do not occur in French are similarly avoided in *verlan* by the insertion or enunciation of the neutral e sound, or schwa, /ə/. The word *feuj* exemplifies both of these principles. It is derived from the French word *juif*, meaning Jewish: *juif* is decomposed into [jui] and [f], which are reversed to give [fjui]. The consonant cluster /fj/ does not occur in French, so the schwa is inserted between them. The ending is dropped and the word remaining, *fej*, in order to follow French phonological rules for closed monosyllables, becomes *feuj* (/fœj/). Lefkowitz (1991) asserts that these language games create sounds that would not otherwise occur in the original language, as in the case of *feuj*, the phonemes occur in an order that would not occur "naturally" in French.

I do not agree that *verlan* invents an exceedingly divergent phonology, but Mela (1991) points out that, in *verlan*, some consonants may occur in the initial position of a word when they wouldn't normally do so in French. She also notes that the proper *liaison*[8] is absent in *verlan*. The use of the liaison serves multiple purposes: it makes the French language sound smooth and connected, signals plurals, and is also a social marker, distinguishing those who use it from those who don't, in terms of not only language proficiency, but of social status as well. Overall, the structure of *verlan* creates words that sound like they belong to the lexicon of proper French but which actually don't. This gives the deceptive effect of hearing a word a French speaker seemingly recognisable word for which they don't know the meaning and with which they might be completely unfamiliar.

Verlan significantly differs from French morphologically. Suffixes that indicate gender in French, through the process of reversal, become infixes, so that distinctions between masculine and feminine occurs in the middle of *verlan* words rather than at the end (*ibid*.). For example, *français* (French, masculine adjective) becomes *céfran* but *française* (French, feminine adjective) becomes *cezfran*.[9] Most verbs, once made *verlan*, are invariable and are not conjugated. Mela (*ibid*.) cites examples from an interview with an adolescent who uses the same verb, *pécho*[10] (*choper*, to nab or to catch) for two different tenses: "*il m'a pécho*" (*chopé*, he caught me) and *"ils te pécho"* (*chopent*, they catch you).

On the other hand, some *verlan* words may be modified according to French morphological rules. Words that are one part of speech in the original French may also be made anew into another part of speech (for example, an adjective into a noun) according to French morphological rules. Continuing the example: the *verlan* adjective *relou*[11] can be transformed into a noun, *reloutage*,[12] referring to something or someone's annoying behaviour.

Table 8.3. **Examples of words in *verlan* and their morphologies**

Original Word	Meaning	*Verlan*	Morpheme
arabe (n. or adj.)	Arab, Arabic	beur	beurette (female of *beur*)
choper (v.)	to catch, to pinch, to nab	pécho	
énerver (v.)	to make anxious	vénère	se vénère (reflexive verb)
français (masc. adj.)	French	céfran	
française (fem. adj.)		cezfran	
femme (n.)	woman	meuf	
juif	Jewish, Jew	feuj	
lourd (adj.)	heavy	relou	reloutage (n.)

As *verlan* words are substituted for their French counterparts into discourse, they also agree with French syntax, and the sentence structure of utterances remains the same in *verlan* as in French. Similarly, words usually keep the same meaning in *verlan* as they have in French, with the exception that sometimes the *verlan* has a differently nuanced connotation and meaning than the French version of the word. Straight substitution of *verlan* words for French or slang words adds another dimension of synonyms to the language, thus increasing the richness of the lexicon. The word, *beur*, derived from the French *arabe*, meaning Arab or Arabic (depending on the part of speech), is quite well known and has a very heavily connoted meaning: it is not simply used as a direct substitute for the word *arabe*, because it also refers to a specific group of people with a specific subculture. The word *meuf*, the *verlan* for "woman," can be directly substituted for its French counterpart, *femme*, and *ma meuf* generally means "my girlfriend." The re*verlan*ised version of this word, *feum*, however, has a more pejorative meaning that signifies sexual objectification (Sloutsky and Black, 2008).

Despite the adoption of some *verlan* words into popular French, some very strong opinions are voiced against the code and the perceived threat it offers to the French language. Since *verlan* comes from French, looks like French, and sounds like French, for the most part, why then do people have such strong reactions to its usage in popular French?

Not just a game

Khoumba: Vous êtes vénère. vous vous excitez sur moi. C'est quoi ça?

François: Pas du tout. Absolument pas. Et puis commence par parler français, je suis quoi? Je suis…

Khoumba: Vénère.

François: Ouais. Dis-moi ça en français courant si tu veux bien.

Khoumba: You are getting yourself worked up over me. What's with that?

François: Not at all. Absolutely not. And now, begin by speaking French. What am I? I am…

Khoumba: Worked up.

François: Yes, say it in plain language, if you will.

Entre les murs, 2009

A (brief) history of *argot* and *verlan*

Verlan is considered a part of contemporary *argot*, which refers to modern French slang. The term *argot*, however, originally referred to a secret language employed by criminals in order that the authorities would not understand them (Lefkowitz, 1991). The term now also refers professional language or jargon, the language of identified or marginal social groups, and the language of urban areas, which can include different social classes (*ibid*.). Although the term *argot* has evolved from referring to a secret language for criminals to a particular phraseology to modern slang, it still carries with it the sense of a *signum social*, a social marker, or identification with a specific group (*ibid*.). *Argot* is both cryptic and playful in nature and it is important to note that it is particularly rich in vocabulary referring to drugs, crime, sexuality, money, the police, and other authority figures. Mela (1991) points out that the term "game" implies that there are rules, and that these rules imply conformity to some extent. *Verlan* has a similar dual purpose in that it is intended both for amusement and for concealment. In addition to the areas in which *argot* is lexically rich, *verlan* also includes many terms referring to ethnic and cultural origin. Thus, both of these codes are restrictive, as they are limited to certain topics of conversation as well as being limited to certain contexts and communicative exchanges.

An early example of *verlan* is given in Furetière's 1690 dictionary, which states: "On dit, 'c'est verjus ou jus vert' pour dire c'est la meme chose; [It is said, "it's *verjus* or *jus vert"* in order to say "it's the same thing"]" (Lefkowitz, 1991, p. 51). At the turn of the 20th century, Lazare Sainéan cites a letter written by a convict known as "the Hyena" in which he writes the date "Lontou, 1842" where "Lontou" refers to the city of Toulon (Lefkowitz, 1991). These two examples show that the practice of inverting words has been practised for a long time. The name of the game, *verlan*, wasn't coined until much later, after a more widespread popularisation of the game.

Paul (1985) explains that there was a temporary resurgence in the use of *verlan* in the 1940s during the German Occupation of France. She generally attributes it to the social disorder and profound troubles of the time. One of the explanations offered by Lefkowitz (1991) is that people were using it to amuse themselves, but it also seems likely that people also wanted a way to communicate without being understood by outsiders and that it was a reaction to a repressive regime.

A contemporary context

The contemporary popularisation of *verlan* in France today is important because of its close linkage to a different culture.[13] Like *argot*, *verlan* affirms a group consciousness and it is considered "a language of group affirmation, closure, exclusion, and recognition" (Lefkowitz, 1991, p. 62). More recently, *verlan* has been popularised most notably by the population of adolescents, children of immigrants from the Maghreb (North Africa) and West Africa. The spread of *verlan* throughout the country and to other French-speaking countries is also attributed to the blossoming of French hip hop. Different subcultures which also use *verlan*, perhaps in different ways, may have cropped up as a result of the dispersion. Paul (1985) points out that there are parallels in the socio-cultural atmosphere of the forties and the eighties that may account for *verlan*'s return in both cases, but that the comparison between the two eras stops at social disorder.

Although *verlan* has many purposes in contemporary French language and culture and that its spread is attributable to adolescents of all social classes, it is still a language that was cultivated in enclosed, self-contained places and that it remains "marked" by its *argotique* origins as a language of criminals (Mela, 1991). With speaking in reverse, there is always the possibility of inciting a hostile reaction. A recent example of this is French Secretary of State for Family Nadine Morano's comment that she wishes for the Muslim youth of France, along with loving their country, working, and not wearing their sweatshirt hoods up, not to speak *verlan* ("Morano demande," 15 December 2009). Such reactions could be a response to the exclusive character that *verlan* lends to the discourse of those who use it, or it could be a reaction to the insubordination to the status quo that it represents.

The in-crowd: Inclusion through the use of *Verlan*

Lefkowitz (1991) gives a detailed profile of the typical *beur verlan* user: They are second-generation immigrants, particularly of North and sub-Saharan African origins. Their identity is neither determined by their roots, nor by their place of birth, as they inhabit the margins of French society, despite having been born in France. Linguistically, their native tongue is French and they tend to speak Arabic poorly. The majority of the *beurs* are adolescents or young adults living in low-income housing projects (*cités*) in the suburbs (*banlieues*) of cities such as Paris and Marseilles.

Some people argue that beurs use *verlan* because of their inability to master French, but this explanation couldn't be farther from the truth, and has severe race and class implications. On the other hand, Mela (1991) argues that being able to play with a language, to alter it according to specific communicative intents, demonstrates a mastery of the language and an understanding of the specific rules (including phonological, morphological, syntactic, and semantic rules, as were discussed earlier) of a language. It also shows understanding of the purpose of language in general. The French Academy's[14] governance of proper French merely reflects how the higher social classes use French the language of power, to cement their elite status. Verlan shows that when the language belongs to the people, they can do with it what they would. Users of *verlan* are also able to code-switch between *verlan* and standard French depending on the context, to whom they are speaking, and the kind of emphasis they want to give their message. The awareness that these adolescents demonstrate of which contexts are appropriate for *verlan* use also shows their understanding the nuances of society.

Verlan, however, is not just for the children of immigrants. *Verlan* is, in general, a language of socially determined groups, a language of speakers from diverse origins, and a language of urban areas (Lefkowitz, 1991). French hip hop and hardcore rap groups illustrate this dimension of diversity as well. Unlike in the United States, where a significant majority of rappers are African-American, there is no distinct ethnic basis of French hip hop culture (Prévos, 2002). French and French-speaking adolescents who also seek to identify with oppressed minorities, regardless of race or social class, employ *verlan* in their own discourse. It is a way for them to distinguish themselves from adults and to establish themselves as a definitive social group with their own cultural identity. This intent to identify with the marginalised group reveals another cultural understanding: that it is not ideal to identify with the culture of the older generation. This is mirrored in American culture with white, middle class adolescents, males especially, identifying with American hip-hop culture. Wray explains that for today's young people, "… to be white is to be culturally broke. The classic thing white students say when you ask them to talk about who they are is, 'I don't have a culture.' They might be privileged, they might be loaded socio-economically, but they feel bankrupt when it comes to culture … They feel disadvantaged, and they feel marginalised. They don't have a culture that's cool or oppositional" (as cited in Hsu, 2009).

It is this feeling of lacking culture that leads white American adolescents and young adults to identify with another culture along different ethnic, social, or economic lines. Hsu (2009) concludes his article: "For the young Americans born in the 1980s and 1990s, culture is something to be taken apart and remade in their own image." This reminds me of *verlan* and the culture in which it is based, as it is a similar attempt on behalf of *beurs* and other *verlan* users who inhabit the margins of French society to appropriate an aspect of the language and to make a place for themselves in the culture.

The outside looking in: Exclusion through the use of *Verlan*

> "Je pense sincèrement que le langage inversé est une dégradation intempestive du français ou même des autres langages. À défaut d'une langue propre à leur génération, certains jeunes utilisent ce moyen d'expression pour s'isoler d'un monde où ils ne se trouvent pas. Jamais je ne parle le Verlan, car Montesquieu, Voltaire sont des maîtres pour moi. Le français est une langue trop belle pour la dégrader de cette façon".
>
> ["I sincerely think that "inverted language" is a misplaced degradation of French, or even of other languages. Since they don't have their own language, certain young people use this means of expression to isolate themselves from a world in which they can't find themselves. I never speak Verlan, as Montesquieu and Voltaire are masters to me. French is too beautiful a language to be degraded in such a way".]
>
> (Response to a question about verlan use from a student at an elite public secondary school in France (Lefkowitz, 1991, pp. 57-58).

In making this French code their own – users of *verlan*, be they *beur* or not – express their cultural identity, all the while knowing that they exist in the margins of society (Mela, 1991). They appropriate the language of power, as they are French, but alter it from its established form, thus emphasising their difference. *Verlan* usage, to some extent, subverts the assimilation process to some degree, as it renders the common language incomprehensible to significant portions of French speakers. Rather than intending to exclude themselves from French society, the adolescents that Mela (*ibid*.) interviewed for

her study indicated that they do, in fact, have ambitions of making a place for themselves in society, and they understand that using *verlan* would be a handicap for them in achieving this goal. Rather, these adolescents recognise the need to master their multiple identities, which includes three languages and three cultures. In addition to mastering these identities, they must also be able to differentiate between contexts in which it is appropriate or inappropriate to use *verlan*, just as a plurilingual person must determine when it is appropriate to use each language they speak.

Although they have the intention of being a part of French society, it is undeniable that they inhabit the margins of that society, which begs the question: what is keeping them on the outskirts? In 2004, the ministers of the Haut Conseil d'Intégration (High Council for Integration) celebrated the achievements of a number of "French from afar," that is, immigrants or children of immigrants to France. In response, Larbi Benboudaoud, two-time European judo champion, responded that he was not "from afar" (*"venu de loin*"), but that he was born in Dugny, France, to which he added: "Pendant combien de temps on va me rappeler que mes ancêtres ne sont pas gaulois? [How many times will you remind me that my ancestors were not Gauls?[15]]" (Marteau and Tournier, 2006, p. 16). This episode is a clear illustration of an unconscious ethnocentrism, even if it is well intentioned, that contributes to immigrants' inhabiting the margins in French society, the consequences of which extend beyond the walls of their homes and neighbourhoods.

French society is divided into homogeneous groups, and the people who belong to each group resemble each other in terms of ethnicity, social class, education, and income. Maurin (2004) explains that the physical separation, a "ghettoisation", is not only due to the lower classes closing themselves off from French society, but also due to the upper classes doing distancing themselves from the "lower" social classes. There is a physical and territorial separation that is not merely material or economic in nature, but also cultural. Each social class tries to dissociate themselves from those immediately below and associate with those immediately above (*ibid*.). That is, people behave how they perceive the class above them to behave in order to distinguish themselves from the classes below. One result is that, in France, adolescents whose parents are immigrants end up living in neighbourhoods where the immigrant population is four to five times that in neighbourhoods where adolescents whose father is French live (*ibid*.). The *beur* adolescents who find themselves on the fringes of society are not there because of an inability or an unwillingness to master the French language and to understand French society and culture, but because they, or their forbears, lack other resources – for example, prior exposure to others possessing a certain level of cultural competence from the beginning, or exposure to families considered "culturally rich." So, this social exclusion extends beyond just concentrating like people in one community or one area; it also has implications for the socialisation and acculturation of each class.

Influence: *Verlan*'s role in language socialisation

The social and physical segregation of French society also impacts the socialisation of the youth into French society. Immigrants, in any country, face an enormous task in assimilating, which usually includes adopting a new language of power, accepting a different naturalisation status, and conforming to social codes that may be any degree of foreign, unfamiliar, or strange. Some children and adolescents accumulate factors that contribute to their success in society whereas others accumulate factors that contribute to their failure in society (Maurin, 2004). Those children who are able to amass the qualities or features that enable success tend to come from families who are also already successful

in French society as well, whereas those who are destined to failure belong to families know the least about this society and whose experience with it is quite limited (*ibid*.). This speaks to the importance of having a concrete understanding of the culture in which these children are a part.

Cultural socialisation is also closely linked to language socialisation, as children learn the codes and values of the society to which they belong through interacting with and listening to the discourse of the adults around them (P. Uccelli, personal communication, 2009; see della Chiesa, Chapter 25, this volume). This theory can also be extended to musical forms of discourse as well, in considering that contemporary French rappers use their form to comment on their experiences and the values of French society, with which they may or may not agree. Hip hop groups, including IAM and La Caution, include in their songs cultural references that allude to the *beur* culture[16] of adolescents with mixed – French and North African – origins. In their song "Thé à la menthe" ("Mint Tea"), La Caution refer to others' negative perceptions of them (having been poorly raised, committing minor crimes, such as vandalism), the poverty within which they were raised (wearing cheap, worn-out clothing), and the influence from other immigrants to assimilate ("pas de salem-aleks," don't say "hello" in Arabic). They also celebrate their Moroccan culture of origin, including the use of Arabic words (*S'habs* [friends] and *bled* [country, homeland]) and references to traditional foods and dress, and critique the aspects of society that diverge from the traditional codes that they celebrate. They criticise the, presumably American, culture of barbecue and fast food as well as their French environment of living in *cités* (*le tèce* in *verlan*), low-income housing units. In this song, La Caution describes aspects of modern *beur* and French hip hop culture in relation to French society and global hip-hop culture.

Hip-hop group IAM also makes connections to Arab culture and civilisation in their music and philosophy, but these connections are not as explicitly related to their own specific cultural heritage as those of La Caution. IAM is known for their philosophy of "pharaohism," in which they make references to ancient Egyptian civilisation, and through which they are able to identify with Arab culture dissociating themselves from the negative associations that the French hold for North Africans and Islamic fundamentalism (Prévos, as cited in Swedenburg). French hip hop is one medium through which outsiders may be able to understand this *beur* culture, as French rappers, often of Arab descent, discuss the issues they encounter as being a part of French society without being included in French society due to their North African heritage.

Implications for the present and the future

The French language has been enriched by the addition of verlanised words with nuanced and culturally-specific meanings. *Verlan* is an important phenomenon to study because it is not simply a game with words, but rather is an indicator of contemporary social and cultural trends. Most research on *verlan* focuses on its form and entry into popular French about 20 years ago. This language game is unquestionably rooted in the 20th century, but it also has a 21st century context that has not yet been addressed in contemporary sociolinguistic literature. That *verlan* persists and we still see its usage in day-to-day language and in pop culture is all evidence that *verlan* still holds important implications for modern language and contemporary French culture. This linguistic phenomenon exemplifies how language can evolve and that culture is not static. *Verlan* is a perfect case study of the impact globalisation has on the evolution of language. Despite

that French is regulated by an official governing body, the language changes as people from diverse backgrounds use French as their language of currency.

In addition to the development and evolution of language, *verlan* has important implications for our globalised society because of the culture it is based in and the specific population that was most effective in helping it spread. The *beurs* are children of immigrants to France and their use of *verlan* does not simply reflect their inability to master the French language and culture. Rather, it is a reflection of their social status in France as not quite French, but not entirely *magrebin* (North African) either. In fact, their "mixed" identity is reflected in the language that they speak, which is often comprised of French, *verlan*, and Arabic together (della Chiesa, personal communication, 2010; Mela, 1991). Understanding the situation of this subculture, and of the *beurs* in particular, as they are children of immigrants, may also provide us with insight to the subcultures of other second and third-generation immigrant populations in France and other countries.

Future research should further study contemporary French hip hop culture and its situation in the global hip-hop movement. Although hip hop originated in the United States, it has not only spread to, but has also taken root in, other countries and begun to develop unique characteristics that distinguish it from hip hop in other parts of the world. It might be an important indicator of the growth of "global culture" that incorporates elements from different regions of the world. One result of the global spread of hip hop and a larger global culture is the diplomatic potential at the level of the people, rather than at the level of government.

Notes

1. Examples and explanations given, unless cited, are from my own personal experience with *verlan*, usually from interactions with French-speaking friends or pop culture.
2. Refer to Table 8.1. For the complete table, please refer to Annex 8.A1.
3. Refer to Table 8.1. For the complete table, please refer to Annex 8.A1.
4. Refer to Table 8.1. For the complete table, please refer to Annex 8.A1.
5. For more details, see Vivienne Mela's article (1991, pp. 73-94).
6. During an interview, President Mitterand proved that he was *chébran*, literally and figuratively "plugged in" with the youth of France by correctly using the aforementioned *verlan* term. Some wonder if this question was staged, however.
7. Refer to Table 8.2. For the complete table, please refer to Annex 8.A1.
8. A *liaison* occurs when the final consonant of a word attaches to the initial vowel of the following word. It is a linguistic phenomenon that contributes to the smooth, connected character of the French language.
9. Refer to Table 8.3. For the complete table, please refer to Annex 8.A1.
10. Refer to Table 8.3. For the complete table, please refer to Annex 8.A1.
11. *Relou* is the *verlan* form of *lourd*, meaning heavy or tedious.
12. Refer to Table 8.3. For the complete table, please refer to Annex 8.A1.

13. For a more comprehensive history on the use of *verlan*, see Lefkowitz, 1991.

14. The French Academy is a body of learned individuals from diverse educational and professional backgrounds whose mission is to "protect the French language" by defining the proper usage of the language (*www.academie-francaise.fr/index.html*).

15. The Gauls were the ancient French people.

16. The following comments are based on my own translations of the lyrics of La Caution's "Thé à la menthe." For the original lyrics, please see Annex 8.A2.

Annex 8.A1

Examples of words in *verlan*, the transformative process, and their morphologies

The following table organises alphabetically the aforementioned examples of *verlan* words, their meanings, morphemes, and reverlanised forms.

Original Word	Meaning	*Verlan*	Morpheme	Reverlanised
arabe (n. or adj.)	Arab, Arabic	beur	beurette (female of beur)	rebeu
chaud (adj.)		auch		
choper (v.)	to catch, to pinch, to nab	pécho		
enerver (v.)	to make anxious	vénère	se vénère (reflexive verb)	
français (masc. adj.)	French	céfran		
française (fem. adj.)		cezfran		
femme (n.)	woman	meuf		femeu, feum
juif	Jewish, Jew	feuj		
louche (adj.)	seedy, shady	chelou		
lourd (adj.)	heavy	relou	reloutage (n.)	
métro	metro	tromé		
pourri (adj.)	corrupt	ripou		
pue (puer, verb)	to smell bad, to stink	upe		
toubab	sub-Saharan African term for a white person	babtou		

Annex 8.A2

"Thé à la menthe" – La Caution

Jeune, j'ai le souvenir d'une Madame Nicole,
Instit' qui pensait qu'un bougnoule n'était pas fait pour l'école.
Je portais un velours troué, des bottes rouges en plastique,
Une cagoule en laine, un chandail ou des « Plays-Basket ».
Le coiffeur ne savait même pas encore que j'existais,
Mais sois sûr que le premier qui nous a vus s'est désisté
Pourtant jeune et innocent, la morve au nez sans kleenex.
On squatte le bac à sable avec nos S'habs et nos idées,
Afin de faire du vandalisme même sans le savoir.
Nos parents n'ont pas, donc on erre sans avoir.
D'après nos voisins, de gros racistes, je précise,
Nous étions mal élevés, leur berger allemand, mieux dressé
Moi j'y crois pas, d'ailleurs j'y ai jamais cru,
Car parental est le seul amour que j'ai jamais eu.
Donc pour pas se vénère : ce qui met à l'amende
Les vertus du naa-naa [mint] donc du thé a la menthe.
Première époque bidonville, ambiance clandestine
Dans un bar à Barbès : thé à la menthe, couscous et tagine à la carte.
Plus de scopitone pour Mouloud et Saïd, Abdallâh.
Avec un sale accent, pas de salam-aleks me dit Hassan l'athlète
Originaire d'Algérie, d'Hollywood à Tamanrasset.
Plus de thé à la menthe, juste des palabres amères.
Comme un malade mental, j'ai mal à la tête, je cavale en Stan Smith,
Adidas, jean 501, ça va j'm'en tape. Ici c'est v'là l'attentat.
Pour quelque douze de plus y a des carnages dans l'air.
Cette France me désintègre. On classe l'Arabe comme un barbare bancal.
Nique la culture du barbecue, du steak et des fast-foods
Au bled c'est la djellaba et les chandails d'Oujda à Casablanca.
C'est banal en bas de la tèce et j'm'emmerde et je pèse que dalle.
Ça se balafre en bas de mon hall. Ma peine et ma joie se confondent
Et c'est tout ce qui reste de notre héritage culturel

Une adolescence Nastase et 501
Pento, cassette de funk et le daron en 505.
Mais vint le mot « problème » avec un grand P,
Face auquel tout le monde a tremblé ou trempé.
Après l'innocence, le pessimisme s'est ancré.
Devant l'incandescence, le droit chemin s'est cambré

Je lui ai tendu la main et le bonheur m'a crampé.
Genre seul l'argent et l'honneur peut me rendre vrai.
Mais ici on peut t'accuser de choses que si t'avais tu t'pendrais.
Il leur faut un Arabe, un Noir ce que tu veux bref du concret.
On a eu la chance de n'jamais se prendre au sérieux,
Côtoyer le vide sans jamais faire le saut périlleux.
Modelant notre vie loin du saut de l'ange.
À l'école nous vautours contre l'albatros de Baudelaire.
On s'est retrouvé dans le rap contre toutes réelles attentes,
La recette Sampler stylo et thé à la menthe.

Box 8.A2.1. **Cultural identity of Chinese immigrants in the United States**

Language, as an essential component of a given culture, serves as a "name card" to convey people's cultural identity. The addition of a "foreign accent" in a specific language also represents an important part of an individual's original cultural identity.

In Boston's Chinatown, the largest such cultural neighbourhood in New England, utterances that interweave English and various Chinese languages are commonly heard. Bilinguals usually choose a base-language to interact with their interlocutors, and they are able to switch the language whenever the situation, topic, interlocutor or function of the interaction varies (Grosjean, 1995). Do people alternate languages in their conversations to learn new vocabulary or to convey their cultural identities to others?

Based on my observations of the Chinese immigrants in Boston's Chinatown, when they make language choices in conversations, they are choosing the groups they wish to identify with, and expressing their desire to be included in those groups. Moreover, the use of different languages is the process through which immigrants establish a new unique culture and thus create a new personal identity, group identity and cultural identity. This new cultural identity is born with a dilemma the Chinese immigrants need to face: on one side, they are inclined to shift to the dominant language for better economic opportunity and socio-economic mobility; on the other side, they cannot totally get rid of their mother tongue because of disfluency in the non-native language and more importantly, because of the cultural gap. People's native languages play a vital role in affecting how they observe the outside world. Therefore, many Chinese immigrants experience significant identity conflicts with the target language community when they feel a discrepancy exists between their original identity and the identity they are expected to establish in the new community (Shardakova and Pavlenko, 2004). This new cultural identity, featuring a mixture of mother tongue and English, helps them to regain a sense of self and understand how they are related to others.

Due to the pressure of integrating into the new community, some Chinese immigrants might display denial of their original identity at first. The Chinese movie entitled "Gua Sha" is a story about cultural conflicts between Chinese and American. Xu Datong, the main actor, is a video game designer in St. Louis, and he identifies himself as a new successful American. When his father visits from China, he performs Gua Sha, a traditional Chinese medical treatment for fever that leaves bright red marks on the skin of his grandson, and causes a lawsuit of child abuse. Datong experiences a painful struggle that forces him to examine the validity of some of the most vital things he thought he knew about his original identity and his Chinese culture. Sometimes the invisible nature of one's cultural beliefs makes it difficult to explain yourself to others when questioned. The story, whether it happens in reality or not, informs us that the original identity is so deeply rooted within oneself that one can hardly abandon it. At the end of the movie, Datong's case is successfully solved through cultural empathy, which plays a crucial role in dealing with cultural conflicts.

The new cultural identity shared by Chinese immigrants in the United States enables them to have a sense of belonging in their American home and alleviates the cultural conflict they encounter in daily life. The mixing feature of languages spoken by those immigrants is one of the most important indicators to their cultural identity. Further research on the difference of cultural identity between Mandarin speakers and Cantonese speakers could be interesting.

Shuyi Zhou, China

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Chapter 9

Cochlear implants, deaf culture and narrowly defined cultural characteristics

By Peter Broad *

Cochlear implants are medical devices that help previously deaf individuals gain or regain partial hearing. Many medical professionals consider them an essential component of treating deafness. Members of the Deaf community, however, consider the implants to be a direct assault on their carefully nurtured way of life, which embraces deafness and cultivates cultural markers based on the absence of the hearing sense. This chapter examines the medical and ethical arguments in favour of Cochlear implants, as well as the arguments of the Deaf community in opposition. Without taking sides, it further attempts to tease out some of the ethical, moral, and cultural issues revealed by this particular incidence of conflict. Its brief examination of the issue reveals that the increasing capabilities of technology are already beginning to call into question the survivability of many cultures, and perhaps fundamentally altering how we define culture itself.

* Harvard University School of Education graduate; independent education consultant, USA

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

In 2004 *Nature* published an article by Carina Dennis about a deaf couple, who were profiled under the pseudonyms John and Karen. John and Karen desperately wanted a baby; more specifically, they were committed to having a baby who was deaf like they were (Dennis, 2004). To their dismay, however, genetic tests had shown that they were likely to produce a hearing child. While John and Karen ultimately chose to roll the genetic dice, another Deaf couple, Sharon Duchesneau and Candy McCullough, chose to try for a sure thing (Savulescu, 2002). As a same-sex pairing Duchesneau and McCullough sought out a sperm donor from a family with five generations of deafness, and have since had two children born deaf.

At age one Serena Rush was diagnosed as deaf. Now six, Serena loves musicals, her iPod, and attending regular classes as a 2nd grader in Silver Spring, Maryland. Serena now hears, though not perfectly, as a result of her cochlear implants, inserted when she was 2 ½-years-old (Marcus, 2009). Cochlear implants, which are devices implanted into the skull, can often give previously deaf individuals as much as 70% normal hearing, and the technology is rapidly improving. The procedure is most effective when conducted on young children, who have the cognitive and physical adaptability to adjust to their new sensory input. Serena's mother, Lauri Rush, a clinical psychologist at Gallaudet University, is thrilled that her daughter can interact easily with her hearing friends and pursue her interests in theatre and music. In some ways, these two stories reflect the very personal ways people deal with the reality of deafness. In other ways, they represent a fundamental conflict about what it means to have no hearing (deaf), and to be a part of a culture that sees deafness not as a disability to be remedied, but a defining characteristic (Deaf). Many Deaf people see the medical impulse to treat deafness as a disability, of which cochlear implants are a "symptom", as a direct threat to a culture which they have worked long and hard to establish (Sparrow, 2005; Edwards, 2005). Many medical experts and families, on the other hand, think the idea of choosing to be deaf is harmful at best, and criminal at worst. Fundamentally, it calls into question the very nature of culture, how it is defined by those who are members, and what happens when those definitions are challenged by a powerful "outside" agent.

The purpose of this chapter is not to pass judgment on what is unquestionably an emotional, personal, and extremely complex question. Inevitably, many people have powerful feelings that fall to one side or the other of the debate surrounding cochlear implants. Rather, this analysis will attempt to tease out some of the ethical, moral, and cultural issues revealed by this particular incidence of conflict. The rejection of cochlear implants by many of those that identify as culturally Deaf can give us insight into what it means to be part of a culture, and who and what gets to make that cultural membership decision.

Background

Before delving into the implications of the debate surrounding cochlear implants, it is necessary to make explicit some broad understandings of the background factors so as to inform the later conversation. While it isn't necessary to delve into the medical details of cochlear implants, a general understanding of their capabilities, who receives them, and why the decision to receive

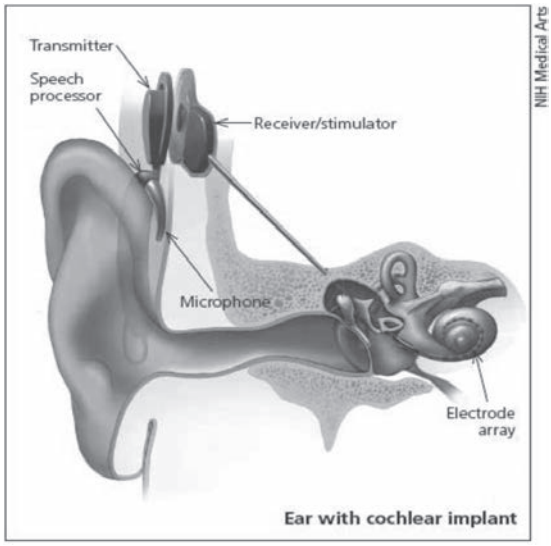
them is or is not made is necessary. Along the same lines, it is essential to have a clearly defined understanding of the difference between being "deaf" and being culturally "Deaf", but this analysis does not have the scope to examine the full range of implications of both definitions.

Cochlear implants

Cochlear implants are designed to give a deaf person a sense of the sounds in their environment and to help them understand spoken language. While cochlear implants continue to increase in power and reliability, their basic form has remained the same since their inception in the 1970s. The apparatus consists of an external portion that sits behind the ear and a second portion that is surgically placed under the skin. Implants almost always include:

- a microphone, which picks up sound from the environment;
- a speech processor, which selects and arranges sounds picked up by the microphone;
- a transmitter and receiver/stimulator, which receive signals from the speech processor and convert them into electric impulses; and
- an electrode array, which is a group of electrodes that collects the impulses from the stimulator and sends them to different regions of the auditory nerve.

Figure 9.1. **Ear with cochlear implant**



Source: NIH, 2009.

Implants are generally given to individuals who have very limited or no hearing. These may include adults who have lost their hearing due to accident or illness, or to children who are born deaf. While there is some debate as to the appropriate age at which to go through with the procedure, the FDA has approved some devices for implantation in children as young as 12 months (NIDCD, 2009). Many researchers believe that early implantation, generally accepted as before 5 years old, can give a child a distinct learning advantage over those who are implanted later in life (Berg *et al*., 2007).

At the moment, cochlear implants do not work in the way that traditional hearing aids do. Whereas hearing aids amplify sound like a stereo speaker, an implant translates sound into signals that are transmitted directly into the auditory nerve. These signals must be learned and associated with real-life signals like sirens, wind, and speech. This learning process is made easier during the early stages of child development, leading many in the medical profession to push early implantation (*ibid*.). However, the imperfect hearing that results from even early intervention has led many to conclude that the technology lacks the effectiveness to make it a compelling alternative to traditional methods of helping deaf people interact with the world. As research continues, there is reason to believe that cochlear implants or similar devices will continue to increase in efficiency and reliability.

"Deaf" vs. "deaf"

One of the largest barriers to accessing the debate over cochlear implants is the murky understanding most hearing observers have of the difference between being "deaf", and being "Deaf". For the purposes of this analysis two broad definitions will be utilised. This is not to say that these are universally accepted, and in fact definitions lie at the heart of the debate about which this chapter is arranged. However, for ease of understanding and illustration the following definitions will be used in subsequent discussions.

People who cannot hear or are very hard of hearing are "deaf". These can include those who are born without the ability to hear, or those who have lost the ability at some point during their lives. Genetics, illness, and accidents can all cause deafness. People who are deaf are raised, live, and work in every conceivable culture, profession, and locale. They interpret their personal situations in a variety of ways, informed by the diverse experiences they have had as human beings. Thus, deafness by this definition is simply a description of a physical characteristic, as one might be described as "tall", "brown-haired", or "one-legged"; no more, no less. Whether or not "deafness" is a disability is secondary to the definition, though central to the debate that will be described later.

In contrast, "Deafness" encompasses such a rich set of characteristics as to be beyond the scope of this chapter. This is because there are many people who are deaf who consider themselves members of Deaf culture. That is, they share a set of cultural norms that make them distinct from other cultures. With Deafness, like any societal grouping that claims the mantle of being a "culture", there is enormous debate both within and without as to what exactly constitutes the culture, or if such a culture can (or should) exist. Again, it is outside the scope of this analysis to examine whether or not there is such a thing as Deaf culture. However, there are a number of characteristics that, as Sparrow (2005) notes, place Deafness "closer to the paradigmatic cases of ethnic and national cultures than do many other proposed candidates for the appellation" (p. 140).

These characteristics give credence to the notion that there is such thing as Deaf culture, and this chapter will operate under the assumption that the definition of Deafness that members ascribe to themselves is a valid one. Deaf culture possesses its own national language, represented in the United States by American Sign Language (ASL), but an increasing number of national and sub-national variations as well (see Scott, this volume). The Deaf have their own social and civic organisations, such as the National Association of the Deaf (NAD) in the United States, and the World Federation of the Deaf (WFD), which serves as an international umbrella organisation. They also have their own culture-specific educational institutions, including Gallaudet University, the premier institution of higher education dedicated to the deaf. Finally, Deaf people possess a shared history stemming from their existence as a minority in a "hearing" world, where they were often the subjects of experimentation and discrimination (Sparrow, 2005).

Fundamentally, however, all members of Deaf culture are deaf, and the lack of this characteristic precludes one from joining the fold (Edwards, 2005). This means that the hearing child of Deaf parents is not Deaf, though they may have learned sign language as their first language and participated in all of the cultural activities associated with Deafness. Similarly, a deaf child or adult who receives a cochlear implant is removing a fundamental underpinning – perhaps the most fundamental of all – of their culture. Given the central place of culture in the lives of nearly every human alive, the deep consternation this causes in the Deaf community becomes increasingly comprehensible.

Cochlear implants and Deaf culture

The documentary *Sound and Fury* (2000) shows us a portrait of the impact of cochlear implants on one Long Island family, the Artinians. Two brothers – one Deaf, one hearing, one married to a Deaf woman, one married to a child of Deaf adults – face the question of whether to implant the device in their deaf children. The hearing brother decides in favour of surgery, while the Deaf couple decides against it. The process nearly tears the extended family apart. The hearing parents of the two brothers accuse their Deaf son of child abuse for his refusal. The wife, Mari, whose parents are Deaf, announces her decision and is promptly deemed "a lousy daughter" who, by rejecting deafness for her son, has also rejected her family.

Box 9.1. **Controversial**

In general, getting a cochlear implant means you are no longer really culturally Deaf – there are exceptions made for people who received cochlear implants as babies and therefore had no choice in the matter – but the Deaf in general see cochlear implantation as a serious threat to the very existence of their culture and language, and tend to be sensitive about that. I think it would be a bit like changing your ethnicity, because a lot of being Deaf involves the experience of being deaf (physically deaf, that is), so if you can hear, it is hard to say that you are also culturally Deaf. For this reason, Children of Deaf Adults are also not considered "Deaf" even though ASL is their first language and their parents are Deaf – because they can hear! So they never have that "growing up deaf" experience that is an important part of Deaf culture … But this is controversial.

Jessica Scott, United States

There are clearly powerful arguments on both sides of the debate. On the one side are those who view cochlear implants as a threat to a carefully cultivated cultural identity that hinges on deafness as its prime underpinning. On the other hand are parents and doctors who view deafness as a treatable condition, and failure to address it as cruel and negligent. Both sides have, in their own contexts, deep reservoirs of moral and ethical reasons for taking the positions they do. Exploring these offers insights into how cultural context is fostered, and how it can be challenged from the outside.

Treating deafness

The impetus to "treat" deafness is relatively simple to explain to those who have participated fully in hearing society and had little interaction with Deaf society. There is no question that the inability to hear is a disadvantage in many contexts within society as currently constructed. The same can be said for the blind, people with conditions like Autism and Down syndrome, and those born with physical abnormalities. That we should use our scientific achievements to ameliorate these disadvantages has been a basic underpinning of medical culture for quite some time. Consciously choosing to allow such a disorder to persist, or, even worse, to actively seek to have a child with such a condition is entirely unethical from this perspective.

For a parent who chooses to give their child a cochlear implant, the arguments are likely less ethical and more personal. Every parent wants the best for their children, though

what that ideal consists of varies enormously from culture to culture. In many cases, like the Artinians', a deaf child may be born to hearing parents. Those parents, understandably, would see this as a potential hindrance to the future success of their child in a world that may not have a great deal of sympathy for deaf people. To effectively share their culture, a hearing culture, with their child, that child must shed their deafness, and cochlear implants offer an avenue to that end.

Deaf objections to medical intervention

For the Deaf, cochlear implants are no less emotionally fraught, but come with cultural and political implications that add layers of complexity not necessarily present on the other side of the debate. One of the most pressing of these issues has already been mentioned: a child or a person who receives a cochlear implant can no longer be seen as truly Deaf, whatever their upbringing or other circumstances might be. Another, according to Edwards (2005) is that cochlear implants "privilege speaking and hearing over signing and seeing" (p. 894). That is, it inherently rejects the value of the language that underpins communication in Deaf culture, a language carefully crafted and nurtured for well over a century. Finally, Deaf people tend to reject the idea that there is something deficient about their bodies. They reject the idea that they have a disorder at all (Edwards, 2005).

The first point – that a child must be deaf in order to be Deaf – clarifies the reasoning behind objections to cochlear implants and the original example of parents actively seeking deaf children. Some 90% of all deaf children are born to hearing parents (Marschark, 1997), many of whom will opt to give their children implants, especially as the technology improves. Of the children born to deaf parents, many will be deaf, but some will be hearing. Thus, Deaf culture, even without the "threat" of cochlear implants, has a propagation problem. Add cochlear implants to the equation, and one could begin to view the procedure as an effort – conscious or unconscious – to destroy Deaf culture entirely.

The second and third points are related, in that they speak to the central debate about whether deafness is a disability. The Deaf, of course, reject this notion, and can point to sign language and heightened visual sensitivity as examples of their ability to communicate quite effectively, if differently. The fact is that with a single exception – their lack of hearing – deaf people lack none of the faculties of the able-bodied and able-minded hearing population. If they were to accept the legitimacy of cochlear implants, they would be tacitly acknowledging that they were, in fact, deficient, and that the tools and abilities they had developed to cope with their lack of hearing were insufficient, at best.

Thus, at their core, cochlear implants and the cultural ramifications they represent are a direct threat to the survival of Deaf culture as it currently exists. The very assumptions that underlie the push towards the procedure call into question the legitimacy of Deafness. If their culture is something that can be "cured", the value of that culture is undermined at a basic level.

In the case of Deaf culture, a relatively small, young culture, eliminating one of the basic pillars of cultural membership has an outsize impact. Many cultures can afford to adopt a "big tent" philosophy when it comes to membership, because there is no single pre-requisite absent which admission is denied. Clara E. Rodriguez, a respected scholar of the Latino experience in the United States, notes that many cultures define and re-define what is required for cultural membership (Rodriguez, 2000). As such there are many Latinos who do not speak Spanish, but few Deaf people who do not sign.

Sparrow speculates, with good reason, that it will not be long before medical science offers the opportunity for deaf people to hear with perfect clarity, either through bionic ears or genetic manipulation. On the other side, the same medical advances could make it possible for deaf parents to ensure that their child was born deaf. Would these advances change the minds of some who may have chosen differently today? Without question, however the underlying debate would still hold true; some parents would be making the carefully considered decision to have deaf children with the goal of raising Deaf adults, so as to perpetuate the culture they deeply value.

Implications

In some ways Deafness occupies a unique place in the cultural landscape. There is no Blind culture, nor an Autistic culture, or at least nothing resembling the cohesiveness and complexity displayed by Deaf culture. That medical science has become a threat to the unity and perpetuation of this culture sets them apart from other threatened cultures. However, in other ways their experience is representative of cultural conflicts that have arisen and are likely to arise in the future. Science, especially genetics, has enormous potential for cultural disruption. So too does the idea that one's cultural membership can be defined both by culture itself, and by outside actors.

Science and culture

Cochlear implants and genetic testing make it possible for parents to decide for their children the culture they will grow up in, just as parents have made this decision for time immemorial. However, the potential ramifications of this reality can be drawn to some uncomfortable extremes. Take, for example, the notion shared by many physicians that allowing a child to live deaf when there are medically sound alternatives is unethical. This thinking follows naturally from the notion that a deaf child will be at a severe disadvantage in society. In fact, however, there are many ways to be born disadvantaged into our current society. Some of these fall under the familiar umbrella of commonly accepted disabilities. Genetic testing and more advanced early intervention, even genetic adjustments in the womb, could potentially reduce the instances of these disabilities dramatically. While there might be some consternation as to the ethics of this, many would agree that it is entirely appropriate to reduce the disadvantages faced by these children as much as possible.

Following this reasoning, it would also seem appropriate, where possible, to adjust other characteristics of children that might be thought of as minor disadvantages. Poor eyesight, small stature, and weak bones could be repaired in utero or infancy. But what then of the intangible disadvantages? Would parents choose lighter skin for their children because of the well-known social advantages? Blond hair? Is there a difference between the parent who chooses for their child to have pale features and the parent who chooses to give their deaf child hearing? Do we equate the parent who chooses certain ethnic characteristics for their child, despite well-documented social disadvantages, and the parent who chooses for their child to be deaf (Savulescu, 2002)? If homosexuality could be suppressed through gene therapy or another medical intervention would parents who objected to the lifestyle or feared for their child's safety be within their rights to change the sexual orientation of their offspring?

Many scientists and doctors would no doubt find the prospect of altering ethnicity or sexuality for social advantage to be immoral and unethical. However, in many ways they would merely be removing the same sort of disadvantage that a deaf child faces in a

hearing-centric society (*ibid*.). Along the same lines, it is difficult to envision a medical professional objecting to a parent who wanted to ensure that their child shared their ethnic characteristics, despite the xenophobia and racism faced by many minorities every day. Deaf parents feel no differently about their own children, who would be welcomed into a loving home and supportive culture despite the disadvantages and discrimination they might encounter in their lives.

Defining cultural membership

Who gets to define cultural membership? Who decides when an individual has breached cultural norms to the point that they can no longer be considered a member of that culture? In Deaf culture cultural characteristics are narrowly defined to the point where lacking a single attribute – in this case deafness – precludes one from membership. Few other cultures have such strict guidelines, though the rules of some ethnic and religious groups can be quite restrictive, like guidelines surrounding matrilineal descent in some conservative sects of Judaism, for example. Small ethnic groups like the Basques maintain their unique linguistic and cultural characteristics in the face of the enormous dominance of adjoining cultures. In these groupings, usually small, with specific attributes that define them from broader, larger, more inclusive cultures, membership is both more concrete and more tenuous. A member of Deaf culture is easily identified by fellow members, since that person will be deaf and communicate in ASL or one of its related languages.

While these cultures carefully maintain their specific attributes as a protection against the influence of other cultures, the specificity of these characteristics has the potential to increase the tenuousness of their position. Deaf culture's tight standards for Deafness mean that bringing new members into the fold is almost entirely the responsibility of families already within its sphere. This puts these families in a difficult position, one where even the Children of Deaf Adults (CODA) risk being left out of Deaf culture (Singleton and Tittle, 2000). Given their fear of being subsumed into a wider hearing culture that has proven indifferent if not hostile to their needs in the past this is an understandable position, but one that leaves them with very limited options in the face of overwhelming pressure.

Sparrow (2005) notes that the State, as an arbiter of the cultural transactions that take place, may have an important role to play in the future of these cultures. States regularly make decisions that take cultural differences and minority status into consideration. "Many forums, at all levels of contemporary politics, involve the representation of groups rather than individuals and often treat the interests of these groups as being of roughly even weight, regardless of how many members they have" (p. 152). State decisions on how to fund medical research and what weight to give various ethnic and cultural groups in the decision making process have enormous impact on those groups, as debates on stem-cell research[1] and American Indian recognition[2] show.

Conclusions

Carefully defining cultures is a tricky proposition at best. Even members of the strictest, most insular cultures often hold at least marginal allegiance to a number of other groupings. Deaf people may be Deaf first, but likely also have national ethnic, and religious affiliations that also help define their innate sense of self-worth and belonging. Deaf culture, while carefully defined as distinct from hearing culture by its members, nonetheless coexists with its influences in the dynamic cultural marketplace that makes up human civilisation. Cultures do wax and wane, sometimes due to factors entirely outside

of their control, sometimes due to their own characteristics, and usually as a result of both. Cultures under threat react to this threat in a variety of ways, by adapting, by fighting, or by establishing careful rules that help ensure their treasured uniqueness.

Medical science, genetics, and the increasingly global marketplace of ideas pose distinct and widely varied challenges to the traditional notions of culture. No longer is it feasible to wall oneself off behind geography or institutions and hope to keep the outside world at bay. Rapid travel and easily available media mean that one will be constantly bombarded with knowledge of how other cultures live, love, and pass away. Science offers opportunities to alleviate if not eliminate many of the vagaries of evolution that humanity has used to define itself into cultural groupings, while at the same time providing ample tools for those who wish to maintain these distinctions indefinitely. For some, this is an opportunity to grow, increase in complexity, and gain new insights. For others, it means that careful reaffirmation of their core beliefs is not only desirable, but necessary for survival.

What happens to cultures, especially small, specific culture like that of the Deaf is unclear. If deafness truly becomes a choice, in which parents and their children are choosing between full, perfect hearing and not-hearing, there may be genuine questions about the viability of Deaf culture. That said, technology and society may shift in ways we cannot predict, providing opportunity for Deaf culture to both survive and flourish. It should be remembered that in almost all cases it is the way in which society is constructed that disadvantages the deaf. In a society designed by the Deaf for the Deaf there is little reason to believe that the hearing would have any advantage. Auditory signals of every sort would be of no utility and thus not factor in everyday life. As we ponder the place of unique cultures and societies with regards to our own it behooves us to ponder that alternate reality.

Box 9.2. **“Culturally” Deaf?**

This idea of cultural deafness is absolutely intriguing. I am bombarded with thoughts on the concept of culture as a reference to the socio-emotional component of belonging and its role on the construction of identity. The Deaf are definitely a social group of their own, based on a singular difference. It is another part of the human prototype that can differ in numbers large enough to generate a sense of community. Just as getting cochlear implants could be considered as strong as changing your ethnicity, the experience of being deaf while comparing yourself with non-deaf is similar to being black and comparing yourself with a white person in response to the plethora of actions and behaviours that are demanded by societies. This brings up the point of “growing up deaf”. It is precisely the construction of identity that links the process of having to deal with a difference or assume this characteristic that makes one emotionally bound to it. A person who has not experienced this personally, does not know what it means to struggle with a different characteristic compared to a majority or an “advantaged” group, will not have the urge and determination to be part of this group. In the case of getting a cochlear implant, for example, I think it also becomes a matter of the idea of “implant” versus a characteristic you are born with. You are born deaf and already feel part of this group. Getting an implant to “be like” people who can hear is not only rejecting your constructed identity, but also becoming part of another group through artificial and “false” methods. There is definitely a less-conscious fear (depending on the age group of course) of rejection here which translates consciously into a loss of culture and language.

Alejandro Belmont, Peru

Box 9.3. **About *Babel***

I recently watched the movie *Babel*, which has a deaf character. I hadn't thought about how hard it would be to be a deaf teenager – when you are already so vulnerable and self-conscious and just want to fit in.

E.B. O'Donnell, United States

An interesting note about *Babel*: The Deaf character was played by a hearing actress, and the Deaf community was very upset that a Deaf person wasn't chosen to portray this character! I imagine (but am unsure) that it would be similar to a Korean person's reaction if a Japanese or Chinese person was hired to play a Korean character.

Jessica Scott, United States

I recently read that heavy eye contact is a significant component of Deaf culture and communication in sign language. While in many cultures it may be considered intimidating, forward or even rude to maintain a steady gaze into the eyes of the person with whom one is communicating, in Deaf culture it is not only socially acceptable, but necessary, and a rule of protocol. This makes me wonder about the ways in which deaf people, or people who are a part of Deaf culture, relate and connect with one another. Does the inclination toward constant eye contact create a greater sense of comfort with or trust of others? Does it come easily? How does it affect the dynamics when communicating with hearing people, if at all?

Lisa Mulvey, United States

Notes

1. In the United States, medical research utilising fetal stem-cells is an extremely controversial subject, and various state and federal laws have been passed both encouraging and discouraging the practice. Most of these debates have little to do with the medical efficacy of the practice, and everything to do with moral and ethical arguments particular to the American context. Corporate interests and patient advocates tend to favor research, while social conservatives tend to object on religious grounds.

2. Many American Indian tribes enjoy limited sovereignty over their legal and territorial affairs. While this is sometimes the result of historical treaty obligations on the part of the United States Government, others have gone through the process of having themselves officially recognised by the Department of the Interior, which manages government relations with the indigenous population. Because there can be significant political and economic benefits from formal recognition, most notably the ability to construct gambling establishments where local regulations might ordinarily prohibit such enterprises, the recognition process can involve significant legal and political upheaval. Additionally, because of the chaotic and often violent manner in which American Indian tribes were subjugated during the westward expansion of American settlement, the historical continuity of many tribes has been called into question by critics. Many tribes lack both documentation and cultural markers that might confirm their cultural legitimacy.

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Chapter 10

Neuroscientific research and the study of sign language

By Jessica Scott*

The field of neuroscience has contributed a great deal to our understanding of how the brain understands signed languages, and conversely, the investigation of signed languages has helped neuroscientists to better understand how the brain understands language. This chapter provides a summary and exploration of the research in neuroscience that is related to signed languages, including research on deaf participants, hearing participants, and aphasic signers. Also included here is a discussion on how signed vocabulary is understood, as well as the comprehension of both grammatical and affective facial expressions among the deaf. Implications for scientists conducting neuroscientific research are discussed.

* Harvard University Graduate School of Education

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Introduction

As a former teacher of the deaf and hard of hearing (DHH), I noticed a pattern among my students. Fluent users of American Sign Language (ASL) tended to have greater ability in understanding and producing written English than less fluent students, a phenomenon that has been documented in research (Strong and Prinz, 1997). It seemed that students who learned ASL at an early age from native signers had a high level of proficiency in written English. Even students with profound hearing losses and little to no access to the sounds of English who learned ASL from birth acquired more advanced skills in reading and writing English. For DHH students who use ASL, early education using this language will give these students a solid foundation in ASL (L1) with which they can better learn to read and write in English (L2) (Snoddon, 2008). This requires the recognition of signed languages as complete languages, and that signed languages are the most accessible languages for DHH students.

Throughout this chapter, the term "signed languages" is used to signify manual languages that are unrelated to spoken language. "Sign systems," manual gestures[1] representing a spoken language on the hands, such as Pidgin Sign English, (PSE), Manually Coded English (MCE) SEE 1 and 2 (Signing Exact English and Seeing Essential English), and Total Communication (TC) are not complete languages, and are therefore not included in this discussion (Emmorey, 2002). These sign systems do not possess their own grammar, as ASL does – they are merely a way of expressing English grammar, word order, and vocabulary with the hands. In contrast ASL, like other signed languages, has a grammar that is unrelated to the dominant spoken language, in the United States, English.

Researchers have begun to turn to the brain for further evidence of the linguistic nature of sign languages; functional MRIs (fMRI) and other new technologies provide researchers and practitioners with information about how signed languages are processed by the DHH. Additionally, the spontaneous appearance of signed languages in areas of the world with relatively large populations of DHH individuals, such as Martha's Vineyard (Groce, 1985), Nicaragua and a small village in Israel (Fox, 2007) supports the hypothesis that signed languages are the natural languages of the DHH and provides further impetus for neuroscientific research into these languages and whether they are processed differently in the brain than spoken languages.

Until recently, the DHH and hearing alike have perceived the signed languages of the world[2] as incomplete modes of communication; signed languages were frequently viewed to be lesser than spoken languages (Sacks, 1989). The thought of sign as a fully formed language did not emerge until Stokoe's work of the 1950s and 1960s, when he described the grammatical features of what would become known as ASL (Armstrong, 2000). Since that time, many researchers have identified the linguistic markers of ASL, including grammatical facial expressions and the four parameters of ASL (hand-shape, palm orientation, motion, and location). These rule-governed parameters are often called the phonological components of sign language (Fox, 2007). Changing any one of the four parameters results in an entirely different sign, just as changing the initial phoneme (/c/) in the word *cat* to (/b/) will produce a different word, *bat*.

As a result of this research, ASL is now increasingly offered in high schools and colleges across the United States as a way to fulfil non-native language requirements; schools and programmes for the DHH in the United States increasingly accept ASL as the natural language of DHH students, and as the vehicle with which to teach English as a non-native language to these students. Understanding how the DHH acquire, understand,

and produce sign language will allow educators to improve the state of DHH education, particularly in the area of signed and spoken language development.

The use of fMRIs and other technologies provides professionals with information about ASL, and all signed languages, through examination of how the brain processes this type of manual-visual language. These technologies also give educators valuable information about their students' language acquisition in their L1 and L2. How the brain processes these languages and how injuries to the brain impact sign language comprehension and production can provide educators and researchers with a more complete understanding of sign language and its relationship to spoken language. This literature review examines the current research regarding the comprehension, production, and the impact of brain injuries on sign language, and will discuss potential direction for future research in the areas of sign language, neuroscience and education.

Language and neuroscience

Neuroscientific research has isolated areas of the brain that play a central role in processing linguistic information in spoken languages: the left inferior frontal gyrus (Broca's area), and the left posterior middle gyrus (Wernicke's area) (Fox, 2007). These areas are primarily responsible for basic linguistic functions (Broca's area) and semantic processing (Wernicke's area) (OECD, 2007). The left temporal lobe has also been found to be important in the processing of linguistic information (Hickok, Love-Geffen and Klima, 2002), as well as visuo-spatial information (MacSweeney *et al*., 2002). Additionally, researchers have found the left fusiform gyrus to be active during individual word recognition (Corina *et al*., 2003). This literature review addresses questions as to whether these regions of the brain, located generally in the left hemisphere and considered active in the processing of spoken language, are used for processing sign languages, or if the right hemisphere, often associated with visual-spatial information, plays a greater role in processing signed languages (Centre for Neuro Skills, 2009). The article first focuses on signed languages, including lexical processing, facial expressions, studies examining first hearing and then DHH signers, and the effect of aphasia on the production and comprehension of signed languages.

Signed languages and neuroscience

Processing lexical items in signed languages

Words are the foundation of language. Whether signed or spoken, words provide us with labels for concrete and abstract concepts, and allow us to engage in discussions. Word production in spoken language has been found to involve Broca's area (Emmorey, Mehta and Grabowsky, 2007). But do the lexical items of sign language, produced in such a drastically different modality, use the same neural pathway as a language based primarily in sound? Does the brain process the visual-motor aspect of sign language lexicon as its most important feature, or do the semantics behind the sign override the mode of communication used, and cause similar neural activity as in spoken words?

Three studies examined brain activation during production and comprehension of single words in signed and spoken language. The 29 participants in one study were DHH users of ASL, and the fMRI results of these participants were compared with 64 monolingual hearing speakers of English (*ibid*.). The second study included 13 DHH participants who used British Sign Language (BSL) as their native language, and were

skilled at speech-reading English (Capek *et al*., 2008). This study contained no comparison group. The final researchers included ten DHH native users of ASL. This study also did not include a comparison group (Emmorey *et al*., 2004). While two studies asked participants to produce an ASL lexical item, in some cases an ASL classifier,[3] using pictorial stimuli (*ibid*.; Emmorey, Mehta and Grabowsky, 2007), Capek *et al*. (2008) investigated comprehension of single word items in several conditions. Words were presented to participants through speech, signs alone, and signs that use mouth movement, either to clarify word choice or as a grammatical marker.[4]

All three studies found similarities and differences between brain activation in the processing and production of spoken and signed lexical items. All participants experienced activation in the left hemisphere of the brain during the comprehension or production of isolated sign language vocabulary items (Capek *et al*., 2008; Emmorey, Mehta and Grabowsky, 2007; Emmorey *et al*., 2004). Emmorey *et al*. (2007) found that both sign and word production involve the use of Broca's area, indicating that individual lexical items in sign language are processed in a manner similar to lexicon in spoken language. Classifiers were also processed primarily in the left hemisphere, despite their highly iconic nature that might lead one to assume they would be processed in the visual-spatial right hemisphere (Emmorey *et al.,* 2004). The right hemisphere appears to be more active in the processing of sign language than spoken language, possibly because the primary articulators of ASL are the hands, which seemingly necessitates the use of visual-spatial abilities to process the language. The same right hemispheric areas of the brain that are used for processing non-linguistic hand gestures are also activated in the processing of ASL (Capek *et al*., 2008). Comprehension of signs that are accompanied by mouth movements, either grammatical or disambiguating,[5] resulted in greater activation across both the right and left hemispheres than the processing of speech reading or signs without accompanying mouth movements. This activation occurred in areas of the brain that are associated with the processing of language, and may be a result of linguistic information reaching the "listener" through the multiple modalities of both sign and speech-reading (*ibid*.; Emmorey *et al*., 2004).

Although signed and spoken languages have different modes of articulation, which may result in different types of brain activation (Capek *et al*., 2008), these studies found that the left hemisphere and Broca's area were vital to the comprehension and production of single words in sign language, as they are in spoken language (*ibid*.; Emmorey, Mehta and Grabowsky, 2007; Emmorey *et al*., 2004). Although the right hemisphere seems to play a larger role in processing sign language than it does in spoken language, this may be a result of the visual nature of signed languages rather than to how the meaning of individual words are processed by users of the language, as the right hemisphere is also employed during the processing of non-linguistic hand movements and gestures (Capek *et al*., 2008). Evidence from these studies implies that the phonological features of sign language (hand-shape, location, movement and palm orientation) are processed in the same areas of the brain as the phonological features of spoken language (Emmorey, Mehta and Grabowsky, 2007; Emmorey *et al*., 2004).

Processing affective and grammatical facial expressions in signed languages

Facial expressions can serve two roles during the production of signed languages: the conveyance of emotion (affect) or a grammatical function (Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005). Grammatical use of facial expression is considered a linguistic property of signed languages, and it has been theorised that this

type of facial expression is processed in the left hemisphere of the brain along with other elements of language. Two studies examined the processing of linguistic and affective facial expression among DHH signers and hearing non-signers. Corina *et al*. (1999) provide a case study of two DHH native signers, one with right hemisphere brain damage and the other with left hemisphere brain damage. These signers produced videotaped utterances that were coded by researchers for the inclusion and exclusion of affective and linguistic facial expressions (Corina, Bellugi and Reilly, 1999). McCullough *et al*. (2005) included 20 participants in their study, ten deaf signers and ten hearing non-signers. These participants observed hearing ASL interpreters on a pre-recorded video as they produced affective, linguistic, or neutral facial expressions in videos that included the face only (no verb condition) and videos that included both the face and the accompanying ASL verb (verb condition). Utilising an fMRI, researchers recorded the participants' brain activity as they watched the stimulus videos (McCullough, Emmorey and Sereno, 2005).

Both groups of researchers found that the right hemisphere played a substantial role in the processing of affective facial expressions (Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005). The right hemisphere damaged signer, although able to produce most linguistic or grammatical facial expressions, was unable to produce facial expressions that conveyed emotion (Corina, Bellugi and Reilly, 1999). While hearing individuals' processed affective facial expression using primarily the right hemisphere of the brain, the DHH individuals in McCullough *et al*.'s (2005) study processed these facial expressions bilaterally. The study suggests that the unexpected employment of the left hemisphere is a result of the additional linguistic information produced by the hands. The study's authors believed that this activated the linguistic centres of the brain while facial expressions were being processed in the right hemisphere (McCullough, Emmorey and Sereno, 2005).

Researchers obtained similar results regarding the use of the left hemisphere in the processing of grammatical facial expressions (Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005). The signer experiencing left-hemisphere damage, although able to produce affective facial expressions, had difficulty producing facial expressions that served as linguistic cues in ASL (Corina, Bellugi and Reilly, 1999). DHH signers in McCullough *et al*.'s (2005) study processed linguistic facial expressions primarily in the left hemisphere as expected, with greater levels of activation when the sign accompanied the facial expression (verb condition). The linguistic nature of grammatical facial expressions results in the employment of language centres in the brain to process this visual information (Corina, Bellugi and Reilly, 1999; McCullough, Emorrey and Sereno, 2005).

The results of these studies indicate that either hemisphere of the brain can play a primary role in processing facial expressions, depending on whether they are conveying linguistic or affective information (Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005). While both hemispheres are involved in both processes, depending on the function of the facial expression, one hemisphere plays a larger role than the other. The left hemisphere of the brain, especially the left fusiform gyrus, primarily processes linguistic facial expressions (as well as other linguistic markers), which can indicate the presence of a clause, conditional verb, or adverb, when accompanied by lexical items (Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005). In contrast, the right hemisphere of the brain is primarily used, along with the left hemisphere, for the processing of affective facial expressions among DHH individuals, although hearing non-signers process these facial expressions more exclusively with the right hemisphere than the left (Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005).

Signers appear able to differentiate between types of facial expressions. These studies demonstrate that linguistic features, even the facial expressions that are processed in the right hemisphere among non-signers, are understood by users of ASL to be a grammatical component of signed language (Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005).

Box 10.1. **Sign language is a language!**

This is a turning point in the way I view sign language: I had never before considered sign language a language. It might be the influence of my mother tongue in which "sign language" is translated into a word meaning "communication using hands." To me, a sign language was a little bit more than gesture or just an assisting communication tool for the deaf. Now, however, I realise that it actually is a language that has been systematically developed and bonds the language users within a culture. In addition, I just read that there may be a similar sensitive period in the right hemisphere involved in the processing of ASL. Since sensitive periods are so important in language learning…

Yoon-Sun Sung, Korea

Sign language and hearing signers

A small number of studies have investigated brain activation patterns found in hearing users of signed language (Emmorey *et al*., 2005; Newman *et al*., 2001). This examination of bilingual users of English and ASL may bring greater understanding to the study of sign language acquisition and linguistic processing. Often, the bilinguals included in these studies learned ASL before learning English. These participants are termed as "native hearing signers" (Emmorey *et al*., 2005, p. 834), which indicates that although the participants are hearing, they were raised with ASL as their first language. This is generally the case for hearing children with DHH parents [often called CODAs: Children Of Deaf Adults]. While one study looked at CODAs exclusively (*ibid*.), Newman *et al*. (2001) compared hearing native signers with hearing signers who had attained L2 fluency in ASL later in life.

Newman *et al*. (2001) included sixteen native hearing signers and eleven non-native hearing signers in their study. The study conducted by Emmorey *et al*. (2005), included ten native hearing signers and no comparison group. Newman *et al*. (2001) asked participants to view written English sentences and signed ASL sentences on a video recording while undergoing an fMRI. Nonsense words and nonsense signs were also included to compare brain activation during the processing of both linguistic and non-linguistic stimuli (Newman *et al*., 2001). Emmorey *et al*. (2005) asked participants to produce ASL and English sentences using classifiers and prepositions to identify spatial relationships between objects.

Both studies found the right hemisphere of the brain to be critical in the processing of ASL, especially in native hearing signers (Emmorey *et al*., 2005; Newman *et al*., 2001). Although non-native hearing signers experienced activation in the right hemisphere of the brain, specifically the superior temporal sulcus, an area which contains the auditory cortex, native hearing signers also employed the right hemisphere's inferior parietal region (Emmorey *et al*., 2005; Newman *et al*., 2001), the area of the brain that processes phonological information (Capital Research Limited, 2008). This region was only found to be active during ASL processing among native hearing signers (Newman *et al*., 2001). Emmorey *et al*. (2005) believed that this use of the right hemisphere was due to ASL's

use of image generation and manipulation, as this task is performed better by the right hemisphere than the left. Results show that this is especially important for the production and comprehension of classifiers in ASL (Emmorey *et al*., 2005).

Although native and non-native hearing signers employed the right hemisphere during sign language comprehension and production activities, the left hemisphere remained active for linguistic processing. Specifically, nouns and verbs in ASL were processed in Broca's area in the left hemisphere of the brain, as they had been in previously discussed studies of lexical items (Capek *et al*., 2008; Emmorey *et al*., 2005; Emmorey, Mehta and Grabowsky, 2007). Both non-native and native hearing signers also employed Broca's area during ASL comprehension exercises (Newman *et al*., 2001). Although for bilingual hearing individuals, the left hemisphere is active during ASL comprehension and production, the right hemisphere shows greater activation during ASL based activities than English based activities (Emmorey *et al*., 2005; Newman *et al*., 2001). As these hearing individuals do not experience auditory deprivation, they may process linguistic information differently from DHH signers. This theory will be further discussed in the following section.

Sign language and DHH signers

Six studies in this review examined brain activation in unimpaired DHH signers during sign language production and comprehension, or while observing non-linguistic visual stimuli. Of these studies, three investigated activation in the language centres of the brain, such as Wernicke's or Broca's areas during sign language processing (Corina *et al*., 2003; Kassubek, Hickok and Erhard, 2004; Meyer *et al*., 2007), two looked at phonological processing and auditory pathway development among DHH people (Fine *et al*., 2005; MacSweeney *et al*., 2008), and the last tested visual-spatial processing abilities among DHH users of sign language (MacSweeney *et al*., 2002).

These studies included sample sizes ranging from as few as six to as many as twenty participants. Three of the six studies included between 18 and 20 DHH users of sign language (Corina *et al.,* 2003; MacSweeney *et al*., 2002; MacSweeney *et al*., 2008). The DHH people included in these studies spoke ASL, BSL, or German Sign Language (DGS) as their primary language, except in MacSweeney *et al*.'s (2008) study, in which only 12 of the 20 subjects were native signers. The remaining eight learned BSL as a second language between elementary and secondary school (MacSweeney *et al*., 2008). The three remaining studies had comparatively small sample sizes of six and seven DHH signers each (Fine *et al*., 2005; Kassubek, Hickok and Erhard, 2004; Meyer *et al*., 2007). Meyer *et al.* (2007) included one DHH signer in their study who did not learn DGS until the age of thirteen. All remaining participants were native users of DGS (Fine *et al*., 2005; Kassubek, Hickok and Erhard, 2004; Meyer *et al*., 2007).

Only one team of researchers did not include a control group (Corina *et al*., 2003). Two studies included both a comparison group of hearing native signers and a group of hearing non-signers (Fine *et al*., 2005; MacSweeney *et al*., 2008). The remaining three studies included two participant groups: a DHH experimental group and hearing control group (Kassubek, Hickok and Erhard, 2004; MacSweeney *et al*., 2008; Meyer *et al*., 2007).

Of the three studies examining the activation of classical language areas of the brain in sign language, two asked subjects to produce sign language words or sentences, either sub-vocally, asking the participant to "imagine communicating with themselves by signing" (Kassubek, Hickok and Erhard, 2004, p. 169) or through the physical production of signs (Corina *et al*., 2003). Meyer *et al.* (2007) investigated sign language comprehension

exclusively, even among hearing non-signers. All three studies found significant brain activation in the left hemisphere among signing participants (Corina *et al*., 2003; Kassubek, Hickok and Erhard, 2004; Meyer *et al*., 2007). The areas that are used for processing spoken English were found to be active in ASL comprehension, specifically Broca's area in the left peri-sylvian cortex (Corina *et al*., 2003; Kassubek, Hickok and Erhard, 2004; Meyer *et al*., 2007). Corina *et al*. (2003) were the first researchers to find activation in the left fusiform gyrus during ASL processing, an area traditionally associated with word recognition. Two studies also found activation in the right hemisphere of the brain (Corina *et al*., 2003; Meyer *et al*., 2007). Specifically, the right lateral cerebellum, an area of the brain associated with semantic retrieval, was found to be active during ASL processing (Corina *et al*., 2003). Additionally, areas of the visual cortex were active during sign language comprehension in DGS, conceivably to process visual-spatial cues of this visual language (Meyer *et al*., 2007).

Three studies examined spatial and auditory processing among DHH individuals. Spatial processing studies included both linguistic (MacSweeney *et al*., 2002) and non-linguistic processing (Fine *et al*., 2005). MacSweeney *et al*. (2002) asked DHH participants to watch videos of BSL sentences that used spatial information to convey action or physical relationships between objects as well as sentences that did not use space in this way. Audio-visual recordings of English sentences were shown to hearing non-signers; these sentences used English prepositions that described similar spatial relationships between objects (MacSweeney *et al*., 2002). Fine *et al*. (2005) asked participants to observe rotating clusters of dots, while focusing either on peripheral motion of the dots, or on a fixed dot in the centre of the cluster. The final study, which focused on phonological processing, asked participants to determine whether two English words rhyme and whether two BSL signs share a phonological feature[6] using picture cards as a stimulus (MacSweeney *et al*., 2008).

Figure 10.1. **Initial and final handshape and position for the sign "French"**

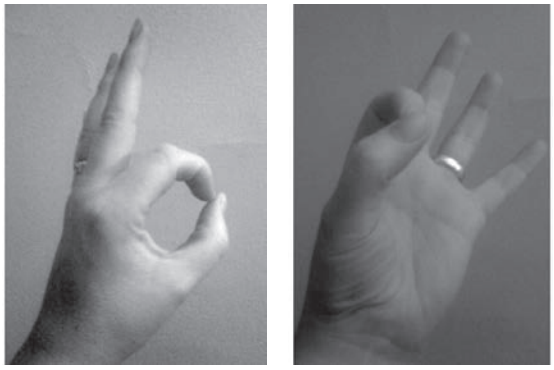


Figure 10.2. **Handshape for the sign "Furniture"**



Arrow denotes movement of the sign.

Like the three other studies with DHH participants, researchers found significant activity in the left hemisphere of the brain during sign language processing (MacSweeney *et al*., 2002; MacSweeney *et al*., 2008). BSL sentences that conveyed spatial information activated the left parietal lobe, used for visual-spatial processing. BSL sentences that did not include spatial relationships, as well as all English sentences, did not result in this same type of activation (MacSweeney *et al*., 2002). Similarly, phonological awareness tasks, both in

BSL and in English, resulted in activation in the left parietal lobe (MacSweeney *et al*., 2008). This stands in contrast to the previously discussed study of spatial linguistic processing among hearing signers, in which the right hemisphere was found to be more active than the left (Emmorey *et al*., 2004). The hearing status of participants seems to alter the way in which the brain processes linguistic information, possibly due to the neural development of auditory and visual areas of the brain in differing ways depending on the type of sensory input received (Fine *et al*., 2005). Fine *et al*. (2005), in their study of non-linguistic visuo-spatial processing, found that although there were no significant differences in visual cortex activation between DHH and hearing participants, DHH participants experienced activation in the auditory cortex while processing visual stimuli. As this use of the auditory cortex was not found among hearing native signers or the hearing non-signer control group, it would seem that this differential use of the auditory cortex is a result of auditory deprivation among DHH individuals, rather than the knowledge of ASL (*ibid*.).

Overall, the results of these studies indicate similar brain activation during language production and comprehension between DHH and hearing individuals. The left hemisphere, including Broca's area and the left parietal lobe, was active during linguistic tasks for both DHH and hearing participants (Corina *et al*., 2003; Kassubek, Hickok and Erhard, 2004; MacSweeney *et al*., 2002; MacSweeney *et al*., 2008; Meyer *et al*., 2007). This area was also employed during non-linguistic tasks (Fine *et al*., 2005). The most striking difference between DHH and hearing participants was the use of the auditory cortex to process visual information among DHH users of sign language. Depriving the cortex of auditory information seemed to cause the brain to use this area in a different way, reassigning neural networks to perform new tasks (*ibid*.).

Aphasic DHH signers

Four studies included here examined the effects of damage to the brain on the production and comprehension of sign language among DHH adults (Hickok, Love-Geffen and Klima, 2002; Hickok *et al.,* 1999; Marshall *et al*., 2004; Marshall, Atkinson and Woll, 2005). These studies examined the language and visuo-spatial abilities of impaired DHH signers using BSL or ASL. Two studies examined signers after an event that caused left hemisphere damage (Marshall *et al*., 2004; Marshall *et al*., 2005), one detailed two signers with right hemispheric brain damage (Hickok *et al*., 1999), and the final study compared eleven signers with left hemisphere damage to eight signers with right hemisphere damage (Hickok, Love-Geffen and Klima, 2002).

Signers with left hemisphere damage experienced difficulty in the production of sign language (Marshall *et al*., 2004; Marshall *et al*., 2005), or sign language word and sentence comprehension (Hickok, Love-Geffen and Klima, 2002). Specifically, researchers found that damage to the left temporal lobe caused significant deficits in ASL comprehension (*ibid*.). However, visuo-spatial processing and simple sentence comprehension remained intact for one of the subjects (Marshall *et al*., 2004). The use of gesture was unimpaired across studies; even when subjects were unable to produce or comprehend a signed word in BSL, they demonstrated good communicative abilities through the use of gestures (*ibid*.; Marshall *et al*., 2005). In fact, when signed lexical items were highly iconic,[7] the signer with left hemisphere damage was unable to process these items accurately, although he was able to understand and produce similarly iconic non-linguistic gestures (Marshall *et al*., 2004).

This implies that while certain gestures may still be accessible, damage to the left hemisphere of the brain harms the ability to understand and produce these iconic signs possibly because of the linguistic nature of the signs versus the non-linguistic nature of

gestures (*ibid*.; Marshall *et al.,* 2005). Signers with left hemisphere damage were less able to comprehend lexical items in sign language or follow directions communicated in ASL than subjects with right hemisphere damage (Hickok, Love-Geffen and Klima, 2002).

Figure 10.3. **The ASL classifier meaning vehicle, considered an iconic sign**



In contrast, the two signers in Hickok *et al*.'s (1999) study with right hemispheric damage did not experience the same difficulty with linguistic processing and production as those with left hemispheric damage. They were able to name objects and produce simple signed sentences: one participant had difficulty maintaining topic during conversation, while the other could not consistently use referential space,[8] which is essential during ASL conversation. These signers experienced a deficiency in their visuo-spatial processing, which indirectly impacted their sign language production capabilities (Hickok *et al*., 1999). Signers with right hemisphere damage do not appear to experience deficiencies in their language comprehension (Hickok, Love-Geffen and Klima, 2002).

Research of DHH signers with brain damage presented above provides strong evidence that signed languages are processed similarly to spoken languages. Through the use of brain imaging, tests of linguistic understanding and non-linguistic visuo-spatial abilities, we see that damage to the left hemisphere of the brain has a similar affect on the comprehension and production of both sign language and spoken language in the form of an inability to recall lexical items or form coherent sentences (Marshall *et al*., 2004; Marshall, Atkinson and Woll, 2005). Damage to the right hemisphere does not impact linguistic performance in sign language but can damage visuo-spatial processing (including the use of space in connected sign language as a function of grammar) (Hickok *et al*., 1999).

Discussion

Neuroscientific research indicates that the left hemisphere is essential for the comprehension and production of signed languages. Several studies identified Broca's area in the left hemisphere as essential to production of both signs in signed languages and words in spoken languages (Capek *et al*., 2008; Corina *et al*., 2003; Emmorey *et al*., 2005; Emmorey, Mehta and Grabowski, 2007; Kassubek, Hickok and Erhard, 2004; Meyer *et al*., 2007). Researchers found that the left parietal lobe, important for visual-spatial processing, was active for sign language processing of spatial relationships (MacSweeney *et al*., 2002), as well as during the processing of phonological information in spoken English and BSL (Emmorey, Mehta and Grabowsky, 2007; Emmorey *et al*., 2004; MacSweeney *et al*., 2008). The left fusiform gyrus, normally active during single word recognition of spoken

language, was utilised for ASL linguistic processing (Corina *et al*., 2003). Even non-manual information, such as grammatical facial expressions containing grammatical markers, seems to be processed through the left hemisphere as linguistic information, rather than through the right hemisphere as visual-spatial information (Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005). Damage to the left hemisphere in studies shown here results in difficulty with sign language comprehension or production, similar to hearing non-signers with left hemisphere damage who experience difficulty with spoken language comprehension or production (Hickok, Love-Geffen and Klima, 2002; Marshall *et al*., 2004; Marshall *et al*., 2005).

The right hemisphere also plays a critical role sign language processing (Emmorey *et al*., 2004; Newman *et al*., 2002). As the right hemisphere is important for processing visuo-spatial information, it should not be surprising that some researchers found that areas in the right hemisphere are active when processing both non-linguistic gestures and ASL gestures (Capek *et al*., 2008). Areas such as the right cerebellum, associated with semantic retrieval, and the right visual cortex appear to be active during comprehension and production of sign language (Corina *et al*., 2003; Meyer *et al*., 2007). Signers with right hemispheric brain damage do not appear to have the same difficulties in sign language production and comprehension that are present for signers with left hemispheric damage (Hickok, Love-Geffen and Klima, 2002). This indicates that, although the right hemisphere may be used in the processing of signed languages, it is not central to comprehension or production of these languages.

In short, while spoken and signed languages share many of the same neural pathways, the visual nature of sign language results in a degree of differential brain activation during linguistic processing activities. The right hemisphere plays a greater role in sign language comprehension and production than it does in spoken language processing. However, this does not discount the use of Broca's area, and other language centres of the brain, in the use of sign language during lexical retrieval, grammatical processing, and sentence production and comprehension. The similarities between signed and spoken languages provide researchers and educators of the DHH with a good deal of information about how DHH students and adults may process language. The articles discussed here also open up a number of avenues to be pursued by future research.

Recommendations for future research

Although each of the studies included in this review provides researchers and practitioners with valuable information regarding signed languages and the areas of the brain that are active while processing these visual languages, there are many important areas that require future research to more fully understand sign language, the brain, and education. The only languages discussed in this review were ASL, BSL, and DGS. However, across the world there are 121 documented signed languages (see Annex 10. A1 for a complete list) (Gordon, 2005). Future research should not only address how the brain processes these other signed languages, but should also make comparisons in neural networks shared across various members of sign languages families. American Sign Language (ASL), French Sign Language (FSL) and Martha's Vineyard Sign Language are all closely related (Sacks, 1989) – could these three languages be processed in the brain differently than Japanese Sign Language or Israeli Sign Language? Is the sign language found in a small village in Israel, apparently unrelated to Israeli Sign Language (Fox, 2007), processed in a way that differs from other signed languages?

Another possibility for future research is to examine the relationship between early sign language acquisition among DHH children and their later abilities in learning written English. Studies of hearing children learning English as a non-native language have shown that knowledge of a first language can aid the acquisition of English (Lesaux and Siegel, 2003). Does learning a signed language as one's native language at an early age provide the same advantage for DHH children? Can the neural pathways that are established for use in signed language aid the learning of an oral or written language? These questions will provide professionals in DHH education with information they need to provide effective educational opportunities for their students, as well as provide linguists and neuroscientists with further information regarding how the brain processes language in general.

Finally, further research should be done into the use and processing of facial expression between users and non-users of signed languages. ASL grammatical facial expressions often represent adverbs – however, non-signers may still understand a grammatical facial expression in an adverbial sense. Is the facial expression "uncaringly," or "in an uncaring manner" processed as linguistic information between both groups? It is possible, since this facial expression is not normally thought of as emotional by either hearing non-signers or by DHH users of signed languages.

There are still many avenues to explore in the area of neuroscience and signed language research. Further exploring the how the brain understands signed language will provide professionals with insight into signed language as well as language in general. This chapter presented current neuroscientific research findings related to signed languages. However, much is still unknown and unexplored in this relatively young field, and further research in the above-mentioned and other areas should continue if we are to more fully understand language and the brain.

Annex 10.A1

The world's signed languages

(Languages in bold are included in this literature review.)

Adamorobe	Algerian	**American**	Argentine	Armenian
Australian	Austrian	Bali	Bamako	Ban Khor
Belgian	Bolivian	Brazilian	**British**	Bulgarian
Catalonian	Chadian	Chiangmai	Chilean	Chinese
Colombian	Costa Rican	Croatia	Cuba	Czech
Danish	Dominican	Dutch	Ecuadorian	Egypt
Estonian	Ethiopian	Finnish	Finnish-Swedish	French
German	Ghanaian	Greek	Guatemalan	Guinean
Haiphong	Hanoi	Hausa	Hawai'I Pidgin	Ho Chi Minh City
Honduras	Hungarian	Icelandic	Indian	Indonesian
Irish	Israeli	Italian	Jamaican	Japanese
Jordanian	Kenyan	Korean	Laos	Latvian
Libyan	Lithuanian	Lyons	Madagascar	Maltese
Maritime	Martha's Vineyard	Mexican	Moldova	Mongolian
Moroccan	Mozambican	Namibian	Nepalese	New Zealand
Nicaraguan	Nigerian	Norwegian	Old Kentish	Pakistan
Penang	Persian	Peruvian	Philippine	Polish
Portuguese	Providencia	Puerto Rican	Quebec	Rennellese
Romanian	Russian	Salvadoran	Saudi Arabian	Selangor
Sierra Leone	Singapore	Slovakian	South African	Spanish
Sri Lankan	Swedish	Swiss-French	Swiss-German Sign Language	Swiss-Italian
Taipei (Chinese)	Tanzanian	Thai	Tunisian	Turkish
Ugandan	Ukrainian	Urubu-Kaapor	Uruguayan	Venezuelan
Yiddish	Yucatec	Yugoslavian	Zambian	Zimbabwe

Source: Gordon, 2005 (adapted).

Box 10.A1.1. **Dance as a language**

Jessica Scott discusses how brain activity of American Sign Language (ASL) users has been observed that demonstrates a linguistic/phonological response occurs when deaf individuals use the physical words of this language. These responses were quite similar to the responses of hearing individuals who use verbal and aural skills in lieu of physical gestures. I began to wonder whether dance moves would activate linguistic responses in the brain as well. Would learning a new piece of dance vocabulary trigger the phonological sections of the brain in the same way that physical hand gestures associated with ASL do? My reflection expanded as I realised that many of the lessons learned regarding language, culture and neuroscience should be considered from the perspective of the language of dance.

An individual can be linguistically competent but not culturally competent in a given language, which can be dangerous if the linguistic competence is high – because the individual will be expected to know cultural norms, which is not necessarily the case (Bruno della Chiesa, HGSE class lecture). The same principle is evident in the language of dance. One might know certain dance moves, but not understand the practices of a dance community. Once at a Tango milonga when I was first learning the dance, I finished dancing with a partner and executed the moves well, but when the song ended I said "Thank you" to my partner and walked away, with a feeling that I had been polite and not taken too much of his time. There were many more women at this event than men, and I was accustomed to rotating after each song. However, at a *milonga* the songs are short and typically partners dance two to four songs together. Saying thank you after one dance is actually rude because it means you do not wish to finish the set. My partner informed me that my behaviour was rude culturally even though linguistically there was nothing amiss. However, my attempt at polite behaviour signalled that I was finished as a dismissive way to leave my partner. One might know the steps (or vocabulary) but without a guide can easily misstep culturally.

While there are various cultural norms in each dance form, there is often a spoken language associated with the movement. These words are often not translated into different languages but retain the original tongue of the dance or become a cognate in the new language. My most formative experience with this is ballet, which is full of French vocabulary: *arabesque*, *jeté*, and *plié*. My understanding of these moves is tied to these foreign words. My ballet teachers would often describe what the word meant in French help cultivate a better understanding of the movement. For example, the word *frapper* in French means to beat or strike and this is the motion the foot makes against the ankle or floor. I loved this as a young girl because I felt that I was making various parts of my body speak the dance by moving in a way that expressed the word. It was a sort of onomatopoeia for the body, where movement replaced sound.

I have always longed to connect my loves of dance and language, and I felt a "Eureka!" moment (OECD, 2007) when reading this chapter by Jessica Scott about ASL: there is an avenue for future research on this interconnected realms of dance and language. It would be great to look at fMRI or wearable optical typography scans to determine whether the neurological results of the brain in people learning to dance or dancing are similar phonologically to those learning or using spoken language or ASL. Would experienced dancers who learned to dance a certain sensitive stages have different neurological responses than those who learn late, those who are just learning? Would there be different responses in the brain for multilingual dancers or monolingual dancers or non-dancers when moving or envisioning a dance?

Annie Piatt, United States

Notes

1. For a discussion of gestures, see Shapiro, this volume.
2. Most countries have their own sign language – even America and Britain do not share the same sign language – British Sign Language (BSL) and ASL are different languages. Included in this review is also German Sign Language (DGS). See Annex 10.A1 for a more complete list of the world's sign languages.
3. A classifier is a general hand-shape that can represent a broad category of lexical items: long thin items, round items, and so forth. For example, the hand extended with thumb, index and middle fingers pointing out can represent any type of vehicles. See Figure 10.3.
4. Mouth movements can be used in two ways in signed languages. The first is to provide clarification between two words that use the same sign – for example, the signs for "anniversary" and "celebrate" can be distinguished only through mouthing the word you intend to use (Capek *et al*., 2008). The second way mouth movements are used is as a sign language adverb (*ibid*.; Corina, Bellugi and Reilly, 1999; McCullough, Emmorey and Sereno, 2005), for example, by shaping your mouth around a "th" sound, you can express the English adverb "sloppy."
5. A grammatical facial expression is one that is used as a grammatical marker, such as an adverb. A disambiguating facial expression is used to clarify word choice when one sign can be used to signify several different words.
6. A phonological feature of a sign is one of the four parameters of sign language. If two signs share a phonological feature, it means they are the same in palm orientation, location, movement, and/or handshape (MacSweeney *et al*., 2008). For example, the signs "FRENCH" and "FURNITURE" share a handshape and are similar in location, but differ in movement and palm orientation (see Figures 10.1 and 10.2).
7. Iconic signs are defined as signs in which "the form of the sign reflects some visual property of the referent" (Marshall *et al*., 2004, p. 539), in other words, signs that look similar to the object they are naming.
8. Referential space is used in sign language to refer to people or objects, as one might use a deictic pronoun in English. A space in front of the signer is established to represent a person or object – when the signer wants to refer to this noun, he or she simply points to the pre-established space.

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Part III

Landscapes, Languages and Policies

Chapter 11

Competencies in Canada in a globalisation context

By Satya Brink, Darren King, Mathieu Audet and Justin Bayard *

If language assets provide a comparative advantage in a globalising world, Canada appears well placed. This Canadian case study examines evidence from a country with two official languages and a high proportion of immigrants in the population. Canada's language wealth has grown as shown by total number of languages spoken and the growth in the number of languages; growth in the proportion who know English and French, and other languages; and the number of people knowing more than one language. Several factors affecting the growth of language wealth in Canada were analysed. Multicultural and bilingual policies have been influential. Though hard to quantify the economic and social benefits to the individual and society, soft evidence was found for such benefits. Allophones who work in both official languages earn a good living while retaining their heritage language. Furthermore, the economic benefit to proficient users of English was shown through multivariate analysis.

* All four: Human Resources and Skills Development Canada

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Two-way relationships between language competencies and globalisation

Multiple language use in a society could facilitate globalisation and globalisation could also increase the usefulness of multiple languages. Since globalisation is the free movement of people, products, money and ideas, the value of languages to individuals and to society has probably changed with such flows. As a consequence, the language assets of a country as well as the language components of human capital of individuals could provide comparative advantage in a globalising world. The use of more than one language is not exceptional but normal in the current world. Over six billion people in the world today speak an estimated six thousand languages while living in about two hundred different states – over 30 times as many languages as there are states (Rumbaut, 2007).

Globalisation also enhances "fusion" of cultural elements, such as music, languages and cuisine. The most notable fusion language is pidgin, which was not the language of any group but was a simplified language of communication between groups. Historically, vocabularies have grown by adopting words from other languages. Currently, many languages include words that have arisen through information technologies.

The benefits of language competencies to individuals are theorised to be a wider pool of labour market opportunities with better returns for greater competencies, while the benefits to societies are economic advantage in trade and investments in a global economy. However, such benefits are yet to be conclusively empirically shown (see for example, Grin, 2002). Nor has the potential disadvantage experienced by unilingual speakers been demonstrated. Some have suggested that unilingual Anglophones are insulated from negative impacts since English may be seen as a universal language, because it is the official language in about 70 countries, because it is the main language of the internet, and because it is the most popular second language.

Nevertheless, some have noted that Canada is advantaged in its two official languages. English is reputed to be a "world language" at least for the internet and to a lesser extent for trade and diplomacy. French, too, is a major language, spoken in over 55 countries.

Language wealth in Canada – A case study

The origins of Canada arose from waves of immigration from pre-historic times, resulting in accumulated wealth of languages. Languages have been integrated in culture, politics and law and therefore, Canada has data on its language wealth and considerable research related to languages. Therefore, Canada provides a unique opportunity to examine the value of multilingual wealth in a globalising context.

Chronological accumulation of languages

Over time, the contribution of various languages to the pool of language competencies has evolved with changing patterns of immigration. The earliest additions to the pool were the indigenous languages. Currently, there are some 50 or more individual indigenous languages belonging to 11 Aboriginal language families (Norris, 2006). Following major immigration from English and French speaking countries, Canada was founded as a state in 1987. The pre-eminence of these two languages was recognised in the Official Languages Act of 1969.

By the 20th century, immigration flows were from a large number of source countries, and the number of people whose mother tongue was neither English nor French rose from 2.8 million in 1971 to 4.7 million in 1996 (Harrison, 2000). These additional languages are often called "heritage languages" and the Canadians who are neither Anglophone nor Francophone are Allophones. "Multiculturalism" is recognised in law (Canadian Multiculturalism Act, 1985, An Act for the preservation and enhancement of multiculturalism in Canada). The source countries of immigrants changed considerably through the last century and the composition of language wealth reflected these origins (see Table 11.1). Unlike many other countries, Canada's languages are drawn from both the east and the west because of its immigration across both the Pacific and the Atlantic due to its geographic location. Due to large numbers of immigrants in a short time from certain countries, the growth in some languages, such as Tagalog, grew more rapidly. Not only did the relative ranks of the languages change over the past 50 years, but also the number of persons speaking the language as a mother tongue grew with immigration and waned with assimilation.

Table 11.1. **Top Ten Heritage Languages in Canada: 1941, 1996 and 2006**

1941	1996	2006
German	Chinese	Chinese
Ukrainian	Italian	Italian
Yiddish	German	German
Polish	Spanish	Punjabi
Italian	Portuguese	Spanish
Norwegian	Polish	Arabic
Russian	Punjabi	Tagalog
Swedish	Ukrainian	Portuguese
Finnish	Arabic	Polish
Chinese	Tagalog	Urdu

Source: Statistics Canada, censuses.

In 2001, 5.4 million people or 18% of the population reported that they were born outside of Canada, the highest level in 70 years. Over three-quarters (79%) of immigrants who came in the 1990s were allophones, up from one half (49%) of those who arrived in the 1970s. During this same period, the English-speaking immigrants decreased from 45% in the 1970s to 18% in the 1990s, however, immigrants with French mother tongue have remained at about 5% over the past 30 years. These changes have not only changed the language dynamics within Canada but also Canada's relationships with major immigration source countries.

Settlement patterns affected the distribution of language wealth. There are strong concentrations of indigenous languages in the western provinces as well as the Territories. Quebec is a Francophone province, while there are French minorities in provinces such as Ontario and Manitoba. New Brunswick is an officially bilingual province.

Indicators of language wealth

Languages contribute to the cultural wealth of the country, however, economists argue that, due to transaction and other costs, languages may not fit the economic definition of wealth. Further, languages spoken by small sub-populations may not have economic value but are important for ethnic and social wellbeing.

Three indicators can be used to understand language wealth:

- the number of languages spoken in the country and the growth in the number of languages;

- the growth in the number of people reporting knowing English, French and other languages; and
- the number of people reporting knowing more than one language.

Number of languages spoken in Canada and growth in the number of languages

As indicated earlier, there are 50 or more indigenous languages which are spoken by 207 000 aboriginal people, less than 1% of the population. Furthermore, there were more than 6 million people, about 18%, with over 200 languages as mother tongue other than English or French identified during census 2006 (Statistics Canada, 2008). New languages were added in 1971 and 1981 in the census questionnaire.

Box 11.1. **Language-related terms**

Mother tongue: First language learned at home in childhood and still understood by the individual at the time of the census.

Knowledge of language: Self-reported knowledge of languages.

Language most often spoken at home: Language used most often used at home by the individual.

Language most often used at work: Language used most often at work by the individual.

Francophone: Persons whose mother tongue is French.

Anglophone: Person whose mother tongue is English.

Allophone: Person whose mother tongue is other than English or French.

Reading proficiency: Measured in five levels of proficiency (with five being the highest) through a direct assessment through surveys such as the OECD Programme for the International Student Assessment (PISA).

The growth in the number of people reporting knowing English, French and other languages

Language is described as a "super collective good" because its communication value increases with the number of speakers (Sabourin, 1985). Therefore, information on the number of people reporting using English, French and other languages is useful in understanding the impact of languages. Indeed, some have suggested that a critical mass is important for survival and maintenance of a language.

The rapid rise in the proportion of allophones in the Canadian population is accompanied by a declining share of groups that claim English and French as their mother tongue. The share of the English mother tongue dropped from 59.1% in 2001 to 57.8% in 2006 and the French mother tongue population fell from 22.9% in 2001 to 22.1% in 2006, maintaining a downward trend that has persisted for more than half a century.

The proportion of Allophones has grown from 4.7 million in 1996 to 6.3 million in 2006, an increase of 18% from 2001, which was three times the growth rate of 4% for the population as a whole (Table 11.2).

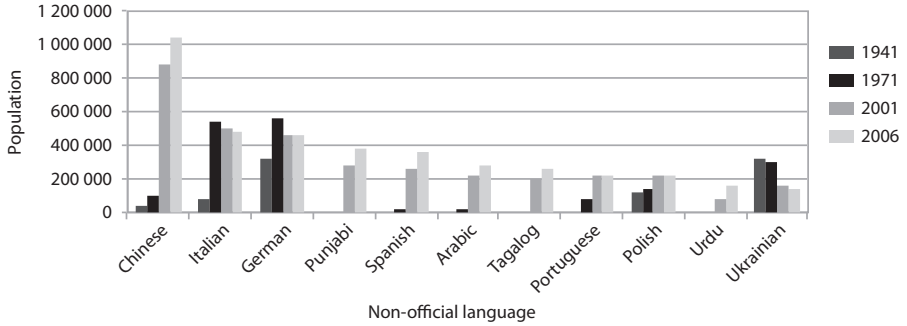
Table 11.2. **Population growth of non-official mother tongues**

1996		2001		2006		Percentage change	
Number	%	Number	%	Number	%	1996-2001	2001-2006
4 744 060	16.6	5 334 845	18.0	6 293 110	20.1	12.5	18.0

Source: Statistics Canada, censuses of population, 1996 to 2006.

The increase in the top non-official language groups varied by language with Chinese growing (31 000 in 1941 to 1 030 090 in 2006) and Ukrainian declining (313 000 in 1941 to 141 805 in 2006). Generally children and grand children of older waves of immigrants from Germany and the Ukraine, now speak English or French as the mother tongue (Figure 11.1).

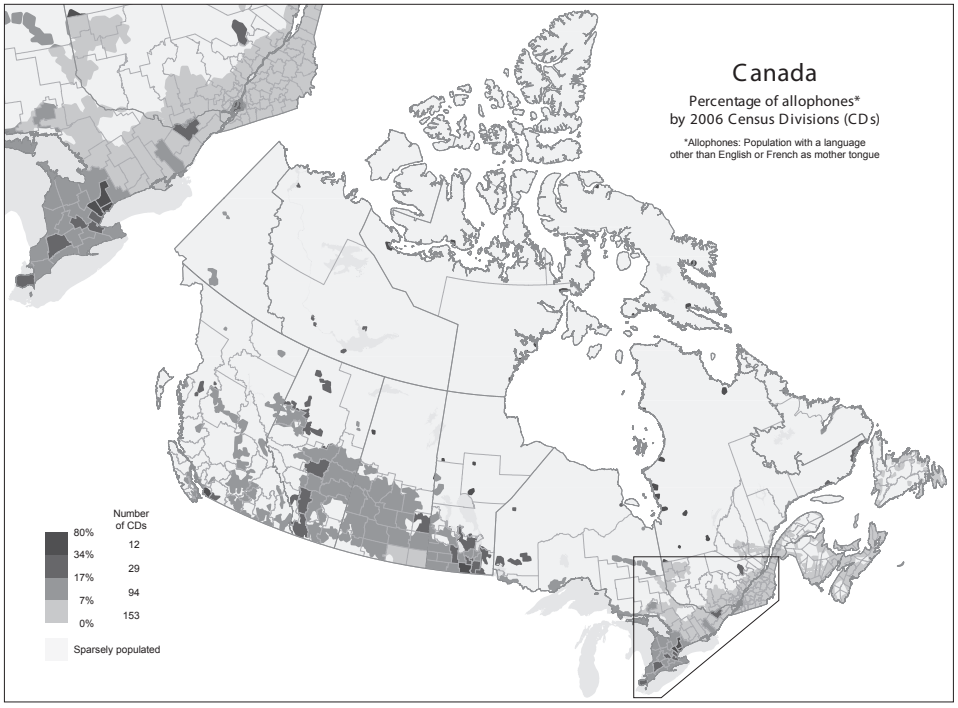
Figure 11.1. **Growth in top non-official language groups, Canada 1941-2006**



Note: "Chinese" includes Mandarin, Cantonese, Hakka, Taipei Chinese, Chaochow (Teochow), Fukien and Shanghainese, as well as a residual category (Chinese languages not otherwise specified).

Source: Statistics Canada, censuses.

Figure 11.2. **Percentage of allophones by 2006 Census Divisions, Canada**



Source: Statistics Canada, 2008.

The distribution of allophones varied with patterns of settlement. Though there are dense populations in major cities such as Toronto, Vancouver and Montreal, there are a substantial number of allophones in other areas of Canada as well (Figure 11.2).

The number of people who speak more than one language

It has been assumed that most people have a single mother tongue. However, in a multicultural society, the numbers with more than one mother tongue has been on the rise. In 2006, almost 400 000 people said that they had more than one mother tongue. Over 290 000 said their mother tongues were either an official language or both official languages in addition to a non-official language. About 1.2 million people spoke a non-official language at home and about 2% said that they spoke more than two languages at home.

In Canada, English and French are official languages, which could contribute to the use of more than one language. The proportion that reported knowing both official languages has been growing (Table 11.3). More Francophones (43.4%, 2 909 905) than Anglophones (9%, 1 558 980) reported knowing both official languages. In 2001, among youth aged 15 to 19, 17% (219 985) of Anglophones, 47% (200 250) and 20% (55 120) of allophones were bilingual (Statistics Canada, 2001).

Table 11.3. **Percentage and number of Canadians reporting knowledge of French and English**

Census year	Percentage of population	Population
1961	12.2%	2 231 172
1981	15.3%	3 681 960
2001	17.7%	5 231 575
2006	18.3%	5 448 850

Source: Statistics Canada, Censuses.

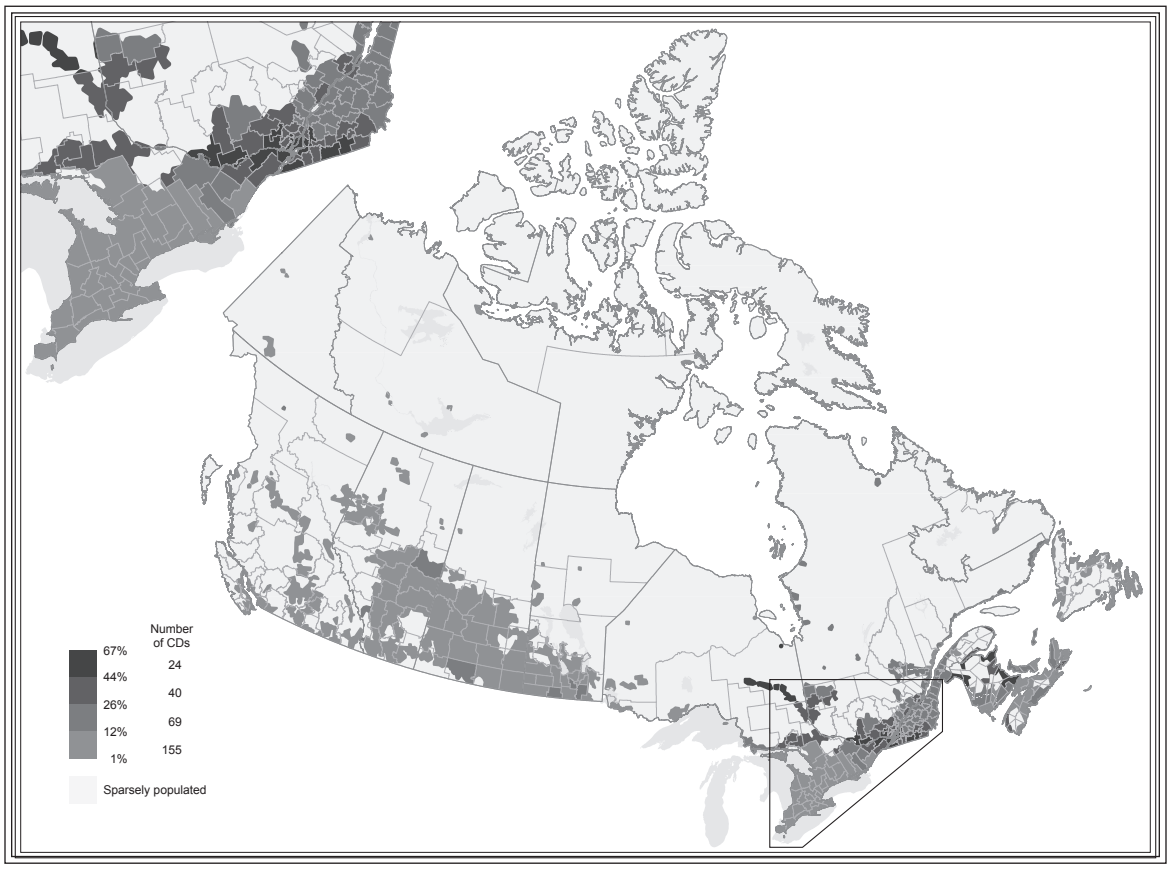
The distribution of English and French speakers is unevenly spread across the country, with major concentrations along the Quebec–Toronto corridor as well as in New Brunswick, Manitoba and Saskatchewan (Figure 11.3).

Though the historical and cultural reasons for bilingualism are widely accepted, the use of two languages may generate both costs and benefits. Costs would include the provision of education and services in both languages which compete for financial and other resources while benefits include intangibles such as identity and social cohesion.

"Even more significant than the growth of the mother-tongue community of a language is its increasing use as a second language. … Languages by means of which these needs can be fulfilled acquire additional secondary and primary speakers who, in turn, enhance their utility value" (Coulmas, 1996). He also points out that the number of speakers studying and/or speaking it as a non-native language is the strongest indicator of the international status of a language. Both strongly suggest that the need to look beyond the size of a speech community and to include both primary and secondary proficiency in the language.

English is a perfect example of the importance of second language speakers to the vitality of a language. English enjoys its current status as the international *lingua franca* not solely as a result of the weight of mother tongue population of English speakers, but in large part due to the fact that it is the most widely spoken second language. One could

Figure 11.3. **Percentage of population having knowledge of English and French by 2006 Census Divisions, Canada**



Source: Statistics Canada, 2008.

compare the situation of English to that of Chinese, which is more widely spoken as a first language, but is less widely used as a second language.

In total, over 9 million people (29%) speak two languages in Canada. Of these, just under 5 million people speak English or French and another language. About 2 million people (6%) speak three or more languages (Table 11.4).

Table 11.4. **The number of Canadians speaking one or more languages**

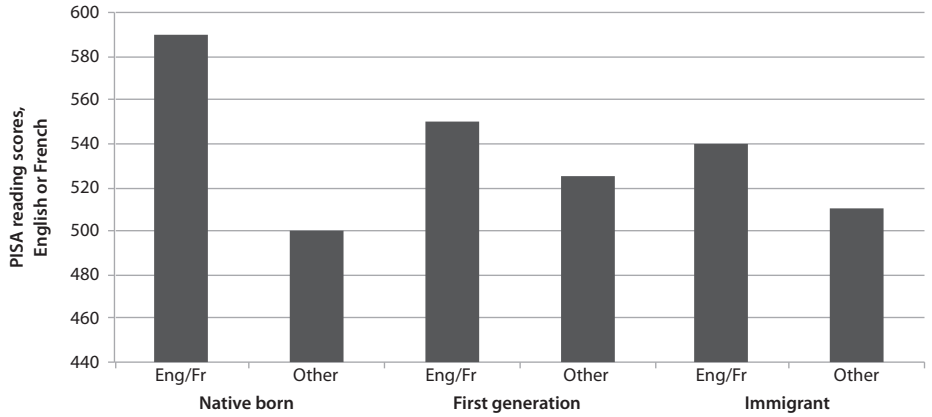
Languages spoken	1	2	> 3
Total	20 015 415	9 199 515	2 026 100
Percent	64%	29%	6%
English only	15 697 475		
French only	3 851 775		
non-official language(s) only	466 165	53 100	1 115
English and French		4 183 495	
English and other(s)		4 691 580	740 895
French and other(s)		271 340	18 735
English and French and other(s)			1 265 355

Source: Census, 2001.

The value of second (or third) language must be examined in relation to the costs of acquiring it as well as the additional value gained by its use. Chiswick and Miller (1995) used data from the United States, Canada, Australia and Israel to investigate the determinants of immigrants' fluency in the dominant language of their country of residence using variables such as exposure to the dominant language, individual efficiency in learning a second language and the economic benefits from language fluency. All three variables were shown to have a statistically positive impact on fluency gained by immigrants in the dominant language. Immigrants tend to opt for the official language that is closer to their mother tongue, that predominates in their region of residence and that has the broader value in the labour market or economy.

Though people can speak more than one language, it is likely that their competence in the first language generally surpasses their competence in the others. Therefore, they may be more efficient in communicating in their first language. Supportive evidence was seen in the PISA scores in English and French of native born, first generation and immigrant 15-year-olds. In each group, students whose first language was either English or French outscored students who spoke another language at home.

Figure 11.4. **Reading proficiency (PISA 2000), Canadian 15-year-olds**



Source: PISA, Learning Policy Directorate, HRSDC.

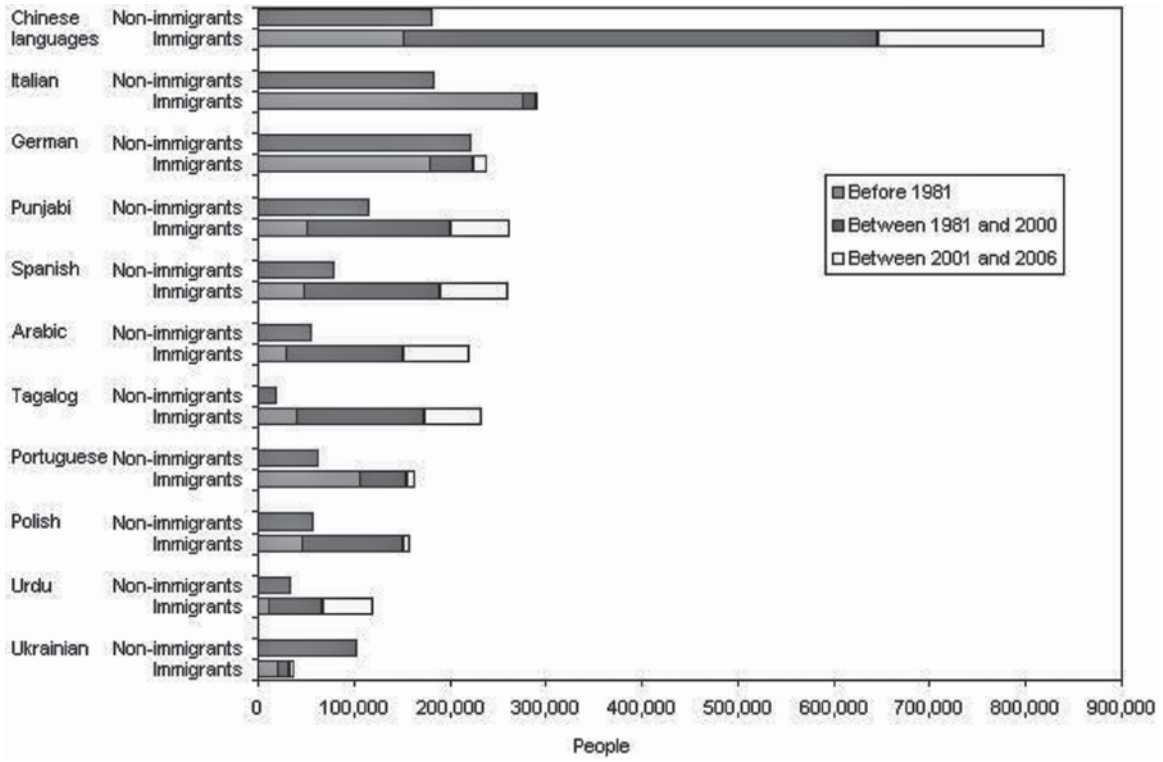
Factors affecting the growth and decline of language wealth

Unless efforts are made to protect and to promote the language assets, they could be eroded due to other socio demographic, economic and cultural factors. Factors could affect the decline of the number of speakers of particular languages, resulting in a decline and finally a loss of the language from the inventory of Canadian language assets. While new languages may be added, factors affecting the retention of these languages also need to be understood.

Rates of immigration

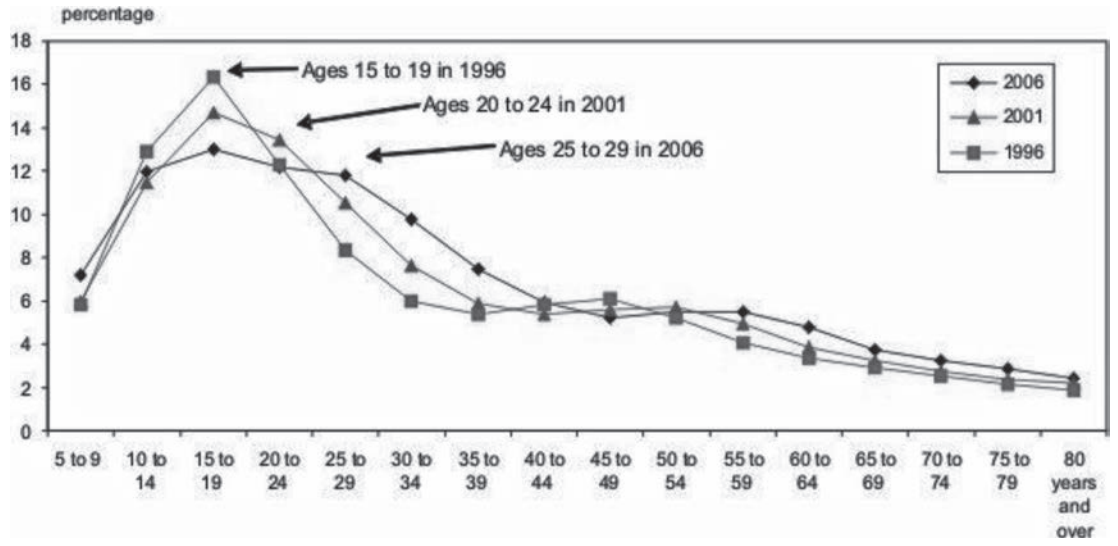
The growth in the three indicators of language wealth has been largely driven by immigration. The rise of Chinese is largely due to the large numbers of immigrants whose mother tongue was Chinese who came to Canada between 1981 and 2000. In comparison, the major influx of immigrants with German a mother tongue was before 1981 resulting in only a slight growth of German mother tongue speakers since 2000 (Figure 11.5).

Figure 11.5. **Non-official mother tongues by immigrant status and period of immigration, Canada, 2006**



Source: Statistics Canada, censuses.

Figure 11.6. **Rate of bilingualism (English and French) among Anglophones by age groups, Canada excluding Quebec, 1996-2006**



Source: Statistics Canada, censuses.

Language skill loss

Though both official languages may be learned at school, the lack of opportunities to speak the second official language may result in skill loss. These language skill losses may be related to age because of the opportunities to learn the second language as well as the opportunities to speak the language has varied over time (Figure 11.6). This is especially noticeable for French, since the possibilities for speaking it in locations outside of Quebec are limited. Figure 11.3. showing the distribution of people speaking both English and French, can also serve as a proxy to show what language consumption and market for language related products could be.

In 2001, 14.7% of Anglophones aged 15 to 19 were bilingual. In 2006, when the cohort was five years older (aged 20 to 24), only 12.2% reported being bilingual. Similar trends are observed when following the rate of bilingualism over time for the cohort aged 15 to 19 in 1996.

Intermarriage

A growing number of people report multiple ethnic ancestries, probably due to intermarriage. In 2001, 11.3 million or 38% of the population reported multiple ethnic origins, up from 10.2 million in 1996 and 7.0 million in 1986. Such intermarriages could result in either two mother tongues being retained, or only one being actively maintained, or both mother tongues being given up while switching to one of the official languages. In the latter case, the numbers speaking English or French will be boosted with a commensurate loss in the allophone language.

A couple is termed "exogamous" when the spouses do not have the same mother tongue. Having a husband with English or French as the mother tongue was generally more widespread among women from older heritage language groups as they marry into Canadian families. In Canada, when an allophone lives as a couple with an Anglophone or a Francophone, the language other than English or French is seldom the primary language used at home.

In 97% of the cases where the allophone's spouse or partner has English as the mother tongue, English is the dominant language at home outside Quebec. In Quebec, the proportion reaches 92%.

When considering allophones whose spouse or partner has French as their mother tongue (French-and-other-language exogamous couple), in Quebec, 80% report French as the predominant home language, while 19% report that English is used most often at home. Outside Quebec, in French-and-other-language exogamous couples, English is the predominant home language for 82% of the allophones, while 15% speak French most often at home.

Assimilation and integration

Assimilation is a sensitive issue, where a mother tongue is replaced with the official language. On the other hand, integration results in the adoption of an official language but the mother tongue is retained as well, however, the primacy of the official language could put the mother tongue at risk.

Slightly less than one allophone in two (46%) speaks English or French most often at home. The proportion rises to 68% when considering allophones who report that they speak a language other than English or French most often at home but use English or French on a

regular basis as well. Two out of five allophones (40%) speak English or French exclusively at home.

Assimilation and integration is dependent on the time elapsed since immigration. Earlier immigrants are more likely to speak English or French at home, whether or not, they retain their mother tongue (Table 11.5).

Table 11.5. **Use of an official language at home among allophones by period of immigration, Canada, 1971, 1991 and 2006**

	Rate of assimilation/integration, %		
	1971	1991	2006
Before 1961	47.4	60.3	66.6
1961 to 1970	22.1	45.7	53.2
1971 to 1980	…	33.6	43.9
1981 to 1990	…	17.3	32.9
1991 to 2000	…	…	23.8
2001 to 2006	…	…	19.2

Source: Statistics Canada, censuses of population, 1971, 1991 and 2006.

The rate of language transfer to English for Francophones has been rising steadily since 1971. In 2006, 39% of Francophones used English most often at home, compared with 38% in 2001, 35% in 1991 and just under 30% in 1971. In 2006, outside Quebec, nearly 42% of Francophones who use English most often at home also speak French regularly, up from 39% in 2001.

Extinction of indigenous languages

The total numbers of people speaking indigenous languages is small to start with and over the past 100 years, at least 10 languages have become extinct due to the lack of native speakers. Currently only one in four (24%) aboriginal people is able to speak or understand an indigenous language, a drop from 29% in 1996 (Norris, 2006).

Second language learning

One of the indications of the revitalisation of indigenous languages is the learning of an aboriginal language as a second language. In 2001, more people could speak an aboriginal language than had an aboriginal language as a mother tongue (239 000 compared to 203 300) which could indicate that some have learned their aboriginal language as a second language. In 2001, 20% of the population that spoke an indigenous language (about 47 100 people) learned it as a second language (Norris, 2006).

A simple index of second language acquisition is a useful indicator. This is the comparison of the number of people who report being able to speak the language with the number of people who state that this language is their mother tongue. Thus, for every 100 persons with a specific mother tongue, if more 100 persons in the overall population speak the language, they have learned it as a second language. Thus, for Inuktitut, 32 775 are able to speak the language, 3 445 as a second language, resulting in an Index of second language acquisition of 110.

Table 11.6. **Populations of English mother tongue and of English as the language spoken at home**

Canada, 1971 to 2006

Census year	Population with English as mother tongue		Population with English most often spoken at home		Difference		Index of second language acquisition
	Number	%	Number	%	Number	%	
1971	12 967 440	60.1	14 446 235	67.0	1 478 790	6.9	110
1981	14 784 810	61.4	16 425 900	68.2	1 641 090	6.8	110
1991	16 311 210	60.4	18 440 540	68.3	2 129 330	7.9	112
2001	17 521 880	59.1	20 011 535	67.5	2 489 665	8.4	114
2006	18 055 685	57.8	20 840 565	66.7	2 784 880	8.9	115

Source: Statistics Canada, censuses.

According to the 2006 Census, 2.8 million Canadians whose mother tongue was not English used this language most often at home. This situation reflects the prevalence of transfers to English by many francophones and allophones, though the phenomenon is less common in Quebec.

Given the decline in the proportion of English mother-tongue people (or people with English as mother tongue) and the increase in language transfers to English, there has been an increasing gap between the proportion of people with English mother tongue and of people with English as home language since 1981. In 2006, 58% had English as mother tongue while 67% spoke English most often at home.

An examination of the population with English as a mother tongue showed a slight decline over each decade. The difference between the population with English as mother tongue and the population with English most often spoken at home rose from about 1.5 million in 1971 to 2.9 million in 2006, an increase of 2 percentage points. The Index of second language acquisition rose from 110 in 1971 to 115 in 2006.

Assimilation and integration also occurs between the official languages. In 1971, one Canadian in four (25.7%) spoke French at home. Thirty years later, in 2001, the proportion had decreased to 22.0%. The decline has continued since 2001, reaching 21.4% in 2006. Since 1991, the downward trend of French as the language spoken at home has been a steady 0.6 percentage point every five years.

Intergenerational transfer

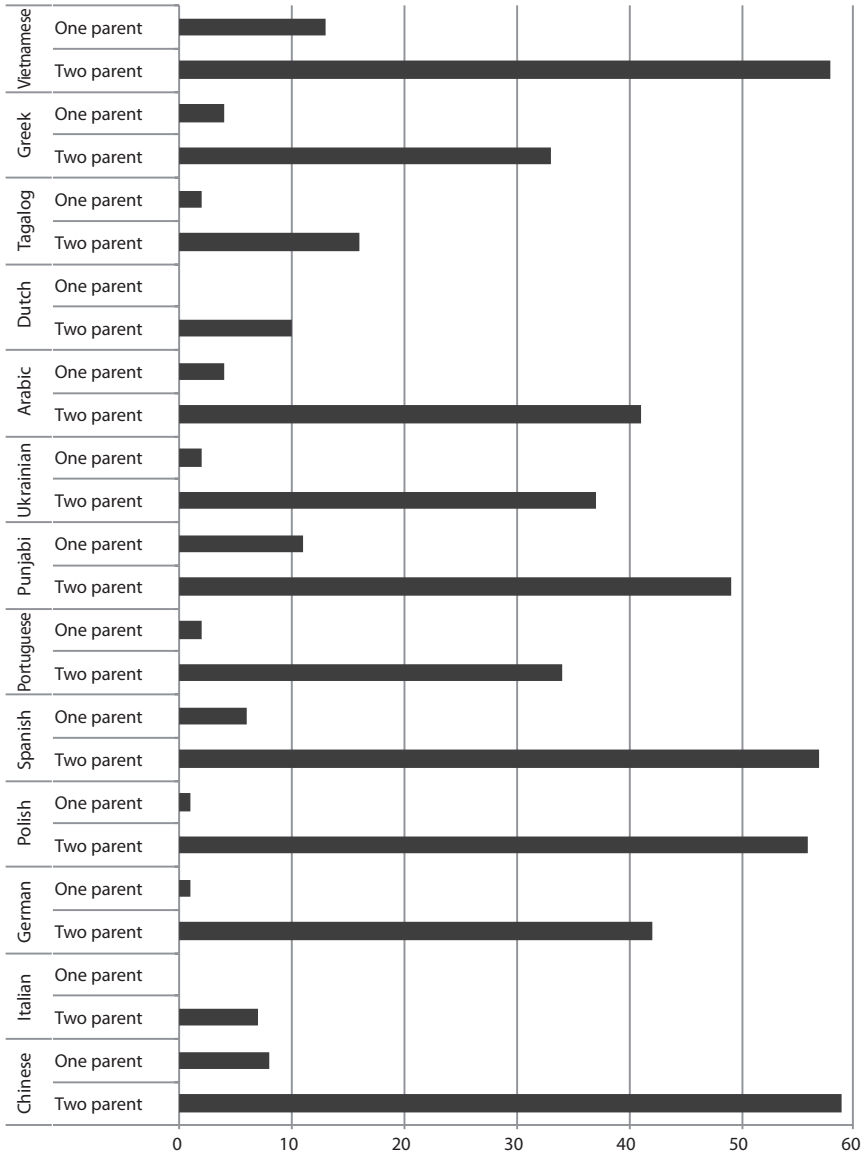
Transmission of language from one generation to the other cannot be taken for granted. The language spoken at home is most likely the mother tongue of the next generation. Thus, if English or French, rather than the mother tongue was spoken at home, children were less likely to learn the mother tongue of their parents.

Harrison, in an analysis using 1996 census data showed that children whose parents had the same heritage language were much likely to learn it as their mother tongue. At least three-quarters of children whose parents' mother tongue was Polish, Chinese, Spanish, Punjabi or Vietnamese had the same mother tongue but less than half the children shared Dutch, Italian and Tagalog as the mother tongue with their parents. Furthermore, fewer children had their heritage language as their home language than their mother tongue (Figure 11.7). Even in endogenous marriages, fewer than half the children use their heritage

language as their mother tongue, except for Polish, Chinese, Spanish or Vietnamese families. When only one of the parents has the heritage language as the mother tongue, its use as the home language is quite rare. The exceptions were Chinese, Punjabi and Vietnamese, where more than 10% of children in exogamous families used the heritage language as their home language. Nonetheless, 7 of the 13 largest heritage language groups, at least 90% of children of endogamous families spoke the heritage language as a second language. Often, they spoke it well enough to carry on a conversation (Harrison, 2000).

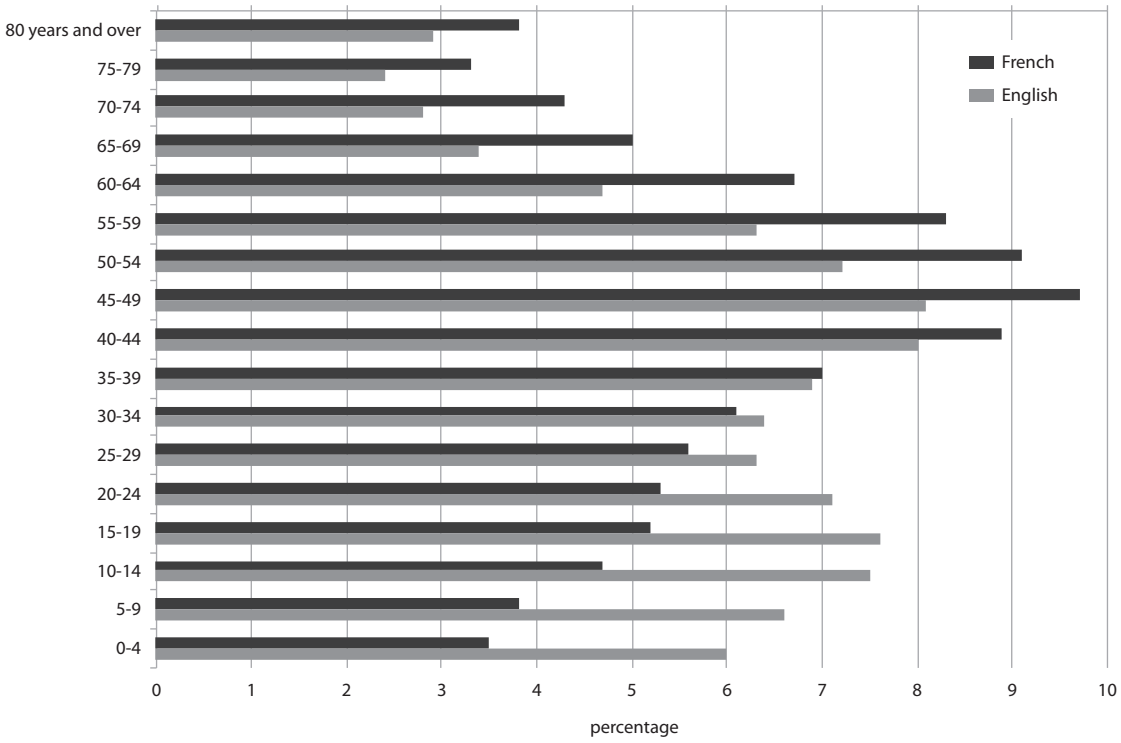
This phenomenon had been the case for French families living outside of Quebec. Increasing numbers of people shifting to English contribute to the loss of French as a mother tongue to the children of Francophone women. Consequently, the number and proportion of Francophone children is much reduced. As a result, the Francophone population is aging much faster than the Anglophone population (Figure 11.8).

Figure 11.7. **Percentage of children learning the parents' mother tongue and its use at home**



Source: Harrison, 2000 based on 1996 census data.

Figure 11.8. **Age structure of English and French mother tongues, Canada less Quebec, 2006**



Source: Statistics Canada, Census 2006.

Fostering linguistic competencies in Canada

Languages are well entrenched in the legislative frameworks of Canada and they have played a key role in the political and cultural life of the country. This is to be expected in a country with as diverse a population as Canada (Box 11.2).

Language wealth as well as language human capital can decline without investment by individuals and countries. The two main strategies are to support the retention of known and spoken languages and to support the acquisition of a second language. The strategies for the retention of known and spoken languages are not directed to instruction, but rather to communities and groups which engage in activities that help to retain languages, particularly heritage languages. The strategies for the acquisition of second language are more complex, because they are largely voluntary and require citizens to take the initiative. Such decisions are affected by consideration of time, effort and money as well as the age of the citizen and possibilities of returns in the working years.

The acquisition of a second language requires time, effort and money. Since these resources are not abundant, they have economic value, or scarcity. The benefits resulting from knowledge of a second language are spread over time. Learning a second language therefore is an investment or the acquisition of an asset. More specifically, it can be said that a second (third or fourth) language is a form of human capital, capable, like all capital, of being increased or depreciating-although, unlike material goods, it does not deteriorate with use – or even of becoming outdated (Breton, 1978, p. 1-2).

Box 11.2. **Legislative framework for support of linguistic competencies in Canada: Relevant acts with brief descriptions**

The British North America Act (Constitutional Act) 1867, Section 133 guarantees that both English and French may be used in the Parliament of Canada, in its journals and records, and in court proceedings in any court established by the Parliament of Canada.

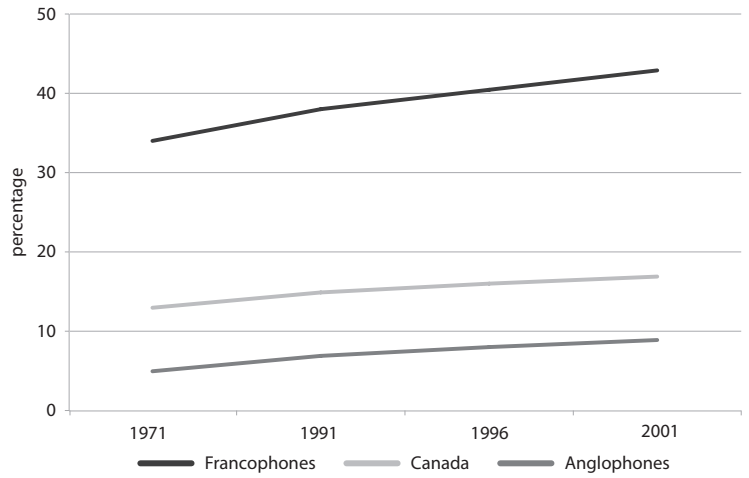
The Official Languages Act, 1969 mandates that the federal government conduct its business in both official languages and provide government services in both languages; provides support to non-government actors to encourage or promote the use or the status of one or the other of the two official languages. This includes grants and contributions to groups representing the English-speaking minority in Quebec and the French-speaking minorities in the other provinces to assist with the establishment of an infrastructure of cultural supports and services

Canadian Charter of Rights and Freedoms, 1982. Section 16-20: Sections 16-19 guarantee the equal status of both languages in Parliament, in all federal government institutions, and in federal courts. These sections also mandate that all statutes, records and journals of Parliament be published in both languages, with the English and French versions both holding equal status before the courts. Section 20 guarantees the right of the Canadian public to communicate in English and French with any central government office or with regional offices where there is "a significant demand for communication with and services from that office".

Section 27 states that the Charter shall be interpreted in a manner consistent with the preservation and enhancement of the multicultural heritage of Canadians

Act for the Preservation and Enhancement of Multiculturalism in Canada, 1985 recognises and promotes the understanding that multiculturalism is the cultural and racial diversity of Canadian society, acknowledges the freedom of all members of Canadian society to preserve, enhance and share their cultural heritage and recognises and promotes the understanding that multiculturalism is a fundamental characteristic of the Canadian heritage and identity and that it is an invaluable resource for shaping of Canada's future. Federal funds are available to ethnic groups to help them preserve their cultures. Projects typically funded included support for newspapers and television/radio in minority languages as well as support for cultural activities such as folk dancing, music, and minority festivals and celebrations.

Figure 11.9. **French-English bilingualism rates among Anglophones and Francophones**



Source: Statistics Canada, Census 1971, 1991, 1996, 2001.

Support for bilingualism

Canadian culture and policies are largely directed to the two official languages, English and French. Over the past 40 years, the bilingual population has grown, however, only 20% of the population can speak both English and French (Figure 11.9). As discussed before, bilingualism is more widespread among francophones than Anglophones.

Three of the major programmes contributing to bilingualism are: immersion programmes, second language education in schools, and bilingualism training for public servants in order to provide government services in either official language.

Immersion programmes

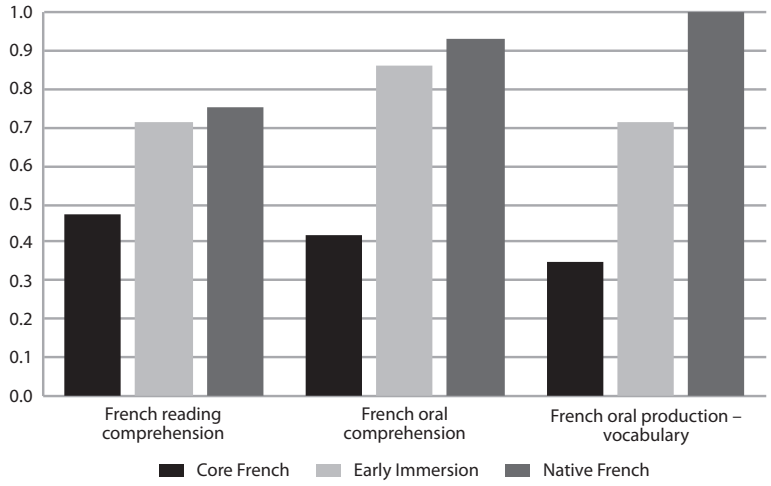
Canada has been a leader in "immersion education", particularly at the start of the schooling years. The purpose of immersion programmes is to support the acquisition of a second language by using it as the language of instruction rather than as the object of instruction. In immersion, the second language is used to teach a variety of subjects, ranging from history and arts to mathematics and the sciences. There are three models: *a)* Early immersion – kindergarten or Grade 1; *b)* Delayed or middle immersion – Grade 2 and Grade 6; and *c)* Late immersion – Grade 6 or later. The proportion of instruction time spent using the second language can vary between 100% for total immersion programmes, to as low as 40%–50% in a partial immersion programme.

Parents of children aged 5 to 24 years were asked during the Survey of Canadian Attitudes toward Learning, whether they had ever enrolled any of their children in some form of language immersion programme at the elementary or secondary school levels. Approximately one-quarter of respondents had done so with 18.5% whose children had attended French immersion, 4.5% had attended English immersion and 1.5% had attended other immersion programmes (Canadian Council on Learning, 2007). In homes where French is the language spoken most often, parents were much less likely (.04 times as likely) to enrol their children in immersion, compared to homes where English was the language spoken most often. In homes where both English and French were regularly spoken, parents were nearly five times more likely to enrol their children in immersion, compared to English-only homes. Immigrant children were less likely than non-immigrant children to participate in French immersion education, however, when they do, they perform as well as Anglophone children.

The effectiveness of immersion education at an early age is hotly debated. However, French immersion students appear to perform nearly as well as native speakers in many language assessments (Figure 11.10). French immersion students do not do as well in speaking and writing skill but their proficiency is sufficient for most purposes. Students graduate from immersion programmes with strong French language skills and show above-average achievement in English literacy and in maths and science.

Since immersion programmes focus on instruction in French, this could affect native language development. Typically, students in total early immersion receive no instruction in English until the third or fourth grade when English language arts are introduced for the first time. During the first years of their immersion programmes, early total-immersion students tend to score lower than students in English school on English-language testing of literacy skills (such as reading comprehension, spelling and written vocabulary). However, most studies indicate that they show improvement in these skills after the first year of English language arts instruction (introduced in Grade 3 or 4) (Turnbull *et al*., 2001).

Figure 11.10. **Scores on French language tests for early French immersion, core French, and native French fifth graders**



Source: Canadian Council on Learning, Lessons in learning: French immersion in Canada, 2007.

Though French immersion is a successful programme, participation rates are not sufficiently widespread to increase substantially rates of French-English bilingualism among Canadians.

Language education at school

Most children are exposed to English and French in school. However, the quality of the teaching of languages is uneven. Many provinces do not have data on language training in schools (Table 11.7).

Table 11.7. **Number of students learning an official language as a second language at school, Canada**

French language school systems	English language school systems
591 615 students learn English as a second language in Quebec and New Brunswick.	2 060 322 students learn French as a second language, including 328 451 in French immersion programmes.
Statistics not available for other provinces and territories.	Statistics not available for core French programmes in Quebec English schools

Source: Data 2001-02. Centre for Education Statistics, Statistics Canada.

Second language training for public servants

Because any federal public service must be available in either official language, many federal public servants must be bilingual to serve the public in the official language of their choice. The federal public service has established its own language training programme. During the 20-year span between the early 1970s and the early 1990s over 2 500 public servants annually received language training in French or English in language centres across Canada. The last few years have been marked by a sharp reduction in the number of courses offered directly through federal language training centres and by more

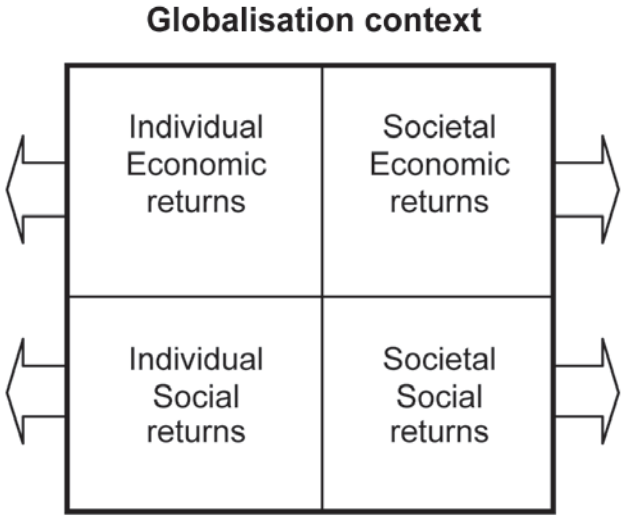
subcontracting to commercial language schools. Furthermore, efforts are made to hire people who already are bilingual.

Individual and societal returns to linguistic competencies in a globalising world

Key questions remain. Is the value of language knowledge enhanced in a global context? Is there a comparative advantage accruing to countries with populations that speak diverse languages? How would the value and comparative advantage be measured?

A useful framework for examining the potential returns to linguistic competencies takes into consideration both social and economic returns, as well as returns to individuals and societies, in a global context (Figure 11.11).

Figure 11.11. **Framework for returns to linguistic competencies in a globalising world**



Individual social returns in a globalisation context

Though no empirical studies exist, ethnic identity, family well-being and world-view are suggested as social returns to the individual.

Societal social returns in a globalisation context

Social returns are difficult to identify, however, relationships based on language spoken such as Canada's membership in Francophonie is a notable one. A case can also be made that Canada has assumed the role of peacekeeper and peace maker around the world due to trust earned because immigrants from many countries are an integral part of Canadian society. Many point to the number of people of immigrant origin who have been elected to parliament.

Societal economic returns in a globalisation context

It has been hypothesised that there is a competitive advantage for plurilingualism of countries in trade which has given birth to the discipline of "language economics".

Some international theory and evidence (Rauch 1996; Gould 1994; Head and Ries, 1998) supports the premise that immigration has tended to induce trade flows, either because immigrants brought established tastes specific to the country of production with them (Trefler, 1995) or because immigrants had the knowledge and contacts necessary to establish and maintain bilateral trade linkages. Language skills of immigrants, no doubt enhanced this trade-producing potential.

There was evidence in large global samples that bilateral merchandise trade flows were higher between pairs of countries that shared a common language (Eichengreen and Irwin, 1998; Frankel, Stein and Wei, 1998; and Helliwell, 1998) as well as for trade among the industrial countries of the OECD (Helliwell, 1997b, 1998). The effects of language were found to be robust to the inclusion of other, possibly confounding, variables such as distance, adjacency, and joint membership in a preferential trading group. In other words he was able to show that the effect of common language was more trade and not because they were neighbours or trade partners. Helliwell extended this analysis to determine if the effects of a common language apply equally to all languages, as well as to second and third languages (Helliwell, 1999). He found that among OECD countries, the common language effect is due to the role of English and other language based trade pathways were not significant.

Both contiguity of land mass and languages could have contributed to the success of trade relations in North America. The longest open border between the United States and Canada is certainly facilitated by a shared language. The 300 000 or more Spanish speakers also could benefit trade with Mexico.

NAFTA accord has resulted in a tripling of intra North American trade since it was signed among Canada, Mexico, and the United States through NAFTA. In 1998, total three-way trade among Canada, Mexico and the United States rose to about CAD 752 billion, with Canada–US and Canada–Mexico trade accounting for CAD 484 billion. Since the implementation of the NAFTA, Canada's trade with the United States has risen 80%, while trade with Mexico has doubled. Mexico is now Canada's 13th largest export market and fourth largest import source. All three countries have grown economically, Canada at the fastest average rate, Mexico at the slowest (Foreign Affairs and International Trade Canada, 2008).

Canada's trade missions include native language speakers and people originating from the countries in question, which have resulted in easier negotiations.

Individual economic returns in a globalisation context

Individuals can contribute to the flows of money to other countries. The World Bank estimates flows to developing countries at USD 167 billion in 2005. Remittances represent an important revenue source for developing countries. In absolute terms, India (USD 21.7 billion), China (USD 21.4 billion), and Mexico (USD 18.1 billion) top the list. The value of these remittances is particularly important to small developing countries because, for example, they account for 20 to 30% of GDP in Jordan and Haiti.

A significant proportion of immigrants to Canada send money to families in their countries of origin. The incidence of remitting among immigrants from different countries ranges from less than 10% (developed countries, such as United Kingdom and South Korea) to over 60% (developing countries such as Jamaica) and the annual amounts from about CAD 500 to almost CAD 3 000, depending on earnings, length of time in Canada and age.

Individual social returns to language in Canada

The very fact that Canada has been able to retain 200 languages while also maintaining economic growth as well as a rising standard of living speaks volumes regarding the social returns to the individual. Individuals are able to retain their ethnic identity and cultural pride as citizens of Canada.

Societal social returns in Canada

There has been little research on social returns of language competencies society as a whole. However, the success of the multicultural policy is an indication. Kymlicka (1998), in his analysis of this policy, used five indicators: rising naturalisation rates, active political participation of minorities, rising exogamy, official language competencies and comparisons with the United States and Australia. He found positive results in all five indicators. He concludes that multiculturalism has been a vital policy promoting citizenship acquisition, participation and integration, while allowing people to "retain or express their identity if they so choose" (Kymlicka, 1998, 1:9). Breton (1978) states that there is in addition to an economic yield to languages, a cultural yield which is related to literary and other forms of creativity.

Societal economic returns to language in Canada

Since Canada is a bilingual state, trade flows between provinces was studied using methodologies that tested factors such as language and contiguity. No robust language effect was found. According to Helliwell, the language effects on trade that are so apparent across national borders do not appear to characterise trade flows across provincial boundaries in Canada.

However, languages have enabled Canada to excel in certain sectors. Despite its small population (1% of the world's population) Canada ranks among the world leaders in translation and language training sectors. Canada's translation sector accounts for a remarkable 6% of the world market, with annual revenues of over CAD 400 million while Canadian language training specialists serve approximately 12% of world demand and generate approximately CAD 450 million in revenues (Industry Canada, 2008).

Individual economic returns to language in Canada

By far, the greatest amount of work has been done on individual economic returns and whether knowledge of languages enhance or hinder employment outcomes and earnings. Earnings of immigrants in Canada were shown to increase with schooling, pre-immigration experience and duration in Canada, as well as with proficiency in the official languages (English and French). Using selectivity correction techniques, Chiswick and Miller (2003) showed that there was complementarity between language skills and both schooling and pre-immigration experience so that greater proficiency in the official languages enhances the effects on earnings of schooling and pre-immigration labour market experience. Language proficiency and post-migration experience appear to substitute each other, therefore, those with greater proficiency have a smaller effect of time in Canada on earnings.

The effects of immersion on language proficiency in an official language and participation in post secondary education was first examined. PISA scores in English and French were used as a measure of proficiency gained in the official language. The OECD average was a score of 500. It is clear that those with scores well above the OECD average of 500, whether

or not they had immersion education, attended post secondary education while those that were below did not. Furthermore, well over 80% of those that had immersion education did so. A higher percentage of those without immersion did not attend post secondary education. Their PISA scores were below the OECD average. The key finding is that mother tongue is not a factor in the success of immersion education as a prelude to post secondary education.

Table 11.8. **Mother tongue, immersion education and participation in post secondary education**

Mother tongue	English		French		Other		
Immersion	French	None	English	None	English	French	None
Educational outcome:							
Not in tertiary A or B	18%	27%	16%	32%	16%	15%	11%
Tertiary A or B	82%	73%	84%	68%	84%	85%	89%
Mean Score in PISA Reading							
Not in tertiary A or B	496	479	506	471	452	----	451
Tertiary A or B	574	557	594	558	555	532	534

Source: Source: Youth in Transition survey, 2008.

The language used at work can have a major impact on employment outcomes and earnings. Use of a particular language or a mix of languages indicates a demand for those language skills in the local market economy. Three fourths of the working age population used English at work (Table 11.9). However, it was surprising to find that the demand for both official languages at the work place was very similar (less than 2%) to the demand for a non-official language. Most of those with a non-official mother tongue language worked in English.

Table 11.9. **Mother tongue and the language used most often at work, working population**

	Mother tongue					
Language used most often at work	English	French	English and French	Aboriginal language	Other	Total
English	58.60%	2.82%	0.16%	0.28%	14.39%	76.25%
French	0.51%	18.59%	0.08%	0.01%	1.00%	20.18%
Both	0.24%	0.94%	0.07%	0.00%	0.33%	1.58%
Non-official language	0.04%	0.01%	0.00%	0.13%	1.23%	1.40%
Other response	0.05%	0.02%	0.00%	0.02%	0.49%	0.59%
Total	59.43%	22.37%	0.31%	0.44%	17.44%	100.00%

Source: Census 2001.

Close to 2.8 million Canadians, or 15% of the population, reported using more than one language at work in 2006. This was a 0.4 percentage point increase over 2001 levels.

Has this pattern of language use persisted among immigrants? Since the languages of more recent immigrants were more likely to be neither English nor French, their language at work could have changed over time. Data from the most recent census, 2006, showed that a lower percentage of immigrants from 2001-06 work in English than those that arrived before 1991 – a drop from 84% to 75% (Table 11.10). The percentage working in French did not change. However, the percentage of those working in a non-official language rose from about 5% to almost 12%. The percentage using English and a non official language also rose slightly but the percentage was below 3%.

Table 11.10. **Language used at work by immigrants whose mother tongue is neither English nor French**

	Year of immigration			
Language used most often at work	2001-06	1996-2000	1991-95	Before 1991
English	75.70%	80.57%	80.38%	84.37%
French	7.66%	5.64%	6.29%	6.91%
Non-official language	11.94%	9.22%	8.48%	4.69%
English and French	1.64%	1.41%	1.77%	1.74%
English and non-official language	2.72%	2.91%	2.77%	1.91%
French and non-official language	0.14%	0.10%	0.10%	0.12%
English, French and non-official language	0.20%	0.15%	0.20%	0.26%
Total	100.00%	100.00%	100.00%	100.00%

Source: Statistics Canada – 2006 Census, Catalogue Number 97-555-XCB2006033.

If indeed immigrants were working in English or French while their mother tongue was different, did their proficiency in the official language affect their income? First, the impact of home language on language proficiency was analysed using the International Adult Literacy Survey (Table 11.11).

Table 11.11. **Literacy proficiency levels of the working age population based on first language learnt**

Population estimates by literacy levels and first language learnt and still understood (in thousands)									
	Prose literacy level								
First language learnt and still understood	1	%	2	%	3	%	4 and 5	%	Total
English	1 770	12.6	3 630	25.9	5 580	39.8	3 050	21.7	14 030
French	1 270	21.9	1 910	33.0	1 920	33.1	696	12.0	5 796
Other	1 910	37.6	1 370	27.0	1 300	25.7	488	9.6	5 068
Total	4 950	19.9	6 910	27.8	8 800	35.3	4 234	17.0	24 894

Source: International Adult Literacy Survey, 2003.

Those with a first language other than English and French fare less well in official language proficiency compared to native speakers. Over half scored below level 3, the desired level of proficiency.

Lower language proficiency could be the reason for the lower earnings of those whose first language was neither English nor French. Using the census it is possible to examine the income according to the knowledge of languages (Table 11.12). There definitely appeared to be a premium for knowledge of both English and French. More of those that only knew a non-official language or more than one such language earned in the lower ranges. Those that spoke another language in addition to English earned better than those that knew French and another language.

Could these discrepancies in earnings be explained by proficiencies in English and French? Research from the International Adult Literacy Survey has clearly shown a positive relationship between proficiency level and earning. The market rewards proficiency in English and French over and above education and work experience. The table below shows

Table 11.12. **Income distribution based on the knowledge of languages**

In CAD	English and Other	English Only	French and Other	French Only	English and French	English, French & Other	Other (single)	Multiple Other	Total
	%	%	%	%	%	%	%	%	%
<20 000	14.32	11.12	24.35	16.29	12.55	10.65	20.56	21.09	12.50
20 000-39 000	21.17	18.38	30.71	24.80	18.51	17.88	25.18	22.20	19.75
40 000-59 999	19.44	20.29	21.76	23.88	19.15	19.86	18.51	18.61	20.49
60 000-84 999	18.81	21.71	13.50	20.18	19.08	21.07	15.86	16.94	20.73
85 000-99 999	7.76	8.87	4.30	6.13	8.14	9.06	6.28	7.71	8.28
100 000-119 999	7.18	7.88	2.11	4.52	7.69	8.26	5.09	4.62	7.31
120 000 +	11.33	11.75	3.26	4.20	14.88	13.23	8.52	8.83	10.94

Source: Census 2001.

Table 11.13. **Population distribution by literacy levels, home language and income**

		Prose literacy level (%)			
First language learnt and still understood	Personal income (CAD)	1	2	3	4 & 5
English	< 8 000	27.4	21.6	19.5	16.6
	8 000 to 25 000	45.2	34.9	24.6	21.5
	25 000 to 50 000	22.6	30.3	33.6	30.5
	> 50 000	4.8	13.2	22.2	31.3
French	< 8 000	18.7	17.6	17.0	18.1
	8 000 to 25 000	56.0	37.3	29.5	22.2
	25 000 to 50 000	21.9	32.6	33.3	32.8
	> 50 000	3.5	12.5	20.1	26.9
Other	< 8 000	27.0	25.6	21.1	17.1
	8 000 to 25 000	46.5	32.7	23.9	16.8
	25 000 to 50 000	21.1	29.7	32.4	26.2
	> 50 000	5.4	12.0	22.7	39.8

Source: IALS (2003), Learning Policy Directorate, HRSDC.

the income by first language spoken as well as the prose literacy level (Table 11.13). Low proficiencies have an impact on earnings regardless of language spoken at home. Similarly, high proficiencies are associated with higher earnings, no matter which language is spoken at home.

Researchers have pointed out that other elements of human capital, rather than language alone can affect income. Educational credentials are a major variable. An attempt was made to examine the earnings of graduates based on their childhood language and language most often used at work (Table 11.14a). There appears to be a large variation in earnings based on standard deviations, so the results must be considered with caution.

Those that spoke a non-official language and worked in a non-official language tended to earn less based on median income compared to those with a similar level of educational attainment. However, those that worked in English earned as well as their peers with similar

education regardless of their childhood language. In other words, most markets reward both education and work in an official language.

While such bivariate analyses can hint at returns to language, results could not be considered causal. Multivariate analyses are few. Pendakur and Pendakur (1998) have studied data from regional labour markets because the demand for official languages or other languages is dependent on the use of that language locally. Among the key factors included in analyses were whether there is an advantage to learning a second language in childhood rather than as an adult, whether English (or French) as a second language has a greater advantage than a non-official language and whether proficiency in the working language mattered. Results did not show a premium for knowledge of multiple languages though knowledge of English was a key factor in both full time full year employment and earned income.

Table 11.14a. **Childhood language, language at work and their impact on earnings, Tertiary B**

Education level				
Tertiary B				
Childhood language learned and still understood	Language used most often at work	N	50th percentile (CAD)	Standard deviation (CAD)
English	English	59 408	30 000	39 440
English	French	914	26 000	43 805
English	Other	169	33 600	62 384
French	English	4 222	31 130	43 582
French	French	35 227	26 455	41 264
French	Other	–	–	–
Other	English	11 935	31 200	48 095
Other	French	1 128	24 960	34 209
Other	Other	484	26 000	54 714

Source: National Graduate Survey, Class of 2000, Learning Policy Directorate, HRSDC.

Table 11.14b. **Childhood language, language at work and their impact on earnings, Tertiary A**

Education level				
Tertiary A				
Childhood language learned and still understands	Language used most often at work	N	50th percentile (CAD)	Standard deviation (CAD)
English	English	59 403	36 000	61 439
English	French	1 314	35 500	44 012
English	Other	–	–	–
French	English	3 544	39 500	43 548
French	French	14 646	36 000	56 819
French	Other	–	–	–
Other	English	12 368	37 000	41 682
Other	French	1 040	37 000	51 887
Other	Other	274	19 760	54 957

Source: National Graduate Survey, Class of 2000, Learning Policy Directorate, HRSDC.

Table 11.14c. **Childhood language, language at work and their impact on earnings, Master's Degree**

Education level				
Master's degree				
Childhood language learned and still understands	Language used most often at work	N	50th percentile (CAD)	Standard deviation (CAD)
English	English	8 993	52 000	60 145
English	French	177	48 994	63 358
English	Other	–	–	–
French	English	1 029	53 000	68 260
French	French	3 200	45 000	76 934
French	Other	–	–	–
Other	English	2 738	52 000	49 758
Other	French	272	46 800	49 282
Other	Other	–	–	–

Source: National Graduate Survey, Class of 2000, Learning Policy Directorate, HRSDC.

Table 11.14d. **Childhood language, language at work and their impact on earnings, Ph.D.**

Education level				
Ph.D.				
Childhood language learned and still understands	Language used most often at work	N	50th percentile (CAD)	Standard deviation (CAD)
English	English	1 534	54 000	32 097
English	French	–	–	–
English	Other	–	–	–
French	English	148	56 064	31 680
French	French	452	54 600	61 129
French	Other	–	–	–
Other	English	710	51 600	31 147
Other	French	75	55 900	32 784
Other	Other	–	–	–

Source: National Graduate Survey, Class of 2000, Learning Policy Directorate, HRSDC.

Conclusions

Canada is well placed if the language component of human capital provides a competitive advantage in a globalised world. Its multicultural and bilingual policies have ensured that there is a large number of speakers of many of the world's languages. It is difficult to measure and to quantify the economic and social benefits to the individual and to societies arising from multilanguage use. So far, the strongest evidence is for the economic benefits of English, especially by proficient users, regardless of other languages spoken. However, it can also be shown that allophones who work in the official languages earn a good living while retaining their heritage language.

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Chapter 12

Catalan language policy and the challenge of new immigration: Nosaltres parlem Catalá

By Armida Lizárraga *

Catalan, the native language of Catalonia has survived since the medieval era despite foreign conquest, a national dictatorship and the banning of its use. Catalan has been the official language since 1983 with the creation of a language policy to re-establish the normative use of Catalan, making it the main language for instruction and communication in public schools. By 2007 the language was spoken, written and read in 97% of the region's schools. Yet, a new challenge has emerged with the large influx of foreign immigrants, which has turned Catalonia into the Spanish region with the largest concentration of immigrants. The Catalan government (Generalitat) has responded with attempts to ensure the Catalan language's continued use through the creation of three policies. This chapter describes the role the Generalitat has played in re-establishing the use of the Catalan language and analyses how the region has adapted to this new immigrant population.

* Harvard University Graduate School of Education

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

The Catalan language has survived since the medieval era, despite foreign conquests, national dictatorships, and the periodic banning of its use, most recently between 1939 and 1975. Thanks to the creation of a language policy in 1983 to re-establish the normative use of Catalan, the language was spoken, written and read in 97% of the region's schools by 2007. Yet a new challenge to Catalan language survival has emerged in the face of the influx of foreign immigrants, which have grown annually between 5% and 14% since 2000. The Catalan government (*Generalitat)* has acted quickly to ensure the language's continued use, creating and implementing since 2004 three policies to meet the demands of its changing population. This chapter describes the role the *Generalitat* has played in re-establishing the Catalan language and analyses how it has adapted to this new immigrant population.

A history of Catalan language survival

The common theme of survival has marked the history of the Catalan language since its inception. Catalonia's salient ethnic and linguistic characteristics emerged in the wake of the Roman era (Laitin, 1989). After the *reconquista,* which ended the short-lived Moorish rule in Catalonia around the year 800, Catalan nobles established an autonomous feudal system with its centre in Barcelona. Between the 9th and 15th centuries, Catalonia flourished and forged its own identity alongside the emergence of the Catalan language (Rees, 1996). The region assumed a more important role in Europe in the 13th century, when Jaume I took control of Valencia, Mallorca, and Murcia. It developed its own institutions (*les corts catalanes*) and an administrative body (*Generalitat).* During this time, Barcelona became a powerful cultural and commercial centre in the Mediterranean. Castilian (Spanish) was considered the "refined" language spoken by the landed nobles who used it to bargain with the rich merchants who spoke Catalan. However, the first printed volume published in the Iberian Peninsula was in Catalan (Vallverdú, 1981; Laitin, 1989). While Catalan and Spanish are both Latin-based languages, they emerged from different variants of Latin and have different grammatical rules and word etymologies (Wheeler, Yates and Dols, 1999).

The unification of Spain in 1469 marked the beginning of linguistic tensions between Catalonia and the Spanish kingdom. Catalonia's language, culture and government remained intact until the first Bourbon King of Spain in 1716. Philip V restricted local autonomy and imposed the Spanish language at all levels. The use of Catalan was banned for official and formal use (Vila-Pujol, 2007).

These political changes affected the use of Catalan and the people's attitudes towards it. Two languages functioned side by side. Higher Catalan classes, such as merchants, who looked to gain power, learned Spanish, while the rest of the population continued to use Catalan (Rees, 1996; Vila-Pujol, 2007). With the arrival of the Industrial Revolution in the 19th century, the high Catalan bourgeoisie tended to use Spanish while the middle classes felt the need for more economic and linguistic autonomy. The first wave of

Spanish-speaking immigrants that moved to work in the flourishing textile industries and settled in Catalan cities also influenced the growth of Spanish language among the working classes (Vila-Pujol, 2007; Huguet, 2005).

However, Spanish did not become the hegemonic language in Catalonia. Even though Catalan businessmen were willing to depict themselves as Spaniards in order to do business, the Madrid-centralised government did not give Catalonia the support needed for their industrial growth. Transportation, taxes and other administrative laws benefitted Madrid. In 1898, Catalan industries lost their protected markets in Cuba and the Philippines (Laitin, 1989). This lack of responsiveness from Madrid fostered the creation of a strong sentiment of nationalism that helped Catalonia develop a vibrant cultural and linguistic renaissance in the mid-19th century. In 1932, during the Second Spanish Republic, Catalonia was declared an "autonomy" together with Galicia and Basque country. This gave an official status to the Catalan language (Vila-Pujol, 2007).

But the political climate soon changed after the Spanish Civil War (1936-39). In 1939 under Franco's dictatorship, a single-language policy was created to forge a Spanish national identity. Franco demanded an immediate replacement of Spanish for Catalan. Public use of Catalan was forbidden, volumes in Catalan were removed from bookstores, and the use of the language was not allowed in public or private schools. Spanish became the institutional and formal language used in education and media, while Catalan was maintained in familial contexts (Rees, 1996). These events led to economic stagnation in Catalonia. In the late 1950s Catalonia's economy began to recover. A Spanish-speaking immigrant labour force from Andalusia and Extremadura was key to this revitalisation. By 1970, Spanish-speaking immigrants made up 48% of the population. They lived mostly in the neighbourhoods surrounding the cities and were hardly exposed to Catalan. This socio-cultural phenomenon shaped Catalan society and is considered to be the first significant wave of immigrants to have adopted the region as their home (Laitin, 1989; Generalitat de Catalunya, 2009).

After Franco's death, the 1978 Constitution removed the ban on Catalan and created 17 autonomous regions with their own public administrations, with the *Generalitat* assuming local control of Catalonia. The Catalan language was immediately incorporated into schools. However, a general language policy had not yet been created.

Box 12.1. **English for indigenous children in Australia**

For the sake of the future of indigenous children, they most certainly need to be taught in English. It is a backward step to be teaching in any other language. It seems to me that teaching in bilingual languages would hinder education standards and would continue to keep the children behind mainstream education. The mere fact that we still have indigenous people unable to speak English in this day and age is a disgrace to Australia. By all means local indigenous languages have a very important role to play and should be taught in the schools and should never be allowed to die, but for the good of the children, English should be taught with the help and in consultation with the local indigenous people. This is no time to keep children locked away in segregated communities. By all means teach them about their cultural heritage including their languages but educate them so they can work in the wider world for their communities, and this in turn will help their communities. Only with proper education can indigenous children move forward. I don't think indigenous children's future should be put any further at risk; they should be educated to the very best of our ability.

Dana Zimner, Australia

Llei de Normalització Linguistíca: A political and legal framework for re-establishing Catalan

In 1983, the *Generalitat* passed the *Llei de Normalització Lingüística* (Language Planning Act), a legal framework that re-established the normative use of the Catalan language in all levels of society (Rees, 1996; Laitin, 1989).

A major aspect of the law focused on the educational system. The policy states that all students in Catalonia must receive their instruction in Catalan, regardless of their native language, and are expected to be able to use Catalan and Spanish proficiently by the end of their secondary education (Huguet, 2006). Teaching should occur either in Catalan, with Spanish studied as a subject, or through a bilingual programme in which speakers of both languages gradually reach the same level in the curriculum (Vila-Pujol, 2007). In order to do this, the Department of Education has run an ambitious in-service teacher training programme to ensure proficiency in both languages. This ongoing work with teachers also helped meet the demand for Catalan programmes in pre-school and Kindergarten age groups, especially in the cities, which received the greatest influx of Spanish-speaking immigrants. An important implication of this law is the pivotal role it gave to schools, not only in disseminating the language but in creating a space where speakers of the two languages had to use Catalan in a shared environment, thus avoiding social fragmentation.

Catalonia consciously sought to learn similar policies implemented in other countries such as Canada where English-speaking students received their instruction in two languages and began to reach native speaker levels in their second language (in this case French) around fifth or sixth grade, outperforming their monolingual peers who received monolingual instruction (Genesee, 1987; Bialystock and Hakuta, 2004).

The *Llei de Normalització Lingüística* generalised the use of Catalan, even in areas with a Spanish-speaking majority. In 1979, less than 2% of elementary schools used Catalan as the language of instruction and in 1983, only 25% of public schools and 40% of private schools offered bilingual education. By 1996, Catalan was the language of instruction for four of five elementary students (Vann, 1999) and by 2001, 73% of pre-schools and elementary schools completed all teaching in Catalan as the main language of instruction. The remaining were implementing new programmes in Catalan. Roughly 70% of all high schools taught in both languages (Huguet, 2005). By 2007, 97% of the schooled population could understand, speak, read and write in Catalan, compared to only 75% that could speak it and 60% that could write it in 1988 (Departament d'Educació, 2007).

A study conducted by the *Department d'Educació de Catalunya* (2007) assessed student proficiency in both languages. These results showed that factors such as family socio-educational level and home language combined with the use of Catalan at school played important roles in its acquisition. The results also showed that teaching in Catalan did not lower the level of Spanish. Assessments collected since the 1990s highlight the importance of the social presence of language in daily school interactions as a crucial factor for the acquisition of Catalan by Spanish-speaking students. While the existence of a second language curriculum helped achieve high levels of language knowledge, it still was not enough to ensure oral expression development, since it is connected to the student's social network outside school (Gleason, 2004; Snow and Kang, 2006).

Major challenges in re-establishing the use of Catalan in all areas of society include contextual factors influencing language development, such as home interactions. Language use in families in Catalonia may be divided into three groups: homogeneous, mixed and mutating (Vila-Pujol, 2007). The first group is more linguistically "homogeneous",

comprising 73% of families who claim they consistently use the same language(s) (Spanish, Catalan or both). Within this group 44% speak Spanish, 26% Catalan and 6% use both languages indistinctively. A second group of "mixed" families consists of 12.8% of the population. In this group, one of the parents identifies as speaker of Catalan (5%) or as bilingual (6.8%) while the other parent claims to be part of a different language group. Only in rare cases, does one of the parents in this group report to be a Spanish-speaker. The third group of "mutating" families represented by 10.2% of the population presents two different situations. If the parents are Spanish speakers (9.7%), their children identify themselves as bilinguals (7.9%) or Catalan speakers (1.8%). But if the parents identify themselves as Catalan speakers, few of their children reported being Spanish speakers (0.1%) or bilinguals (0.5%).

Although this third group is not as large as the first, the trend towards bilingualism is growing. While there is no growth in Spanish as a linguistic identity, the number of Catalan-only speakers is declining. Demographically, there are more mixed couples than Catalan-only couples. Family and networks are crucial to developing Catalan in Spanish speakers (Vila-Pujol, 2007; Departament d'Educació, 2007).

Since language cannot survive only through schools (Huguet, 2006), the law seeks to address other domains of Catalan language use in the courts, public administration and media (Vila-Pujol, 2007). Older employees in local government were required to take Catalan language classes. Two local television channels broadcast in Catalan with subsidies supporting the production of popular soap operas that reflect Catalan regional culture. Newspapers such as *La Vanguardia* or *El Periódico* have daily separate editions in both languages, while *L'Avui* and other regional newspapers are only published in Catalan. Most of the biggest publishing companies in Spain have been based in Catalonia and now launch all their bestsellers with translations in both languages (Rendón, 2007; Vila-Pujol, 2007). Successful public advertising campaigns to raise awareness about the use of Catalan were implemented.

The government's language policy and the society's acceptance of the language are aligned. Furthermore, Catalan has gained status as a language of prestige in Catalonia. Although Catalonia is perceived as a bilingual society, it is better characterised as a diglossic one (Woolard, 1989). Bilingualism means two languages coexist and are used in similar roles and with equal levels of proficiency. Diglossia happens when one language is used for education, official communication or literature and the other is used for daily interaction or popular culture (Rendon, 2007). But new challenges to the survival of the Catalan language have appeared with the growth of foreign immigration.

The challenge of foreign immigration

Historically, Catalonia has been a region of immigrants. A large influx of immigrants from other parts of Spain moved to Catalonia between the 1950s and early 1970s. By the end of the 20th century, more than six million immigrants, including both foreign and national, lived in Catalonia (Morén, 1998). To many Catalans, immigration is still a threat to the survival of the Catalan language as people also link their Catalan identities to their traditional origins rather than to the cultural mixture and contributions made by immigrants. In 2005, three in four Catalans had an immigrant among their recent ancestors (Cardús i Ros, 2005). The notion of being an immigrant has been redefined as it has come to identify more people born outside of Spain rather than Spaniards coming from other regions. Catalonia is the Spanish autonomous region with the largest foreign

immigrant population (Bernaus, Moore and Cordeiro Azevedo, 2007; Institut d'Estadística de Catalunya, 2010).

For Catalans, this growth is new – and fast. Roughly one million foreign immigrants now live in Catalonia, comprising 13.7% of the total Catalan population, with 70% concentrated in Barcelona (La Vanguardia, 2008). Consequently, the population in Catalan schools has changed. Immigrant students make up nearly 14% of the student population with an annual growth between 5% to 14% since 2000. Almost half of these students are from Morocco, while the others are mostly from Latin America (Institut d'Estadística de Catalunya, 2010).

However, given the success of the *Llei de Normalització Linguistíca* speaking Catalan has almost become a prerequisite for securing employment in Catalonia. One study found that the ability to speak, read or write Catalan increases the opportunities of getting a job by three to five percentage points. Writing in Catalan increases these chances by between two and six points (Rendon, 2007). These findings align with another study, which found that the possibility of learning Catalan grows if the person lives in a community where people know Catalan or are Catalan born (Bernaus, Moore and Cordeiro Azevedo, 2007).

Learning Catalan as a foreign-born immigrant creates socio-emotional challenges. In a high school with a large population of immigrant students, attitudes and motivations to learn Catalan had a tendency to decrease as the students' year level increased. Also, anxiety towards the language increased, as students grew older. Their countries of origin had little influence on the level of motivation or anxiety towards learning the language. The teacher, as a motivator to learn Catalan, also played an important role. Few Catalan teachers showed the determination to use differentiated instruction and relied on outdated and rigid pedagogical practices. On average, students felt more connected to their Spanish teachers, in many cases Spanish was the native language in their countries of origin. The social complexity of this specific language situation in Catalonia is especially unique. Students in schools with a high concentration of immigrants find it more difficult to learn Catalan (*ibid*.).

Given these developments, policymakers have recognised that action is needed at the local level to ensure the continued survival of the Catalan language.

Policy adaptations in response to the new challenges

In 2004, the Department of Education launched the *Pla per a la Llengua i la Cohesió Social (*Plan for Language and Social Cohesion). It was an integrated response to the new challenges of the social and language cohesion and aimed to promote language immersion, taking advantage of the accumulated pedagogical experiences of the Catalan educational system. This political document is the referent for practices conducted in Catalan schools with young immigrants and for the training of specialists working in the *aules de acollida* or reception classrooms for new immigrants entering the Catalan educational system (Department d'Educació, 2007).

Studies of the Plan's effectiveness found that while it established criteria for teaching Catalan, including goals and procedures for intercultural education and community participation, it still needed to address the lack of bilingual teachers and give consideration for the students' native language as a vehicle to teach Catalan (Arnau, 2005).

A revised plan within this framework – called *Pla per a L'Actualització de la Metodologia D'Immersió en L'Actual context Sociolingüístic 2007-2013* (Plan for the Actualisation of the Immersion Methodology in the Current Sociolinguistic Context 2007-2013) – offers specific

guidelines, emphasising teacher development in sheltered and differentiated instruction, the creation of teaching materials targeting the student population, and the incorporation of families and communities in the acquisition of the Catalan language. It also provides a set of detailed guidelines concerning differentiated instruction according to the student's native language, an emphasis on oral language development in the early years, and a new pedagogical approach where the students are active learners. Schools with specific needs due to their multilingual population will be identified and targeted to implement this framework.

In 2008, a major public debate emerged over the *Llei d'educació de Catalunya* (Education Act of Catalonia) and even sparked teacher strikes (La Vanguardia, 2008). In July 2009, the Catalan Parliament approved the Education Act. Three of the most significant changes are *a)* the shift in the management of schools giving autonomy to them to carry out their own educational project according to their contextual needs; *b)* the consolidation of the Catalan linguistic model with the goal of implementing trilingualism, ensuring that students reach proficiency not only in Catalan and Spanish but also in a third language; and *c)* investment in education over the next eight years should amount to 6% of the GDP in Catalonia (Generalitat de Catalunya, 2010). Other changes included mandatory education starting at three, provisions for parental commitment, modifications in new teacher requirements, and more autonomy for school principals. Proposals that did not make it into the final law included fixed quotas for immigrant students per school and the complete geographic reorganisation of the educational zones. The verdict is still out on the success of these policies (for a discussion of language policies in other countries, see Cho; O'Donnell; Tarozzi; Worden, all this volume).

Conclusions

The *Generalitat* has reacted quickly to social changes affecting the continued use of the Catalan language. Three major pieces of policy – the Plan for Language and Social Cohesion (2004), the Plan for the Actualisation of the Immersion Methodology in the Current Sociolinguistic Context 2007-2013 (2006), and the Education Act of Catalonia (2009) – are starting points for continuing to maintain the Catalan language and embedding it deeper in Catalan society. However, the *Generalitat* faces challenges at several levels. First is implementation, which includes carrying out mandatory education from the age of three and creating an evaluation system, to mention only two. The second and perhaps biggest challenge is to change Catalan society's attitudes towards immigrants. These include changing principal's practices, teacher's pedagogies and parental attitudes towards sharing schools with the foreign immigrant population and keeping their children in the Catalan public school system.

Only time will tell whether these policies will ensure the vibrancy of the Catalan language. In a society that has experienced a drastic change in their social texture, other changes such as neighbourhood integration may also be considered in the future. Regardless, if past success is a predictor of future outcomes, then the Catalans, who have demonstrated time and again their ability over centuries to keep their language alive, will likely be speaking in their mother tongue for generations to come.

Box 12.2. **Nsyilxcen**

The Colville-Okanagan language, also known as Nsyilxcen, is a Salishan language spoken in the central portions of Washington State and British Columbia. The language has between 150-200 fluent speakers, none under the age of 55. Eight tribal governments work with the Colville-Okanagan language. Three active non-profit corporations also work with Colville-Okanagan Salish (Parkin, Reversing Language Shift and Southern Interior Salish, 2011). Additionally, hundreds of individuals are involved as students, teachers, activist and speakers.

In my experience, Salish language education and use falls under a steady pattern. Children attending government-funded and regulated schools receive some Salish as a second language instruction. Adults participate in limited community classes as well as summer language camps. Most fluent speakers are geographically isolated from each other and converse in English with those around them. Salish is primarily used as a high status introductory language in political and religious settings, with participants reverting to English in order to accommodate monolingual participants. I will explore some possibilities for multilingual education and language use within this context.

Perhaps one of the most important questions to answer is "why study Salish at all?" First, language revitalisation is largely a question of justice. Language shift for Salishan communities was largely involuntary due to the colonial experience of native peoples. Between boarding and residential schools, the suppression of indigenous religions and the stated goal of terminating tribal governments, all of which lasted into the 1970s, it is hardly surprising that the linguistic competencies of tribal peoples declined. Second, there are cognitive benefits to learning non-native languages (See Worden, this volume). While Salish as a communication tool is not particularly "useful" outside of the Pacific Northwest, the meta-linguistic skills which are developed as the language is learned would apply globally. Third, Salish language can be part of a "grounded" ethnic identity which allows native nations and peoples to interact with the rest of the world as equals (see Christoph, this volume).

The fact that Salish language is well received within indigenous communities when it is spoken implies that the language currently has relatively high status and is no longer exclusively seen as the language of the poor or ignorant. Following Bruno della Chiesa's motivational vortex hypothesis (Chapter 1, this volume), given adequate opportunity individuals will most likely be successful in their attempts to learn Colville-Okanagan Salish provided its status remains high. To promote language learning, tribal governments and organisations would need to continue to support language use, both monetarily and in terms of publicity. Additionally, explicitly working to establish diglossia, with Salish as the language of the in-group and its activities and English as the language of the out-group, could theoretically help address language shift.

Unfortunately, adequate opportunities for language learning remain largely unavailable. To date, individuals who have achieved any level of mastery of Colville-Okanagan Salish as a non-native language have done so because of their own considerable efforts as opposed to any organisational or institutional support. To better support language learners and language revitalisation, education policies should narrow and intensify Colville-Okanagan language education. Instead of teaching many children some Salish, educators would be more successful in their revitalisation efforts if they brought a smaller number of students to a higher level of competency. One way to help achieve this would be to assign language teachers to cohorts instead of grade levels. Additionally, using fluent elders as classroom teachers may be a less valuable role for them than developing cultural materials. Through mass media, in the form of textbooks, songs, speeches or videos, these same speakers can create a body of work which can reach an unlimited number of learners. Introductory classroom instruction can be delegated to semi-fluent speakers, who would, in turn, greatly benefit from the more productive use of fluent speaker's time.

Grahm Wiley-Camacho, United States – Colville Confederated Tribes

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Chapter 13

Education and creativity in Tanzania

By Jessica Welch *

When discussing education in developing nations, such as Tanzania, the role of creativity rarely comes up. Resources, in the form of local artists and musicians, are abundant – but how can we equip this population of artists to take the role of educators, and subsequently connect them with the students that so desperately need an outlet for creative growth? Based on my time working as a musician and music teacher in Tanzania, I highlight one organisation that is working towards this very goal, and discuss why the role that this organisation fills is so vital.

* Harvard University School of Education graduate; Spanish instructor, Axl Academy, Aurora, Colorado, and violin teacher

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This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Aid organisations and education in Tanzania

Aid groups (both foreign governments and NGOs) continue to concern themselves with a large-scale overhaul of education in Tanzania, which often results in just as many negative side effects as positive. As a case in point, foreign aid donors promised several hundred million dollars to the Primary Education Development Plan in Tanzania during the late 1990s, with the goal of improved quality of education as a result of allocating USD 10 per student. During the first year of implementation, less than USD2 per student actually made it to schools (Kruder, 2005). The push for Universal Primary Education has led to a rapid increase in students, with some classes as large as one hundred, without an appropriate increase in resources such as desks and chairs, or even trained teachers (Sifuna, 2007). This system is clearly not an effective method of bettering education. Any major shift in the way improving education is approached will take years to accomplish- so what can be done now? How can existing resources be used to supplement an education system that is corrupt and out-dated? In this chapter, I discuss an organisation that is filling a gap both educationally and socially in the Tanzanian landscape. The Umoja Arts Centre (UAC), which opened its doors in January 2008, is providing a vital service to the community of Arusha, Tanzania, all without foreign investment, and with a model of sustainability that, while far from perfect, could stand as a model for future organisations. I will discuss the role that UAC is playing in the community, both educationally and socially, and the importance of the arts as a catalyst for development in both areas.

During my time in Tanzania, I was surprised time and time again by how little cooperation existed between various aid organisations. Competition was the rule, not the exception. For example, it is standard to pay a sitting fee to lure participants into workshops or meetings put on by aid groups, which are ostensibly for the benefit of attendees themselves. Basically, these "services" provided by aid groups function more like shady business transactions than sustainable development practices. Organisations must attract people to their meetings with offers of payment in order to have large enough numbers to satisfy donors, while attendees are often more interested in what they are getting paid than in what is being presented. Smaller community-based organisations must find ways to counteract the mentality that this system has ingrained in many members of the local population. Unless there is some sort of compensation, many people will refuse to participate in meetings, workshops, or activities specifically designed for the benefit of their own community. Obviously, this is a system that will take large amounts of time and effort to change.

The Umoja Arts Centre: A different approach

A new model, and one that is currently working at UAC, is an organisation that acts more as a catalyst between resources. Every week, representatives from over a dozen organisations come to teach and participate in the classes and workshops taking place at the Centre. Local artists have a chance to exhibit and sell their artwork in an environment that encourages creativity and originality, as opposed to the narrow niche for stereotypical African art that appeals to the average tourist. Students from the only accredited bachelor's degree in music in the country have a chance to practise, teach, and perform their craft,

Box 13.1. **Racism?**

I experienced racism in Tanzania – the most obvious was being called *Mzungu* at least 100 times every day. *Mzungu* means "whitey" in Swahili, basically, and it's totally normal for people (from babies just learning to talk to elders) to shout it at you when they see you. It's not usually meant offensively, but it got to the point where it made me so angry that I would stop and lecture people for using that word, or I would come back with *Mwafirka* ("African" in Swahili). That's not something I am proud of, obviously, but it's what happened on a regular basis. I was pretty much molested every time I took public transportation … which probably has just as much to do with the reputation "white girls" have in Arusha due to the huge influx of volunteers who have this romantic idea of having a Tanzanian boyfriend. In fact, there are guys in Arusha who make a living going from volunteer to volunteer – the term for them is Flycatcher, and it's hilarious and disgusting at the same time. I was hit by a truck – basically I was on my bike on a back road, when a truck (later some witnesses told me it was a TZ army truck) hit me from behind. I flew about 12 feet, and was only really conscious long enough to see them all stick their heads out from the truck, yell *Mzungu*, and then take off.

Jessica Welch, United States

It's very common for the stereotype of the easy "Western" tourist/volunteer to take hold in many non-Western cultures. I experienced it in a non-Western country where I used to live. If you are dressed in very Western clothes, especially if you show any cleavage or wear short skirts, you may be subject to unwanted stares or physical contact. When men asked me if I was from a specific region in Eastern Europe, I didn't know whether to be flattered or insulted because in the area where I lived there is an idea, propagated by both women and men, that women from that country are the most beautiful in the world. At the same time, there are so many prostitutes from there that a common slang word for "prostitute" is "Natasha". I usually replied very curtly that I was not, mostly to convey the message that they shouldn't attempt to proposition me.

Catherine Patterson, United States

while struggling local dancers and musicians find a place to both encourage each other and to assist in developing the next generation of Tanzanian artists. Students pay what they can, which ranges from high hourly fees to a few cents a week. In this model of doing business, the pressures of expectant donors or the guidelines of government aid are bypassed. This is by no means a perfect solution; UAC is frequently hanging by a thread financially. This has had, however, unexpected positive side effects. The idea of community ownership has had a powerful effect on everyone involved. As opposed to the feelings of dependence that many aid organisations engender, here there is active participation from all levels of society to ensure the continued survival of UAC.

The lesson to take away from the financial existence of UAC is that identifying a need in a community does not always mean that a large scale donor campaign must immediately be organised- often it is simply a matter of connecting a need with a resource that otherwise would not easily be brought together. Unfortunately, it seems that many outside organisations come in with the best intentions at heart, but immediately set about finding ways to darken the lines of separation that already exist in society. Looking at the school system is a good example of this practice.

Segregation and education

Segregation continues to be one of the unspoken laws in Tanzania, drawing a solid line between educated and uneducated, African and non-African. These lines are drawn at a very early age, and run especially deep in a city like Arusha, with a large expatriate contingent and growing Tanzanian middle class. Non-Tanzanians attend international schools, Tanzanians attend local private and government schools, with little, if any, intermingling. Let me go further and say it is not merely a matter of segregation between expatriates and Tanzanians, it is also a matter of segregation between Tanzanians themselves. There are very specific socio-economic delineations between who attends government schools (the poor), who attends English medium local schools (the middle and upper-middle class), and who attends international schools (the most affluent). Many international organisations unwittingly contribute to this through the establishment of schools that adhere to very strict guidelines about the socio-economic level of the students they admit. One foreign aid-run school in Arusha requires families to go through extensive interviews and home visits to ensure that their students fall into the category of extreme poverty. At face value this seems a good avenue for impoverished children to receive an education. However, given the overt segregation of students, schools like this only darken the lines between the levels of society that already exist.

In the case of education, it often seems that like begets like. How can students break out of a cycle of poverty if they are only ever exposed to classmates from the same situation? The educational arena can be a powerful tool for change; however, lacking the chance to gain social and cultural capital, students are doomed to maintain the status quo of their surroundings (Bourdieu, 2001). Unfortunately, in the social clime of Tanzania, there are very few circumstances or places where children and families from different strata of society will ever interact. In order for there to be such a circumstance, or such a place, the draw to come together must overcome the boundaries that have been in place for generations; it must provide a method of interaction that is universal, and not dependent on the education or background of the participants. One of the most universal places to start is in the arts. The cultural exchange that happens at UAC is both on an individual and an organisational level – a unique but vital combination that is hard to find in many organisations across the country.

Arts, education, and participation at Umoja Arts Centre

Why the arts? To further clarify the above statement, I will focus specifically on music, both as a musician myself, and due to the body of literature available. The past ten to fifteen years have shown a sharp increase in the area of the neuroscience of music (see Grant, this volume). Music, it seems, not only plays a role in every culture in the world, it is universal even on a biological level (Mithen, 2009; Trainor, 2008; Brattico and Jacobsen, 2009). As Juslin and Vastfjall (2008) point out, newborns across the globe have an innate preference for certain types of song, and seem to consistently prefer song to speech, regardless of cultural background. This very universality makes music, and other forms of the arts, ideal catalysts to cultural and social exchange and cooperation that so often are difficult to facilitate.

With these ideas in mind, let me describe a typical classroom at UAC. On any given Saturday in Arusha, if you happen to be in the area of the town's only traffic light, you may witness an unlikely sight. You would see Tanzanian children, anywhere from 3 to 15 years old, carrying cases of all different sizes that seem carry violins and guitars. Some of

these children are accompanied by parents, some by neighbours, and some make the trek alone. They are all headed to a small community arts centre in the middle of town for their weekly individual and group lessons.

Since January 2008, UAC has existed as one of the only community (and self-sustaining) based arts organisations in East Africa. Its mission is to promote an arts economy in Tanzania, and to provide a place for quality, high-level arts instruction and cultural exchange. So while the sight of a five-year-old Tanzanian child walking down the road with a dusty violin case might give the average person a shock, it is what takes place inside the classrooms at Umoja that is the most surprising. In these classes, the child of a UN councillor, the child of the head of a large safari company, and the child of a street corner food vendor are all learning the basics of music side by side. Fast forward a few days, and you would find all these children in strikingly different settings. Two of the children are in international schools, learning from teachers trained at some of the top universities in the world. They may be learning French in anticipation of the school trip to Paris in a few weeks, or they might be learning about geology after having returned from a group climb of Mount Kilimanjaro. One of these children sits in a classroom with no windows, crowded on a bench towards the back of a classroom of fifty to sixty students, parroting back the information his teacher (who has little to no training as an educator) is reading out of a textbook from the late 1980s. One of the only times that these children will ever be in the same room, on the same footing, is at UAC.

At first glance, one might think that this centre is just another novel venture organised by foreigners. How will learning the violin, a Western instrument, ever impact a Tanzanian child? As I illustrated above, the mere fact that the children in this class are on equal footing, learning together in a classroom is of huge value and importance. One of the only common factors between the education of the international, wealthy child and the local child is that they both lack quality arts education at school. Of course, the international student may have art lessons or music class at their school, but these very often amount to finger painting and group recorder sessions- hardly high quality or meaningful arts education. Here is where something unique takes place. These students, who come from hugely diverse backgrounds, are finding a language that is even more common than the English or Swahili they are taught in. As cliché as it may sound, these students are learning to communicate and express themselves through music. Perhaps we could even consider the musical medium that they are learning to internalise and express themselves through as a new form of "Globish".

Creativity and education

This brings me to what I consider the most vital aspect of the music, dance, and art education that is taking place at this community arts centre: the development of creative thinking. Creative thinking has traditionally been relegated to the realm of performing and visual artists, with great scientific thinkers occasionally included in the discussion. Recently, however, the neuroscientific community has begun to explore the neural basis for creativity, which has sparked a much wider debate and discussion about what creativity truly is. The definition of creativity is not, and perhaps never will be, set in stone. For this discussion, however, I think the most straightforward definition is the one given by Flaherty (2005) "the production of something both novel and useful in a particular social setting" (p. 147). In pulling children from their homes and putting them in a traditional, rote driven educational classroom, are they learning to create or express anything that is either novel or useful in their social context? I would contend that the exact opposite is taking place; if anything, these children are un-learning the creativity that day-to-day

life has endowed them with. This, then, is why the creativity that is being guided and encouraged through exposure, training, and performance in the arts is providing these children with such an invaluable tool.

If we consider the creative thinking that is being encouraged and nourished through the arts, and combine it with the new expressive tools of communication that these children are learning to use, the potential impact is enormous. The power of a common avenue of communication and expression is becoming more essential as the world becomes more globalised; the already large gap between the educated and uneducated stands to increase exponentially as technology and travel become the norm in the developed world. UAC is one example of small organisation trying to equip students, families, and artists with tools to mitigate that gap.

Conclusions

It is not my intention to present the arts as a panacea to the educational quagmire that much of the world is in. It is about as likely that singing hymns around a campfire will lead to world peace as it is that exposure to and education in music and the arts will lead to an ideal educational system. However, the simple fact that it is nearly impossible to go anywhere in the world without seeing a musician on a street corner should cause us to wonder why the arts are so far removed from most educational settings. We need to start looking for ways to connect resources that already exist, rather than starting from scratch again and again. By giving that street corner musician some pedagogical training and pairing him with a local art centre or school teacher and class, the world would have one less starving artists and one more classroom enriched and enabled in creative thought and output. Thousands of artists could be trained and linked to thousands of students using a tiny fraction of the millions in aid that are devoted to education in developing nations. Perhaps it is time for the West to re-evaluate the way we dictate what is needed and what is not in developing countries. Food, water, shelter, and medicine make up the bulk of what we in the West have said (with the millions of dollars in aid sent every year) is necessary for survival. However, since the beginning of recorded history (and perhaps even further), music and the arts have been part of what makes us human.[1] By ignoring this basic desire in our quest to "save" Africa, we in the West are practicing a subtle and pernicious form of cultural condescension. The idea of quality has been a hot topic in recent discussions concerning education in developing nations. Quality education *must* include the promotion of creative thought. The Umoja Arts Centre provides one example of a sustainable way to move education towards that goal. As Moyo (2009) succinctly put it "if a country can't produce the next generations of well-educated civil servants, politicians, economists, and intellectuals, then how can it not regress?" (p. 72). An integral part of being well educated is the ability to think creatively and expressively, and perhaps someday this will be reflected in classrooms worldwide, and not just in the classrooms of the affluent West. Until then, more organisations like Umoja Arts Centre are needed to bridge the divide.

Box 13.2. **Bridging knowledge systems: Linking traditional science knowledge with western science knowledge in Malawi**

As an international education policy student, I am required to look at the research on many education programmes in international development. These programmes are often funded by aid organisations in so called "developed" nations and are use to develop education programmes in "developing" countries. While many of these programmes are well intentioned and many provide important services, programmes also sometimes miss the mark due to the misinterpretation or basic ignorance of local customs and culture surrounding the norms of local knowledge systems. These programmes may often find that they are not as effective as they hoped. It is my opinion that some of these issues stem from the use of inappropriate materials or understanding of local knowledge.

One group of researcher's efforts to bridge these cultural divides between knowledge systems, particularly surrounding sustainability science education is the work that Glasson *et al*. (2006, 2009) in Malawi. Glasson *et al*. (2006) discusses a two-year study that "explored nature- knowledge- culture systems from a place based perspective" in Malawi. Glasson *et al*. (2009) has a slightly different focus. This article explores the importance that traditional ecological knowledge from the elders in Malawi can be an important tool to teaching ecological issues and developing culturally relevant curriculum in Malawi. An important theme in both articles is the prevalence of the Western science tradition in the school curriculum. The authors indicate that shifting some of the focus from the Western tradition to having a better understanding of "indigenous science and how nature-knowledge systems … work is essential to addressing the educational issues related to teaching about ecological sustainability in developing countries" (Glasson *et al*., 2006, p. 662). Often traditional knowledge and "Western" knowledge is separated and compartmentalised. Learning can become more meaningful for students if the knowledge is integrated.

Glasson *et al*. (2009) discuss a strategy for negotiating this tension between knowledge systems. They propose using Bhabha's "third space" theory (Bhahba, 1994). Essentially, the third space in an area at the interface of the two knowledge systems. Within the "third space," neither the Western or indigenous viewpoint is the answer, but cross cultural new interpretations are generated. "With the third space, stakeholders collaborate together in the co-construction of new hybrid meanings and interpretations of science… the purpose to create a more robust scientific world view" (Glasson *et al*., 2009, p. 128). This model for integrating knowledge addresses an important issue in science education in developing nations. It takes the codified Western science that is generally the norm of instruction, but is not culturally relevant to teachers or students and replaces it with a more appropriate and culturally based science education.

Glasson *et al*. (2009) share a few examples of how this type of education can develop in Malawi. While interviewing and discussing traditional knowledge with Malawian elders, the authors identify several examples of traditional knowledge that can be coupled with Western science for a science education curriculum. For example, the growing of crops under msangu trees to increase soil fertility provides a forum for the teaching of how nutrients in natural fertilizers are useful in agriculture (Glasson *et al*., 2009). Another example is the process of boiling and drying vegetables for their preservation. This traditional activity provides a launching point for instruction on how boiling and drying affect metabolic activity (Glasson *et al*., 2009). These are just two examples, but it is easy to understand how linking traditional knowledge with Western knowledge can create a more culturally useful and accessible curriculum for both teachers and students while contributing to the recognition and continuance of important local customs related to ecology and sustainability.

Development of education and curriculum can be a complex and challenging process. This become increasingly so when the cultural and knowledge systems of the curriculum of instruction does not match up with the local customs and norms. Glasson and colleague discuss this disconnect in their research in Malawi, discussing the importance of culturally relevant material and providing the "third space" model as a forum for bridging this knowledge gap and moving toward a more inclusive and effective curriculum in ecological and sustainability science.

Matthew Aruch, United States

Note

1. For a brief but interesting exploration of this topic, see Mithen, 2009.

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Chapter 14

English as a multicultural language for international communication in Asia[1]

By Nobuyuki Honna*

As most Asian countries recognise English as an indispensable language for intranational and/or international communication, they are increasingly committed to strengthening and improving English language teaching (ELT). In parts of Asia where English is an official language and ELT succeeds, people may speak English among themselves. Wherever this happens, a set of indigenous language patterns develops. Similar situations have also been witnessed in countries where English is taught and learned as an international language. We need to fully understand these aspects of present-day English if we are to take advantage of English as a language for communication. One important issue is mutual communicability among speakers of different varieties of English. Based on the observation that a common language is not a uniform language, but rather a diverse language, this chapter argues that a way of dealing with English as a multicultural language for worldwide communication is not restrictive conformism but diversity management.

* Aoyama Gakuin University, Tokyo

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction: English as a multicultural language

The complexity of globalisation has led us to recognise the importance of our increased competencies in various kinds of languages and the importance of our expanded knowledge about various aspects of language, culture, and communication. At the same time, the role of English as an intermediary language is continuously emphasised. Yet the important thing about English is that it is a pluricentric and multicultural language, rather than a unicentric and monocultural one.

Contemporary English has two functional and structural characteristics that few to no other languages have developed in the history of linguistic evolution. Functionally speaking, English has conspicuously spread among non-native speakers, as a sizable number of Asian, African, Pacific, and Caribbean countries have designated it as their official, associate official, or working language. As such, English is used in 70 countries (*i.e.* around 36%) of the 194-state world (Honna, 2003). Additionally, in more than a hundred countries students are learning English as a language for international communication.

At the same time, the spread of English does not assure the transplantation of American or British English throughout the world. Rather, English is becoming a conspicuously diverse language. Everyone speaks English (as any other language) with an accent and with their own cultural influences. As Americans speak American English and Britons British English, Asians, Europeans, Africans, and South Americans speak English with their own characteristics. The internationalisation of English has caused its diversification. Indeed, when Japanese speak English with Koreans, there is no room for American or British English and culture. It would be clumsy if the Japanese and the Koreans had to conform to American ways of behaviour while speaking English to each other. The same is true with English conversations between Turks and Brazilians, French and Swedish people, and any other interactions that occur on the global stage. What happens is that Japanese behave like Japanese and speak English in Japanese ways, as do Koreans, Chinese, Philippines, Russians, Italians, Danes, Arabs, and everybody else. This demonstrates that English is now a multiculturally variegated language. Tolerance toward varieties is a condition for using English as a global language. We need to be convinced of this logic and prepared to positively deal with its various ramifications.

Diffusion and adaptation

In order to understand these English language trends, it is important to fully comprehend the relation of diffusion and adaptation. If things are to spread, they must easily mutate. For example, there would be no McDonald's restaurants in India if they insisted on offering beef hamburgers. Cows are holy and beef is taboo in Hinduism, the religion of many people in India. Yet, McDonald's restaurants in Mumbai (Bombay) and other cities are popular, because they serve chicken or mutton burgers, an indispensible change to assure the spread of this fast-food chain in a place whose culture is so different from that of the country of origin.

This principle can apparently be applied to language, too. The internationalisation of English prompts the diversification of English. In other words, diversification is the "price" we have to pay for the internationalisation of English and it is important to recognise that English has become an international common language simply *because of* its development as a culturally diverse language.

The popular assumption might state that a common language should be a uniform language. But this is not true. A common language cannot be but a diverse language; a lot of allowances have to be made, and differences accepted. Conversely, if American standards of English pronunciation, vocabulary, grammar, semantics, pragmatics, and sociolinguistics were imposed upon all users of English, it would never have become an international common language.

World Englishes

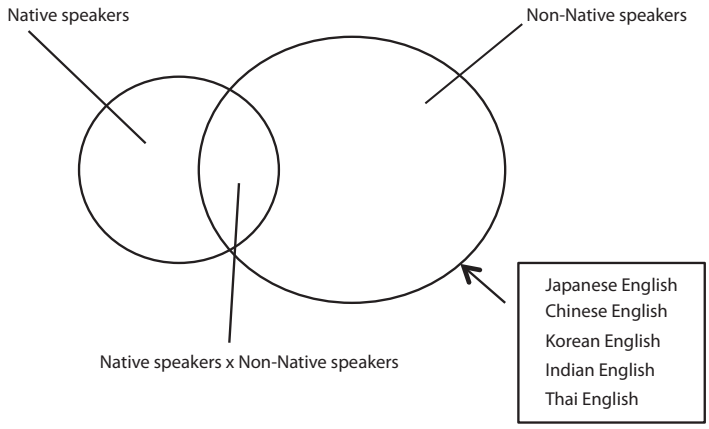
The diffusion and diversification of English is dynamically conceptualised as "world Englishes", as defined by the author (Honna 1999, 2003; 2008). Perhaps, it is the first language to be represented in a plural form in the history of linguistic dynamism (but this could happen with other languages too, on a smaller scale; moreover, and even if the wording might not have been used back then, similar realities existed, for instance, in Europe's Middle Ages, when Latin was the *lingua franca* of educated population groups). Behind the plural form of Englishes is an interesting idea about English as a world-wide language. The idea suggests that all varieties of English that have developed or are being developed in various parts of the world are equally valid and viable in linguistic and cultural terms – the philosophy of English is under constant examination, evaluation, and amendment.

Kachru (1992) classified these plural forms of English into three concentric groups: *a)* inner-circle varieties spoken by people in the United Kingdom, United States, Canada, Australia, New Zealand, and South Africa, *b)* outer-circle varieties formed by Asian and African speakers whose countries were former colonies of Britain and the United States, and *c)* extended-circle varieties employed by learners in all other countries. Outer-circle varieties in Asia and Africa are often called "New Englishes" (Platt, Weber and Ho, 1984; Pride, 1982).

The idea was formalised by the publication of the *World Englishes* journal by Blackwell Publishers, Ltd. in 1982 and the organisation of the *International Association of World Englishes* (IAWE) that same year. Braj Kachru and Larry Smith were instrumental in materialising these two entities. A little earlier, Kachru (1976) succinctly depicted the contemporary situation of world Englishes based on his Indian English studies. Smith (1983) also covered most essential domains we should address to further substantiate the idea of world Englishes (or English as a multicultural language for international communication).

Using English in non-Anglo-Saxon cultural contexts is the result of a variety of sociolinguistic conditions. The most important prerequisite is the fact that English is spreading among non-native speakers. There are more non-native speakers using English with other non-native speakers than native speakers using English with other native speakers or non-native speakers. My former students report that they now tend to use English more frequently with Asian business people than with Americans or British people. This situation is illustrated in Figure 14.1. (Honna, 1999).

Figure 14.1. **Communication between speakers of English**



Source: Honna, 1999.

English as an Asian language

The spread of English as a language for multinational and multicultural communication employed by non-native speakers thus implies that English is becoming more and more de-Anglo-Saxonised throughout the world. This creates new structural, pragmatic, and functional dimensions in contemporary English.

As a matter of fact, English has become a very important language in Asia. It is a working language for intranational and international communication in many parts of the region. Bolton (2008) estimates that in Asia 800 million people speak English for various purposes, a number that is far larger than the combined populations of the United States and Britain – where English is the native language for most citizens**.**

Many Asian nationals use English more frequently with other Asians than with people from the UK, the United States or other "native speaker" countries. As we are expected to have increasing contact with people from other Asian countries in the fields of business, tourism, overseas studies, environmental protection or regional cooperation, it is about time for us to start exploring issues in English communication in Asia.

The multiculturalism of English as an Asian language

However, Asian varieties of English are tremendously diverse with different social roles attached to the adopted language. Each country has used the language within its traditional cultural and linguistic contexts, thereby producing a distinct variety characterised by unique structural and functional features. Proficiency levels also differ with countries where English is a non-native language producing more skilful speakers than their counterparts where English is designated as an international language (EIL).

As languages come into contact with each other, they get mingled in many interesting ways, leading to diversification. The notion of one language as an independent system is only an imaginary creation. This has become increasingly obvious in Asian English studies, where cross-linguistic analysis is a key to a better understanding of a wide range of new patterns.

As a matter of fact, the forms and uses of English in Asia are enormously influenced by the Asian languages. While the influence often gets blurred in syntactic superposition,

it is visible in lexical and idiomatic borrowing. Here are some examples of the use of the concept of "face" in Singapore and Malaysian English, where Chinese features are apparently reflected.

"Face" is extremely important in Asian societies. In the oriental value system, "face" refers to an individual's pride, dignity, honour, prestige, and even identity. From the Chinese origin, two expressions (namely losing and saving face) are used in English throughout Asia, such as:

1. I lost a lot of face by being unable to answer this question.
2. This saved me a great deal of face.

In Singapore and Malaysian English, however, there are a lot more expressions related to "face" such as:

1. You failed again… I don't know where to hide my face.
2. Why did you treat me like that the other night? I've really got no face now.
3. You must go to his son's wedding dinner. You must give him face.
4. Since I don't know where to put my face in this company, I might as well leave and save what little face I have left.
5. Just tell him what you really think. There is no need to give him any face.
6. Let's ask Datok Ali for help. He knows the right people and he's got a lot of face.

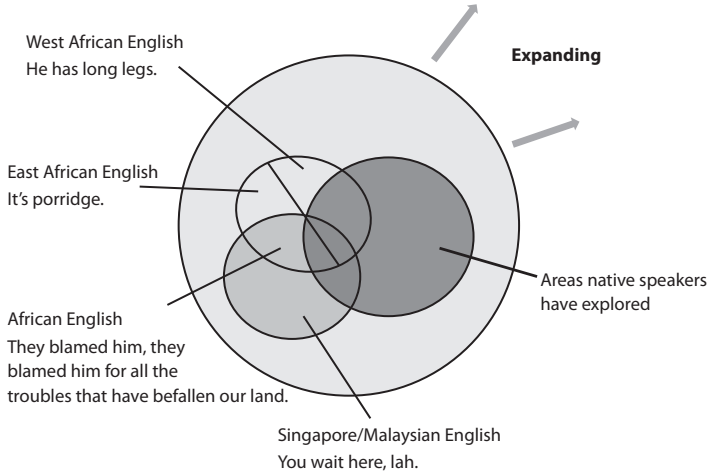
In this connection, it has to be stressed that although these phrases are not necessarily part of British or American English, they are not to be denigrated or stigmatised. If they are useful for certain purposes in Singapore and Malaysian societies, they tend to be deeply rooted there. Just because non-native speakers do not use English the way native speakers do, this does not mean they are using the language incorrectly. This principle applies to many other forms of English as an Asian language. Actually, many Asians seem to have little difficulty understanding these Singaporean and Malaysian expressions rendered into English, because they have similar phrases in their regional and national languages.

At this juncture, it is important to note that teachers do not teach local varieties of English at school. They teach "International Standard English," whatever that may refer to, in the classroom in Singapore and Malaysia. But if people are compelled or expected to speak English, it is natural that they should do so only in the way which fits them best. The same phenomenon can occur in countries where English is taught as an international language if we encourage our students to speak English, as we must for various obvious reasons.

Expanding the capacity of English as a multicultural language

As the spread of English progresses, it is bound to reflect a diversity of disparate cultures. Every language has an indefinite capacity for structural and functional modulation and expansion, and there is no language that has used up its inherent potentiality. The portion that the native speakers have yet explored is very limited (see Figure 14.2.; Honna, 2008), leaving a lot to be exploited by non-native speakers. On a global scale, non-native speakers explore those areas based on their own linguistic, cultural, and cognitive experiences.

Figure 14.2. **The capacity of English**



Source: African examples are from McArthur, ed., 1992: 22.

For instance, Singapore and Malaysian English, although sharing much with native speaker English, introduces the use of dozens of different sentence-final particles, like "Wait here, lah." The rationale for these expressions is that they express a wide range of delicate shades of meaning, in other words, the ethos of the speakers. African speakers also enrich the language with an array of lexical and syntactic creations. The African expressions here are representative of many metaphorical innovations New Englishes can contribute to the English language. As for any language, there is a myriad of new patterns being constantly added to English, and the capacity of English is invariably expanding.

English across cultures and diversity management: The need for a pedagogical response

The worldwide spread of English has thus not led to the global acceptance of American or British English as the norm of usage. Rather, the global spread of English has prompted its multicultural diversification. One of the implications, or rather complications, of these multicultural enrichments continuously added to the English language, concerns mutual communicability among speakers of world Englishes. This is an actual and immediate problem as well as a potential future concern. Cases of zero-/mis-communication in intervarietal interaction are abundant.

In fear of a new Babel, people often cry for a return to American English or British English as the standardised norm. However, it is important to recognise that standardisation or eventually re-standardisation of the de-standardised standards is not a plausible way of dealing with the current multiculturality and multiformalism of world Englishes. If we are to establish English as a multicultural language and use it as an international language, we have to address the issue of diversity management pedagogically.

I have explored issues of diversity management in terms of a pedagogical concept of intercultural literacy. According to my definition, intercultural literacy (Honna, 2003):

1. is the attitude, preparedness, and competence to express one's message and understand others' appropriately in a cross-cultural encounter;
2. involves an ability to adjust to intercultural differences in a mutually beneficial manner;

3. is the literacy of the fourth kind after basic literacy (reading and writing plus arithmetic), information literacy, and media literacy; and
4. is expected to be introduced to the school curriculums across disciplines from primary, through secondary, to tertiary education.

I have also placed teaching awareness of language as a fundamental component in intercultural literacy. The role of language awareness in intercultural literacy is based on the assumption that a major part of language awareness is to improve sensitivity to, and tolerance of linguistic diversity, as is witnessed in Hawkins (1987, 1992) and many others.

The key is the improved sensitivity to, and tolerance of linguistic diversity (that may occur intralingually and/or interlingually). An understanding of linguistic diversity can be developed most effectively through teaching how language is designed (cognitive linguistics) and how people use language (sociolinguistics). It is essential that these fundamental elements of language awareness should be incorporated into teaching English as an international language (TEIL).

Since I discussed the importance of cognitive linguistics in teaching awareness of language elsewhere (Honna, 2008), a mention will be made here of some of the sociolinguistic nature of language to show that diversity should not be such a cause of confusion and disorder as it is often believed to be. If English is to be taught as an international language as well as a multicultural language, pedagogical programmes should be developed to address these issues.

Human beings tend to be wary of differences. They suspect that differences can hinder and diminish order and harmony. But differences are everywhere. Every language is a variegated one. If we are made aware that we, users of our native or first language, need to have many different variables and that we are capable of managing them properly, we will hopefully be able to see intervarietal differences from an enlightened perspective (see della Chiesa, Chapter 25, this volume).

Thus, a first awareness issue in our TEIL is diversity in language: why we develop different ways of saying one and the same thing in our language. Studies of language in social contexts indicate that linguistic diversity is a reflection of the social reality in which language is used. People use language to express their social position, their relationship to addressees, and their perception and understanding of the social context in which the discourse is conducted. Linguistic diversity increases with the complexity of social organisation and relationship.

Yet, human beings choose the most appropriate unit out of their repertory of a huge number of different forms meant for one semantic denotation. Every person has chains of these bundles that constitute a wide range of linguistic units characterised by phonological, through morphological and syntactic, to (dia)lectal and linguistic features. The speech act is represented as a consecutive series of constant choices of linguistic formatives. The choice is governed by the sociolinguistic variable rules: Who Says What to Whom When/Where (How). Socialisation is the process in which young children learn these rules, which are incorporated into the socio-cultural norm of behaviour in a given society.

In regards to Japanese students of English, Suzuki (1973) provides a good example. Unlike English and many other languages, there are several terms for first person singular and second person singular in Japanese. Japanese speakers always have to choose one of them in accordance with the social relation they maintain with their addressee, with the relationship built on the social concepts of family structure, power, seniority (age, position), familiarity, and formality.

A simple pair of *watashi* (I) and *anata* (you) is often taught to foreign students of Japanese as the first person singular and the second person singular, respectively, but it is unlikely that Japanese can get by with them in their daily lives. The Japanese system of personal terms is a symbolisation of the social organisation with reference to human relationships like kinship, friendship, and others. We need these different words because we are expected to express delicate shades of socio-psychological meaning appropriately. On a daily basis, we are capable of dealing with these differences. We live in diversity. We cannot live without it.

This ability to accommodate intralingual differences can be extended to the interlingual situation. Linguistic conformism is not wanted. It is important for students of English to understand, based on their mother tongue experience, that differences are valued, and, absolutely cannot be discarded. This concept of linguistic diversity should be extensively explored in TEIL.

For instance, there are hundreds of differences between American English and British English. These differences can often be a cause of serious communication problems. A NATO military exercise is a case in point. An American soldier declaring "We've cleared the wood," meaning "the wood is safe," could be interpreted by a British counterpart as "We've come out of the wood" (Reeves and Wright, 1996, p. 1). However, differences across the Atlantic Ocean are normally taken for granted. Thus, flat/apartment, lift/elevator, ground floor/first floor coexist in the lexicon of English. Idioms are no exception, for example: a storm (tempest) in a teacup, blow one's own trumpet (horn). Grammar varies, too: I demanded that he should leave/I demanded he leave. The saying "A rolling stone gathers no moss" is interpreted positively in the United Kingdom and negatively in the United States, and from one speaker to another.

Differences are conspicuous in many semantic domains. Take automobile terms for example (Table 14.1). To my knowledge, there has been no serious talk between Americans and Brits about eliminating differences in an effort to unify them. They get along with the differences, simply accepting them as part of each other's linguistic idiosyncrasies.

Table 14.1. **Automobile terms**

American	British
hood	bonnet
trunk	boot
fender	bumper
dimmer	dip switch
stick shift	gear lever
dashboard	fascia
blinker	indicator
muffler	silencer
windshield	windscreen

These attitudes could hopefully be applied to the pedagogy of English as a multicultural language for intercultural communication so that intervarietal differences are accepted as a fact of life as well as a resource of mutual self-enrichment. A useful pedagogical approach seems to be "intercultural accommodator," not "cultural assimilator" (Honna, 2010). In a

larger sense, the issues involved in diversity management in world Englishes are parallel to those in symbiotic societies being created in many parts of the world. In view of these trends, our efforts to establish English as a multicultural language are expected to identify and analyse actual and potential issues of our changing society and propose ways to solve its urgent problems based on the spirit of mutual benefit and cooperation.

Conclusions

The concept of English as a multicultural language is based on the fact that English is bound to stay an indispensable language for intranational and/or international communication in Asia and other parts of the world. This paper dealt with issues in intervarietal communicability among speakers of different varieties of English. As a pedagogical response to these actual and potential inconveniences caused and to be caused by the diffusion of English as a multicultural language, teaching diversity management by means of educated awareness of language was explored as an indispensable component in intercultural literacy/awareness.

While English has a centrifugal tendency for intracultural and intranational purposes, it also has a centripetal force for intercultural and international engagements. When speakers of English converge for information exchange and mutual understanding, they are strongly motivated to adjust their respective speech manners. They are eager to learn how to do this. This is where diversity management training comes in, to help them help themselves in this endeavour. These pedagogical efforts are needed to improve our competence in using English across cultures.

Note

1. This is a slightly revised version of a paper presented at the OECD-Japan Seminar held at Aoyama Gakuin University, 24 October 2008.

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Chapter 15

Language education in Japan and Korea: Policies, practices and challenges

By Kyung Suk Chang *

This chapter examines the contexts of English language policies and how they are developed, formulated and implemented in Japan and Korea. This analysis examines each country's policies through historical, sociological, economic and political lenses in order to understand the multidimensionality of non-native language (NNL) teaching and learning. The two countries are compared and contrasted to determine which NNL learning and teaching practices are shared, and which are specific to each country's particular context. This analysis also allows the authors to speculate as to which characteristics may support or impede success in NNL learning and teaching. Implications for policy and practice in terms of NNL learning and teaching for each of the countries, as well as for other countries, are explored.

* Korea Institute for Curriculum and Evaluation, Seoul

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

Interconnectivity as one of the essential features of globalisation transcends time and geographical barriers as well as political, social, and cultural boundaries (Albrow, 1996; Giddens, 2000; Tsui, 2005). This key feature is affected by tools such as information technology and language, which are referred to as "global literacy skills" (Tsui, 2005). In response to the changes globalisation has brought about, it has been inevitable that countries re-visit or re-examine their language policies in order to ensure that their nationals have adequate linguistic tools.

As English becomes one of the most influential tools for global communication, the language has rapidly spread as a non-native language. English is spoken by only 8% of the world's population as their first language. It is estimated that the world's non-native speaker to native speaker ratio for English is between 2 to 1 and 4 to 1(varying greatly from 470 million to over a billion depending on how literacy or mastery is defined and measured) (Crystal, 1997, 2003; Graddol, 1996). This ratio means that non-native speakers now outnumber native speakers. The rapid spread of English has been considered a worrying phenomenon, due to threats to local languages and cultures, issues surrounding ethnocultural identity and ideology, cultural-linguistic imperialism/neo-colonialism, the hegemony of English, multilingualism, and the implied advantage for people with proficiency in the language (See Canagarajah, 1999; Fishman, 1996; Gnutzmann and Intemann, 2005; Pennycock, 1998; Phillipson, 1992).

Globalisation (*gurôbarizêshon,*グロ–ベル化, 國際化 in Japanese; *gŭlrobeolhwa,* 글로벌화, 국제화 in Korean) has been a powerful force that shapes NNL policies in Japan and Republic of Korea (henceforth, Korea) since the turn of the century. This has posed challenges to two countries which have long considered themselves to be mono-ethnic and therefore monolingual societies with Confucian heritage, though they have become more multinational over the last two decades, due to migration movements. In these two countries, much greater prominence has been given to English language learning and teaching at policy level. While they are at different stages of economic development and have different political systems, they have one thing in common in terms of language education policy: English has been recognised as important in order to remain competitive in the global economy, and learning English has become a national mission.

There has been a great deal of debate on the effects of English language education in the two countries. The difficulty and failure in effecting positive change in English language education remains a constant theme in the critical review of the subject. One of the indicators of the problem is their performance in the TOEFL (Test of English as a Foreign Language) bit Score (Total) ratings. According to the 2007 data issued by ETS (Educational Testing Service, 2008), Japan is ranked 28th and Korea is ranked 26th out of 28 OECD member countries. The data from previous years show that the two countries have not succeeded in improving their performances in the TOEFL ratings, continuing to show low scores (Suzuki, 2009).

As Seargeant (2008) observes, English language education is increasingly being associated with wider social changes in both countries, especially those relating to the

nations' international relations and their role and status within the global community. The Japanese government's reform plan was proposed in Action Plan to Cultivate "Japanese with English abilities" (MEXT, 2003):

> … For children living in the 21st century, it is essential to acquire communication abilities in English as a common international language. In addition, English abilities are important in terms of linking our country with the rest of the world, obtaining the world's understanding and trust, enhancing our international presence and further developing our nation.

In Korea, English language education has been the focus of education reform since 1995 when the beginning of an era of globalisation was declared by the then-president Kim Young-sam. Since then, a number of English language policies have been developed, formulated and implemented at the government-driven level including curriculum revision, native speaker teacher recruitment, investment in infrastructure, and teacher training. English education became a key campaign issue at the 2007 presidential election. The current president Lee's emphasis on Koreans' need for English was expressed (Kang, 2008). He stressed that a short-sighted, vested interest-oriented view should not hold back the long-term national goal of English-friendly Korea. He made the remark as criticism mounts over his overzealous plan for the wider use of English, which he believes is a key to sharpening competitiveness of Korea and Koreans.

It has been estimated that reform plans could cost an astronomical amount of taxpayers' money. The government's strong push towards English education reforms and the national obsession with the topic are often described as "English Fever", "English Craze" or "Korea's English Pandemic". There has been a growing public concern over the issue "English is a must for all Koreans", which haunts the whole nation.

Efforts the Japanese and Korean governments have made for English education reforms support that globalisation had a great impact upon the national language policy in these countries. It is assumed that the two countries are confronted with similar issues when formulating and implementing language policies though they respond to their specific socio-political contexts in different ways. Language, as one symbol of a nation's identity, has been recognised as an embodiment of its values, culture and tradition (Coulmas, 1997; Fishman, 1972, 2001; see della Chiesa, Chapter 1, this volume). Tsui (2005) notes that language policies are emotionally charged, highly political, and that decisions regarding language education are shaped by the socio-political processes of which they are a part. As she suggests, in order to make sense of their development, formulation and implementation, it is essential to situate language policies and the debates surrounding them in their socio-political contexts, which cannot be separated from their historical contexts.

This chapter examines the contexts where English language policies are developed, formulated and implemented in Japan and Korea. It establishes a collective level framework which includes key social factors that have significant influence upon policy decisions on English language education and choices of practices in each context. A comparative analysis of language policies and practices in the two countries will also be undertaken. The multifaceted comparative analysis will bring the identification of some issues that are shared, and others that are specific to their own socio-political contexts. The comparison will allow the isolation of factors and the indication of the observed success or failure/challenges of English language policies and practices. It is expected that the findings from the comparative analysis within the multi-faceted framework provide some implications for a nation's decisions on non-native language policy and for research on issues relating to non-native language learning and teaching. The debate about the how, why and when

of teaching English is naturally multifaceted and likely to be the subject of continued argument as policy initiatives are evaluated over the next few years. The kinds of questions canvassed in public debate, mostly to do with requisite levels of language competence, reflect those commonly found in other countries in the face of a language policy important to national interests. In Japan and Korea, a majority of people learn English in schools, therefore the government efforts to improve English proficiency of the population equals the improvement in English teaching and learning at school.

Framework for analysis

Axis and key social factors for NNL context analysis

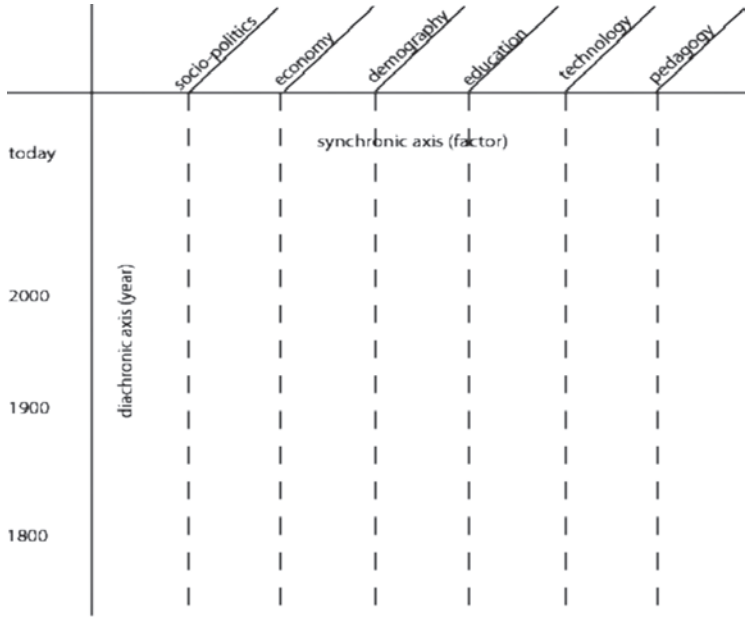
The significant role that context plays in understanding non-native language learning and teaching has its root in sociolinguistics. To date back, Hymes (1974) suggested that one should take as context a community, or network of persons, investigating its communicative activities as a whole, so that any use of channel and code takes its place as part of the resources upon which the members draw.

In analysing language education policies and practices, it is hence necessary to examine the context where decisions on policies are made and practices are implemented. Johnson (2009), with emphasis on the ethnography of language policy, proposes that the analysis should include the dynamic social and historical contexts in which language policies are created, interpreted and appropriated. Hornberger and Johnson (2007) introduced the ethnography of language policy as a way to illustrate the different layers of what Ricento and Hornberger (1996) metaphorically refer to as "the language policy-onion". The metaphor suggests that the features consisting of each layer (of the onion) can be identified and compared to gain a more comprehensive picture of a context where non-native language education takes place. It also suggests that diachronic and synchronic approaches from linguistics can be adopted to gain access to the cross-sections of each layer of the given context. Following Ferdinand de Saussure's (1857-1913) association, diachronic linguistics studies language change over time and synchronic linguistics focuses on one particular point in time. As Figure 15.1 illustrates, on the diachronic axis one can go back and forth in time, watching the language with all its features change while a particular state of a language at some given point in time is viewed at the synchronic axis.

On the diachronic axis, the NNL contexts of the two countries can be reviewed from historical perspectives to identify major changes made in particular socio-historical situations over certain period of time. The analysis of the political relationship between the countries might provide some explanations about what impact it had had upon NNL policies and practices in each country. Such an historical review might give further hypotheses or assumptions on the perceptions or attitudes that people hold towards non-native language learning and teaching.

The synchronic analysis shows how the NNL context and social factors interact and influence each other. Findings can then be compared with those at other points in history. This makes it possible for the diachronic and synchronic analyses to operate in a complementary manner in order to gain a more comprehensive picture of a particular NNL context. In terms of comparative research methodology, Oaky (2001) stresses the interdependence of diachronic and synchronic views. He proposes that synchronic comparisons are as essential as diachronic ones to the process of verifying hypotheses and generalisations. He also suggests that historical information and diachronic propositions are needed to avoid falling into the cross-sectional fallacy.

Figure 15.1. **The axis of NNL context analysis**



The examination of any NNL context using diachronic and synchronic analysis needs to include the examination of the social and economic mechanisms that structure language policy (see Graddol, 2006; Spolsky, 2004). The underlying mechanisms consist of a variety of social factors such as politics, economy, demography, education, technology and pedagogy. The rationale for an inclusive analysis structure is that, as already discussed, language is an embodiment of cultures, values, and traditions of any given society (Byram, 1989; Coulmas, 1997; Fishman, 1972, 2001; Kramsch, 1993; see della Chiesa, Chapter 1, this volume).

A great deal of research has been conducted on the link between language, society, culture and language policy within socio-cultural contexts and beyond their boundaries. It includes how globalisation reshapes a nation's NNL policy; what language policy is in a post-colonial society; how people's movement has influenced formerly mono-lingual and mono-ethnic nations' language policy; how reforms in higher education affect NNL learning and teaching in the secondary school; the potential technology has in bringing about change in language learning and teaching; what changes are brought in the revised curriculum for NNL in response to globalisation, and how effectively they are implemented in practice. This illustrates how a country's local language education is "a microcosm of the society" (Fujimoto-Adamson, 2006) and the world around it.

Typology of NNL policy and practices

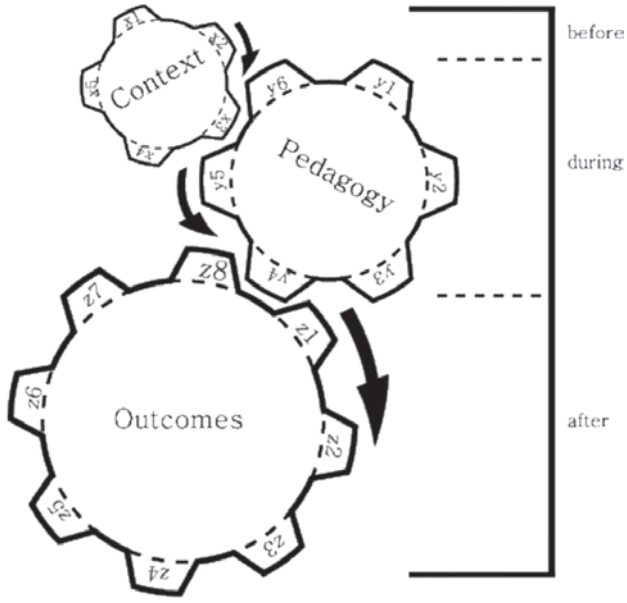
Strategies or styles of instruction are often referred to as pedagogy. The term is generally defined as the study and theory of the methods and principles of teaching (Collins Cobuild). Research indicates that effective language practices are highly complex and a number of contextual factors influence one another (Ellis, 1991; Prabhu, 1987; Yoshitomi, Umino and Negishi, 2006). Widdowson (2003) argues for the complexity using the parameters of language pedagogy. According to his argument, the parameters of language pedagogy have to do with educational ideology that informs policy making, goals, first language settings, learner and teacher roles, curriculum and so on. He raised a crucial

question for language pedagogy: "To what extent does a setting on one parameter have consequences on how the others are set?"

In the present investigation, an analogy is drawn between gears and NNL education operational system as shown in Figure 15.2.

The schematic depiction of NNL education presented in the above figure can be used in thinking about the discrete elements of NNL educational policy and practices, their inter-relationship, and the necessary conditions for policy implementation and evaluation. The typology aims: *a)* to provide a framework for thinking about the development, implementation

Figure 15.2. **The typology of NNL education**



and evaluation of NNL policy as a process; *b)* to conceptualise the effective and successful process of implementing language policy and achieving goals; and *c)* specifically to draw an analogy between the "before, during and after learning" conceptualisation (GLC, CERI 80th Governing Board Document) and the analysis of NNL context analysis.

The typology in Figure 15.2 uses gears, whose motion and speed can represent effects of NNL policy implementation. The effective operation of NNL education policy is contingent upon how one setting is intertwined with the other system. Context is a setting where NNL policies are formulated and x1, x2, x3… are socio-cultural factors which have influence on the policy-making process. Pedagogy, as a process of policy implementation in practice, has to do with a number of factors (y1, y2, y3…). The outcomes of NNL learning and teaching can be measured by using different methods (z1, z2, z3…). The evaluation results of the measurement can be fed back to NNL policy planning and management. It is assumed that any problems identified in the gear system may affect the whole operation system in a negative way (the interdependency in the effective operation; policy in the national test system; impact on pedagogy and its wash back effect on language learning outcome)

Methodology and structure

The method this research employs is to engage in a survey of a number of key studies within the "applied linguistics" literature on non-native language education in Japan and Korea. It also reviews a selection of the academic literature that has studied English language education debates relating to each country, and examines the ways in which the subject has been presented over the years. It discusses the prominent issues most often identified, and cross-references these with an examination of the policy reforms that have been proposed and implemented by the two governments in recent years. This study largely depends on secondary or tertiary sources in the native languages or English versions of original documents. It needs to be mentioned that in some areas access to data was extremely limited or scarce.

The rest of this chapter is divided into three sections. In the first section, NNL education in each country is reviewed from the historical perspectives before the 21st century. The second section deals with significant social changes such as in economy, demography, (general/NNL) education, technology/media and their relevance (or influence) on NNL education. The last section identifies challenges the countries face in bringing about changes in NNL education, and finally key findings of the research are presented, and implications for NNL policy making and future research are drawn from the findings.

English language education in the history

This section reviews the history (about 150 years) of English language education in Korea and Japan. It identifies major national or international events and historical incidents, which had impact on English language policy in each country.

Looking back through history, attempts are made to trace the complex influences upon language education over the years and how they may shape the current situation. To investigate the relationship between social, political and economic events (the "macro" events) and English education in the two countries, Annex 15.A1 shows three items: *a)* the year according to the western calendar, *b)* political era, and *c)* national or international (social, political and economic) events related to English Education. Historical incidents, which are closely related to NNL policies and practices (or which are significant related to NNL politics and practices) are also shown.

How did non-native language education start?

Japan

In the Japanese history, the accession of Emperor Meiji to the throne in 1868 brought about a radical transformation in society, politics and commerce. The Meiji Restoration (1868-1911) played a significant role in the start of NNL education at schools. There was a government-directed radical move toward westernisation, modernisation, civilisation and the enlightenment of its people. English, the language used by the western people, was considered a means for modernisation and enlightenment. In 1872, English was introduced as an official language following a report written by Mori, the first Minister of Education (MoE). Almost 3000 foreign educationalists were invited as consultants to the Ministry of Education (Fujimoto-Admson, 2006). English was used as a medium of instruction to teach western advanced knowledge on technology, science, architecture, and medicine. For example, English became the medium of instruction for all subjects in Kaisei University

(currently Tokyo University). The western instructors were not necessarily NNL education specialists with teaching experience (Imura, 2003). In 1881 non-native language education started in junior high schools. Among the beneficiaries of this education were students from high society families. The MoE also sent students abroad to gain foreign knowledge and bring it back to their own country.

The return of the students around the end of the 1880s brought about change, which has had a far-reaching impact on language education. When they started to teach what they had learned in overseas countries, they used Japanese, their mother tongue, instead of English. Translation became a popular and frequently used technique for teaching western knowledge (Imura, 2003). Academic books written in European languages were translated into Japanese. This then led to a sense among Japanese that English was no longer required to gain access to western culture and knowledge. Consequently, the status of English changed from a means to gain access to western culture and knowledge to a school subject (*idem*.). In 1889 the Japanese Imperial Constitution was established and this was interpreted as a booster for patriotism. Japan was involved in wars with other countries, and victories boosted Japanese patriotism, which affected the status of non-native languages (Fujimoto-Adamson, 2006). While the English boom was common during the first half of the Meiji Era, the latter half was considered as a "backlash" to the boom.

Throughout its modern period, Japan has consistently represented itself in internal and external discourse as monolingual nation (Gottlieb, 2008). Official policies and a highly influential essentialist literary genre called *Nihonjinron* (theories of what it means to be Japanese) had a key influence on much of the government, academic and cultural discourse on Japanese society, including ideas about language.

Korea

The treaties with America and Great Britain at the end of the 1880s provided the Choseon dynasty an opportunity to advance an initiative for non-native language education. After a long period of its rigid policy of isolation, it started to open the country to the western countries and to make endeavours towards modernisation. To meet the need for Korean interpreters, the royal court opened the *Dongmunhak* (Common Script Learning) in 1883, a one-year interpreter training school. For political reasons, the school was maintained under the heavy influence of China. Instructors (Chinese who had been educated in America) were chosen by the royal court's advisor appointed by China. School was meant for everybody, regardless of social status (Kim, 2008a). English, Japanese and arithmetic were taught, and its graduates served in various areas of the Choseon society, especially in diplomatic and customs affairs. It was closed when *Yukyeong Gongwon* (Public Institute of Education), the Royal English School, was established.

The realisation that the country was behind the times brought a strong need for taking reform measures. Given the American government's support, *Yukyeong Gongwon* was established in 1886 with different orientation and characteristics from *Dongmunhak*. As promised during the United States delegation's visit, it received support from America. Three carefully chosen American instructors were sent to Korea by the American commissioner of Education. Following the king's order, the students were carefully recommended and selected from well-known families and high-ranking officials of the time (Kim, 2008). The government was interested in cultivating in elite officials a command of English. It had its own school regulations, which were believed to be Korea's first modern ones. It is assumed that these rules served as guidelines for other modern schools. It provided a three-year course and twelve subjects were taught in English using English textbooks. It

was suggested that government positions be given to those who did well on the graduation exams called *Daego*. A vast investment was made by the government to recruit quality instructors from the United States. A highly exclusive selection of students applied, with admissions limited to a handful of sons of high-ranking yangban. The Korean government took the initiative to establish it, stepping out of the shadow of China that had loomed over the Dongmunhak. *Yugyeong Gongwon* was considered one of the ambitious modernisation endeavours the Korean government undertook, but although it received the king's unfailing support, the government closed the school in 1894, after eight years (Kim, 2008). Its failure was ascribed to frequent changes in instructors, to students' low motivation (it is assumed that the privileged background of its students hampered their motivation), to the government's lack in expertise and skills in management, and to the gap in educational goals between the government and instructors (the government goal was to equip elite officials with English skills, while instructors offered a college-level formal education – *i.e.* the gap between theory and practice) (Kim, 2008). Students scarcely showed any efforts to adjust to a lifestyle that required hard work and diligence. Other initiators for language education in the 19th century were American missionaries; since they were not openly allowed to act as such, they took a diverted means of carrying out their mission by providing Koreans medical and educational services instead of direct missionary work. At the missionary schools, subjects were taught in English, *i.e.* in immersion education (*idem*.). Then missionary work in the field of education was allowed by the King, and some missionary schools like *Baejae Hankdang* (1885) received the government's approval and support.

It has been recognised that missionaries played an important role in introducing and expanding English language education to Korean society under the isolationist policy and anti-foreign sentiment among the people. The influence of the missionaries lasted longer, directly and indirectly upon the expansion of the non-native language education throughout the coming turmoil in the dynasty. Kim (2008) noted that one of the differences between English language instruction at mission schools and the government-sponsored English education was that instruction was offered to students regardless of their social status. This difference is believed to have laid a foundation for the expansion and popularity of English regardless of the nation's political situation.

After the Gabo Reforms in 1894, Yugyeong Gongwon was closed and a modern educational system for the public, which included non-native language schools, was introduced (Kim, 2008). Modern school regulations were enacted and promulgated. In 1897, Joseon became the "Great Han Empire" (*Daehan Jeguk*) whose name of reign was the "Gwangmu Era". At that time, the government sponsored newly established non-native language schools (mainly for Russian, Chinese and German Schools). As a result of the Enlightenment Movement during Gwangmu Era, NNL schools were encouraged to meet the need for non-native language education. Although non-native language education continued to exist, its beneficiaries were still limited.

Ups and downs in NNL education

According to the socio-political and economic situation and their influence upon NNL policies, it is necessary to divide the century into two: before and after the Second World War. As the chronology of NNL education shows in Annex 15.A1, the 20th century witnessed NNL education in both countries experiencing declines and increases under changes in the historical and socio-political situation they underwent. The ups and downs of NNL education is discussed in three sections: before and during World War II (continued decline), after the war (booming) and the end of the century (emphasis/leap).

Before the War

In Japan, the decline of NNL education had already started at the latter half of the Meiji Era (1868-1911) (Fujimoto-Adamson, 2006). The victory in the wars at the end of the 19th century, it was believed, was achieved due to Japan's advances in technology and its strengthening military presence in the region. It was observed that several wars and historical incidents bolstered its people's patriotism and nationalism. According to Fujimoto-Adamson (2006), with returning Japanese lecturers from abroad wishing to teach Western knowledge through Japanese, the government wished even more to regard the Japanese language as the language of instruction for nationalist purposes. The new era, after making efforts to modernisation, was one of greater closeness to the outside world, yet one in which the Japanese sense of identity, both in terms of language and nationality, were uncomfortably trying to assert themselves in the world. This affected the government language policy and the status of NNL. Although it still continued as a subject at schools in spite of some changes in English education, the passion for the nation's NNL education shrank.

NNL education during the beginning of the 20th century was characterised as the co-existence of two enduring streams in language education, which had started around the end of the 19th century. "Two forms of curriculum" emerging in English education during the Meiji Era appeared more prominently in the next period, the Taisho Era (1912-25). In the dichotomy was the government's policy to import modern methodologies, as well as *juken-eigo*, English education to prepare for entrance examinations at universities and secondary schools (Fujimoto-Adamson, 2006). According to Fujimoto-Adamson (2006), an example of the former was in the government's invitation to the scholar, Swan, from the United Kingdom in 1901 to spread the "Gouin Method", a forerunner to the Audio-Lingual Method. The popularity of *juken-eigo* was illustrated by a new body of literature focusing on the examination practice, notably through the publication by Nanbi (1905) of "How to analyse English sentences" specifically written for students taking entrance examinations. More and more publications on the analysis and translation, for the preparation for the examination came on the market related to examination preparation, *e.g.* Ichikawa (1912) A book about English grammar; Yamazaki (1912) Official Applied analysis of English sentences; Hosoe (1917) A book on English grammar; Ono (1921) Interpretation of English sentences – an analysis and how to translate into Japanese. The government's efforts to adopt the contemporary method for effective non-native language education were reflected in the invitation of foreign scholars, the establishment of research centres and the radio channel in 1925.

In Japan, it is observed that the root of the contemporary focus on exams goes back to the early 20th century. Sakui (2004, pp. 155-163) observes that these "two forms of curriculum" still exist today: one is the national curriculum made by the government and the other the implementation in actual classrooms focusing on "serious test-taking preparation". This phenomenon has been in existence for more than 100 years, showing clearly the continuing dichotomy between policy formulation at the government level and its implementation in the classroom. It is often criticised that NNL education has failed to meet needs for the linguistic competences the changing society required.

While the forms of curriculum continued at schools, controversy surrounding NNL education had been affected by the historical incidents such as the new immigration law in the United States which forbade Japanese immigration. It is assumed that this social phenomenon reflected the government's education policy. Yoshino (1992) outlines that teachers were required to follow a more nationalistic policy: English was seen as a negative, foreign influence in society. Nationalist sentiments were at a high and Japanese identity was reconceptualised as being unique in character and spirit, that is, *nihonjinron* theory of Japanese uniqueness.

Anti-English language education reached its peak in 1941 when the Pacific War started at Pearl Harbor. According to Fujimoto-Adamson's (2006) review, in 1942 all the United Kingdom and United States lecturers in Japanese universities were dismissed. Later, all foreign academics were dismissed and the English language provision in Japanese education was abolished.

In Korea, NNL education at the beginning of the 20th century was under a greater influence of the socio-political turmoil than any other period in history. It underwent a great deal of change; this period is often called the dark ages in NNL education. At the end of the 19th century language schools were built with the government's support. However, the change in the political situation impacted them. Under the influence of the Russo-Japanese War (1904-05), the Russian Language School was forced to close as Japan declared Korea a protectorate and started to politically intervene. In 1909, all the government-supported language schools were merged under the name of Hanseong Foreign Language School. In 1910, Korea became a colony of Japan following the Annexation Treaty. A great deal of emphasis was given to Japanese language in the common school curriculum, gearing towards Japanisation. The language school Hanseong School was permanently shut down.

Kim (2008) divided the period of the colonial rule into three according to the political incidents and their impact on the NNL education: formation by military force control, cultural policy, and assimilation periods. According to her analysis, the first period (1910-19) is characterised by the establishment of a strictly centralised educational system in order to expedite Koreans' integration. As the goal of the colonial government's educational policy was to assimilate Koreans, emphasis was given to Japanese language education, and accordingly the status of other NNL significantly weakened. Along with Japanese teachers, Koreans who were educated in Japan came to exert important influence on modern education in Korea during its formation period. NNL education at secondary schools in this period was under the influence of Japan during this period, that is, two different curriculums.

The colonial government put emphasis on primary and vocational education for lower-level workers with simple manual skills. This was not conducive to the NNL education. The colonial government suppressed private schools and foreign-run mission schools. Under strict supervision, some professional schools run by missionaries such as Baejae Hakdang and Yeonhi Professional Schools were able to maintain the vein of English education. Missionaries sustained the field during the early colonial period as in the late 19th century. Kim (2008) found that in many mission schools, English continued to be a required subject.

The Koreans strongly resisted the colonial government. During the March First Movement in 1919, a nationwide independence movement took place. In order to promote *Nissen yuwa* (harmony between two countries), it took a more lenient conciliatory policy called the "cultural policy" or *bunka seiji*. This affected education policy. Among the major changes in education were the extension of the school years to the same length as for the Japanese, and the permission granted for teacher training schools and higher education (Kim, 2008). The first four-year university, Kyeongseion (Keijo or Seoul) Imperial University was opened and the government introduced a system of university entrance examination. The reinforcement of examination system has had strong influence on the Korean education and society. The exams connected one's schooling to his/her ability to acquire desired social status, and thus good performance on the exams was seen as a guarantee to success in society, provoking fierce competition among high-school students. The colonial government permitted private study abroad and adopted a government-sponsored study-abroad program.

Koreans received teacher training in Japan or in the United States. After their return, the Japan-trained teachers taught in government/public schools while the United States educated teachers in private schools, especially in mission schools. The Japan-educated far outnumbered the United States-educated. Kim (2008) estimates that among the Koreans studying in Japanese schools, the number of English majors was the highest. As they became teachers at government or public schools upon their return to the colony, and their Japanese-influenced pedagogy exerted important, long lasting influence on English language education in Korea. The grammar-translation methods were given the most attention in class, and thus students were more likely to develop linguistic knowledge rather than communication skills.

Opportunities for higher education expanded the number of Koreans receiving NNL education. During this period, the government alleviated restrictions on private education and mission schools. NNL education in private professional schools offered English teacher training and strengthened English curricula. The government's requirement of entrance exams for higher education institutions and inclusion of English as a test subject heightened the importance of English instruction in secondary schools (Kim, 2008). While Japanese language education continued to be prioritised, attention was given to other languages. This also contributed to creating a perceived ideal of a teacher. Those who were successful in assisting students prepared for the entrance exams were considered effective teachers.

As shown in Annex 15.A1, Japan was involved in a series of political incidents during the 1930s. This had influence upon the colonial government policy. In contrast to the "cultural policy" after the Koreans' independence movement, an era of harsh rule was opened, to borrow Kim's (2008) phrase, under the slogan of "Japan and Korea are one entity". This policy has been interpreted as Japan's effort to eradicate the Korean national identity, and to fully assimilate Koreans for the purpose of war. This of course affected its language policy. Japanese language education was given unprecedented emphasis as the daily means of communication. In 1937, it was ordered that all instruction be conducted in Japanese in schools. Shintoism put mission schools under threat. Some mission schools were forced to close. As Japan became embroiled in war, its antagonism against mission schools intensified and it made attempts to drive missionaries out. All missionaries and other Americans in Korea were ordered to leave Korea as Japan entered war against the United States in 1941.

The colonial government attempted to more thoroughly adapt the Korean educational system to serve the purpose of the Japanese war. In 1945, all classes in school were suspended and students were compelled to do more work at munitions factories or for other military purposes. The last decade of Japanese rule was a period of truly dark, tragic years for Koreans. During this decade, its forced emphasis on the Japanese language and mandate for worship at Shinto shrines threatened the existence of mission schools in Korea, created an anti-American atmosphere, and restructured Korea as a war supply base (Kim, 2008). The educational field therefore suffered a sharp decline during the last decade of Japanese colonial rule.

The language policy during the period between 1938 and 1945 can be characterised as the strict enforcement of Japan's monolingual policy to attempt to assimilate Koreans and convert the entire colony into a war supply base, hauling Korean youth for labour mobilisation and battle lines (Kim, 2008). NNL education in Korea declined during this period, before coming to an end as World War II ended in the Allies' victory (Korea was thus liberated on 15 August 1945).

NNL after the war

The United States occupation of Japan started in 1945, as Japan surrendered to the Allied Forces. Fujimoto-Adamson (2006) describes change in the political, economical and educational systems as a result of the reform supervised by the General Headquarters (GHQ) organised by the United States military. He adds that the changes under the GHQ can be compared with the internally directed change in the Meiji Restoration initiated/followed after the arrival of Commodore Perry and his ships in Japan.

It is interpreted that the GHQ's missions influenced many aspects of society. Buruma (2003) states that the United States' occupation played a major role in influencing Japanese interest in English education. He refers to this period as the second English boom, almost 70 years after the first one at the beginning of the Meiji Era. This was seen in various key events, among which was the creation of "Come Come English," a radio English conversation programme by Hirakawa in 1946. This popular NHK broadcast encouraged many people to listen in and start to study English. Also, in the following year, English lessons started again in junior high schools and the tentative plan of The Course of Study, which was the National Curriculum for all subjects including English, devised under United States supervision. This boom contributed to the popularisation of English, while only the privileged class benefitted from the NNL education boom in the (early) Meiji Era.

In 1952, the first Fulbright English teachers from the United States arrived in Japan. United States scholars such as C. C. Fries, of Michigan University, visited the country. As Imura (2003) observes, around this time, the two streams of NNL education - the government propensity to import new methodological trends in English language education, and the entrance examination trend - which had first emerged in the Meiji Era started to become apparent again. While the government introduced the new National Curriculum, emphasising the importance of basic English ability, publications to prepare students for entrance examinations became available.

Japan's dramatic, miraculous economic developments after the war brought its nationals a need for NNL proficiency. Widespread among the business sector was a call to improve the level of "Practical English" among company recruits so that the Japanese workforce could be better equipped to conduct international business. Imura (2003) attributes the call as the initiative of the Society for Testing English Proficiency to introduce EIKEN (えいけん [英検], an abbreviation of *Jitsuyō Eigo Ginō Kentei*, Test in Practical English Proficiency) in 1963. Since then EIKEN has been used to assess the English language proficiency of Japanese students. It has been taken by more than 80 million examinees. Imura (2003) indicates that the introduction of the first nationwide English test during the Economic Miracle period (1955-1970s) signifies the connection between business and English education.

There were several English educational reforms from post-war Japan to 1987. In 1947, the Japanese Ministry of Education (then called *Monbusho*, and now called "MEXT" for "Ministry of Education, Culture, Sports, Science and Technology") suggested a tentative course of study and revised it in 1951-58, in 1973, and in 1978. However, as Imura (2003) points out, the focus and approach remains almost the same, that is, the focus was on basic literacy, grammar, composition, translation, and writing exams; accordingly, grammar translation method prevailed. The fact that English education at schools was still university-entrance-examination-oriented was criticised. In spite of the changes at the level of the course of study, Sakui (2004, pp. 155-163) observes that these "two forms of curriculum" still exist today: one is the national curriculum made by the government and the other the implementation in the actual classrooms focusing on "serious test-taking preparation".

In the mid-1970s, there was debate surrounding English education at school among intellectuals. For example, Hiraizumi, a politician of the ruling party, argued that English should only be taught to students who really needed it and English should become available only to an elite set of students. Others defended English education at schools, criticising that the creation of an English-speaking elite failed to consider the ever-growing practical needs of the population. Watanabe, an English linguist, was against English education abolishment, stating that English education for examination is valuable to train Japanese students' intelligence (cited in Imura, 2003).

In Korea after World War II, United States forces arrived and the United States Army Military Government (USAMG) ruled over southern Korea from 1945 to 1948 when the South Korean government was established. During this three-year occupation, Korea was under American influence, which was wide-spread and persistent, and the occupation signalled the beginning of the United States's direct involvement in the Korean politics (Kim, 2008). The structure of the USAMG in Korea bore a close parallel to the highly centralised colonial government, with the military governor acting as Governor-General. During this short period of time, the military government was able to lay the foundation for South Korea's political structure, which lasted until the 1960s, and for the introduction of a capitalist economy and a free market system. The USAMG may have had a lasting impact on almost every aspect of Korean society.

The political situation during the rule of the USAMG brought about change in education including language policy. From 1944 to 1948, the enrolment in the public elementary schools increased by almost 50% only in South Korea. The government put priority to the problem of illiteracy of the public. The opportunity for (compulsory) education was extended to the public. The national curriculum of 1946 served as a guideline for the development of primary and secondary education in South Korea until 1954, when the first national curriculum by the Korean government was introduced after the turmoil of the Korean War. Since then education has followed the highly centralised national curriculum system.

After the liberation, Japanese teachers (the ratio of Korean and Japanese teachers was then 3 to 2) returned to their own country and there was a great demand for Korean teachers with training. The shortage of teachers became a critical issue that required both instant relief and long-term solutions (Kim, 2008). The government provided teacher training through both regular schools such as normal schools for elementary school teachers, teachers' college for secondary school teachers, and short-term training programs.

The remarkable progress in education during this period was attributed mainly to the effective collaboration between the government and the Korean educational leaders who aggressively pursued educational reform. From the political perspective, the USAMG's ultimate goal in education was to instil (American) democracy into the Koreans' minds with the intention of establishing an anti-communistic system in South Korea. The American officers in the bureau of education lacked intimate knowledge of Korea and expertise in education, and thus consulted the Korean educational elite in formulating and implementing policies. The Korean educational elite, many of whom held advanced degrees from American institutions and had years of educational experience, enjoyed autonomy and exercised the power of execution (Kim, 2008).

During the period of the United States military government, English was the most important NNL. This laid the foundation for the current elevated status of English education in Korea. The fact that the USAMG was in control may have been sufficient to enhance the language's status in South Korea, but it took further measures to strengthen the influence of English. According to Kim (2008), it was announced that English was the

official language in 1945, reading "For all purposes during the military control, English will be the official language. In event of any ambiguity or diversity of interpretation or definition between any English and Korean or Japanese text, the English text shall prevail." (According to Article V of Proclamation No. 1 by the United States Armed Forces in Korea [USFK]). The choice of English may have been inevitable since it would have been impossible for the military personnel to carry out their duties in other languages. In 1947, one month after the establishment of the South Korean Interim Government (SKIG), when administrative authority was transferred to Koreans, the government finally acknowledged the Korean language as the nation's official language.

The military government elevated the status of English by its employment of Koreans who had studied in the United States. Other officials looked for Koreans who had studied in America, particularly those with doctoral degrees. Those who had not had appropriate jobs under colonial rule because of their educational background were now at the forefront of building a new country. The military government's active pursuit and utilisation of English-speaking United States-educated locals intensified Koreans' interest in attending American schools. In addition, its need to secure Koreans who would readily align themselves with American policy and ideology resulted in a rapid growth of students going to the US. During the colonisation period, it was observed that the Korean graduates of colleges and universities in Japan numbered about a thousand a year (Kim, 2008). Then America took the place of Japan as a foreign country where students could go and be trained for future leadership in the numerous phases of national life.

The military government's English-related policy and practices affected the Korean society in critical ways. First of all, the government's adoption of English as the official language and utilisation of Koreans with proficiency enhanced the status and value of English language education. The belief became popular that educational background in America or proficiency in English would guarantee a prestigious social status. As English ability and degrees from American schools were imprinted as highly effective tools to reach higher social positions in Koreans' minds, many began seeking opportunities to study in the United States. Approximately 89% of the study-abroad students in the 1950s chose American institutions, and this tendency has continued to the present. The returnees have formed a new elite, dominating a vast range of sectors including academia, politics, finance and the military in Korean society. South Korea is considered by many a highly Americanised society, with disproportionate emphasis on things American (Kim, 2008).

Among Koreans with English proficiency were beneficiaries of the Japanese colonial rule, for educational opportunities had been excruciatingly limited. According to the political situation, it would have been impossible to receive an education sufficient to speak English without collaborating with the colonial government. Thanks to the American military government's emphasis on English ability, allowing those with knowledge of the language to take part in policy making and implementation, Koreans who were considered pro-Japanese maintained their vested rights. Problems lay in a social inequity: those who were poor and radical fought against Japanese repression and were excluded from the opportunity for English education, and even after the liberation, the political situation kept them from participating in the new government and establishing themselves in the new world. Kim (2008) points out that those without the benefit of English education in the colonial government continued to be excluded from the benefit of social mobility; this is considered as a vicious cycle in the NNL education.

After the turmoil of the Korean War, the national curriculum for English education was ready in 1954, and had a great influence of English education during the USAMG

rule. English education since the first national curriculum was required to follow what was stated in the national curriculum. At the national curriculum level, goals, values, the number of English classes, guidelines for teaching, and vocabulary control were included. American English was proposed as a standard. Before the sixth national curriculum, the underlying assumption was on a structural syllabus with a focus on grammar, contrastive analysis, and translation. This prevailed in the NNL education in Korea until the end of the 1980s, when a great demand for communicative language teaching developed. While the national curriculum was revised five times since the first national curriculum, little change was made in the NNL education at schools.

After the Korean War, the Korean government has made efforts to reconstruct the country, and in the 1980s, Korea was ready to join in the global economy. The number of students studying in English-speaking countries increased, and more people travelled around the world. The national economy became global. There was a great nationwide demand for English from the society as it became internationalised.

The role of missionaries in NNL education cannot be ignored. The liberation of the country from Japan brought new groups of missionaries, which made a great deal of contribution to English education in the private sector. They made a contribution to solving the shortage of English instructors by supplying native speaking teachers. A new route of native speakers of English teachers was the Peace Corps volunteer program from the United States. According to Kwon (2000), the first group of Peace Corps volunteers arrived in 1966 and were assigned to secondary and tertiary education institutions. The Peace Corps Program ended in the early 1980s as Korea grew out of the status of an underdeveloped country. There was a growing need for English teaching professionals in the expanding industry, and large industrial conglomerates (*chaebols*) recruited native English speaking professionals (Dusthimer and Gillett, 1999). Demand for teachers became overwhelming as the national curriculum was revised on the basis on communicative language teaching.

To sum up, the political situation after the war put Korea and Japan under the influence of the United States. It is assumed that the political situation had a great impact upon the status of English in society, which was making great efforts to reconstruct the countries after the war and the decolonisation. NNL proficiency was then considered a tool thanks to which the countries could better compete in the world economy. There was a strong need for communicative language teaching, but in practice there still was a gap between social needs and practices. The Japanese approach to language education was considered a honey in the comb policy. Language education in Korea had been considered a tool for social mobility. The benefits, however, were largely limited to a high social class.

Gearing toward the 21st century (during the last two decades of the 20th century)

In Japan during this period, society was geared toward globalisation and the new millennium. Demand for the change in NNL education increased as the nation's awareness of global communication and interdependence rose. One of the remarkable changes during this period was to invite native teachers of English to the country. In the mid-1980s there was a growing awareness that research into classroom practice was needed and so the *Eigojigyo Kenkyukai* (Association of Research for English Teaching in the Classroom) was established. Voices for change at schools were heard (Fujimoto-Adamson, 2006). It was also noticeable that advancements in information and communication technologies (ICT) boosted the spread of English in the globalised world.

There was a growing attention to the contemporary approach to NNL education, *i.e*. communicative language teaching (CLT). The growing attention to communicative language teaching raised the need for native speaking teachers. In the 1980s, at the same time, the communicative approach became increasingly popular, attracting many teachers. Most significantly for Japanese High Schools, in 1987 the Japan Exchange and Teaching Programme (JET), a government initiative started; Monbusho (MEXT, 2002) states that this programme was introduced to improve NNL education in Japan.

A revision in the national curriculum was implemented to put emphasis on communicative skills and understanding cultures in NNL education. In 1989, in the new revised course of study by Monbusho, it was made it clear that literacy alone was no longer sufficient and that language must be taught in relation to the culture which supports it (Monbusho, 1989).

According to Tsui (2004), since the Meiji reform, Japan has functioned exclusively in the national language. The unity of nation, state and language has always been taken for granted (Coulmans, 2002). In the 1970s, because of its rapid economic development and influence, and its aspiration to strengthen its international status, the Japanese government poured resources into the promotion of Japanese both within Japan and overseas, and the use of Japanese in international conferences and meetings (Gottlieb, 2001).

However, since the 1980s, under the pressure of globalisation, the Japanese government raised its awareness of NNL education, as the recruitment of native-speaker English teachers in Japan under the JET Program in 1987 and the introduction of English at the elementary level as part of the informal curriculum in 1997 testify. In a report of the Curriculum Council in Japan, it was explicitly stated that the primary purpose of the national curriculum standards reform was "to help a child cultivate rich humanity, sociality and identity as a Japanese living in the international community" (Monbusho, 1998, as cited in Gottlieb, 2001, p. 44). The cultivation of "Japanese with English abilities" is part of the Basic Policies for Economic and Fiscal Management and Structural Reform 2002. The policy included the reform plan, which stated that by 2005 there would be 100 super high schools in which English would be the medium of instruction (Tanabe, 2003).

As in many other countries around the world, emphasis on a shift to a communicative teaching methodology was a major element underpinning NNL policies in the 1980s, while traditional teaching methods strongly emphasised reading and writing skills with a heavy focus on grammar (aimed at achieving success in university entrance examinations: extensive classroom practice time based on written multiple-choice tests was required for these). With large classes all being taught this way, Japanese proficiency in spoken English has historically been poor. Since 1987, the JET programme has aimed to change this through promoting a shift towards a more communicative teaching approach by providing native-speaker Assistant Language Teachers (ALT) to assist Japanese teachers with more communicatively oriented activities in middle and high school classrooms.

According to Gottlieb (2008), the ALTs come predominantly from English-speaking countries such as Australia, Canada, New Zealand, United Kingdom and the United States. In 1991, the Central Deliberative Committee on Education recommended that the number of ALTs be increased and that the Course of Study guidelines be revised to promote a greater emphasis on communication (Ministry of Education, 1991).

Fujimoto-Adamson (2006) states that, in 1989, an Oral Communication lesson in the English language syllabus in Senor High Schools started. This was considered the government's first direct effort to develop students' speaking ability. The internet and the growing popularity of the JET scheme made contributions to another English boom in

Japan. In 1997, "globalisation," "cultural differences" and "international understanding" became official slogans for state-run English education. In addition, English lessons at some primary schools started on an experimental basis, as an extra-curricular activity.

Fujimoto-Adamson (2006) points out that this recent trend is similar to the Meiji Era initial tendency towards English-medium instruction, yet is more significant now, in that more students will be affected. The second part of the new policy is to provide a wide-ranging teacher training programme to all junior and senior high school teachers in methodology and linguistic ability. Interestingly, the means to measure the teachers' linguistic competence comes from the private sector through the STEP and TOEIC testing systems.

Fujimoto-Adamson (2006) also noted that since the start of English education, the current Heisei Era seems to have reached a new peak of English language education in Japan. English at schools, colleges, universities and the growing private language school market is enormously popular and appears to be responding to the needs of the business community at last, since they were first voiced in the late 1950s. It seems that the nation responds not just to the needs of the business sector, though.

In Korea, due to the political situation after the Liberation and the Korean War, the perception of English as a tool for a better life was widespread among its people. English was essential to education, power, and success in Korea, and the ability to speak English well was associated with higher status and therefore much desired. At the same time, Korea started to gain recognition from the world. People travelling overseas and going abroad to study increased as its economy bloomed. Furthermore, the 1988 Olympic Games provided motivation to raise Koreans' awareness of the significance of English in the globalising world to be competitive. The 1988 Olympic Games provided the country a turning point for NNL education. The importance of English gained recognition in the 1970s and 1980s as Korea became a major trading partner with many countries, especially the United States.

During the 14th government (1993-98), President Kim put emphasis on the internationalisation of the country, which was prompted by the WTO (World Trade Organisation)'s agreement towards opening markets. A series of innovative language policies were formulated and implemented in the 1990s. The measures to lower the starting age to learn English was a case in point. With a great deal of controversy and concern across the country, English was introduced in 1997 as a compulsory subject in primary schools.

For the implementation of this innovative policy, a great deal of the budget was spent on intensive in-service teacher training. This had an influence on the curriculum of the primary teacher training colleges. It provided student teachers at the training institute initial teacher training for teaching English at the primary level. Textbooks for primary English education were authorised by the government and distributed to each school. Intensive in-service teacher training was provided through 16 local offices of education across the country.

Emphasis on CLT also had influence on the government's policy to recruit native speaker teachers for NNL education. In 1992, the government set up the native recruitment program called the Fulbright ETA Program, which started with eight native-speaker (NS) teachers of English at secondary schools (Kwon, 2000). This program increased the number of the native speakers and introduced in 1995 a new native speaker recruitment program called EPIK (English Program in Korea, originally called KORETTA, Korea English Teacher Training Assistant), modelled after the Japanese JET program (Dusthimer and Gillett, 1999). It started with 600 native speakers recruited in 1996. In the 1990s, the change also impacted higher education. Universities and colleges began to employ NS instructors on

their own. During this decade, the private sector imported a great deal of foreign teachers. One of the important changes in the English teaching profession of Korea in the 1990s was the emphasis on communicative competence. The term communicative competence has become a buzzword for those concerned in NNL education. Developing both students' and teachers' communicative competence was given priority in teacher training.

This is also reflected in the English test in the national college entrance examination. In 1993, the national college entrance exam called College Scholastic Ability Test (CSAT) introduced English as one of the key subjects. In the test, listening items were included and then only increased. Following the revised national curriculum, in 1996 speaking items were introduced to measure students' speaking skills. Seventeen of the 55 test items were designed for these purposes.

Responding to globalisation: Reforms in NNL education for the 21st century

This section deals with changes in NNL education in response to socio-economical changes globalisation has brought about to both countries. For Korea and Japan, the early 21st century has been taken as a turning point for reforms in English education. Globalisation has brought about changes in society and linguistic competence has been considered a commodity in the globalised world. English is not considered a "foreign language" anymore, but has been identified as the global language, international language or *lingua franca*. NNL education is no longer optional but required. This section covers how both countries react and what differences and similarities are identified in their NNL reform strategies.

Japan's 2003 Action Plan

The step into the 21st century has brought a self-evaluation of its NNL education effectiveness as a response to the globalisation. The government launched the close examination of the failure to bring about change toward communicative language teaching in spite of its continuous efforts over half of the last century. Poor results on international tests such as TOEIC and TOEFL also supported the notion that NNL education has not been successful.

It was acknowledged that there had been a number of factors why English education failed. Among them are deep-rooted nationalism, low motivation caused by learning English for exams not for communication, and little innovation in the implementation in the classroom. Aspinall (2006) sees motivation as present among all actors in the process, *i.e.* students, teachers, parents and policy makers; it is not a lack of will to learn or an opposition to policies that impedes improvement, he suggests, but rather a failure at the implementation stage. He locates the difficulty in national norms and values relating to teaching and learning and suggests that one solution may lie in a "small culture" paradigm focusing on group dynamics within a small culture as a classroom.

McVeigh (2004) argues that NNL learning, predominantly English, has been seriously impaired by nationalist elements in both state and corporate culture, which dismiss the humanistic value of language learning in favour of a culture strongly influenced by the Nihonjinron nexus of language and identity (see della Chiesa, Chapters 1 and 26, this volume). Motivation, in his view, is the primary weakness of NNL learning, because students of English focus on passing examinations while trying to achieve the aims of corporate culture, or even contributing to "a vague sense of the national collective" rather

than developing a sense of themselves as human beings able to speak more than one language. From his view, linguistic nationalism is responsible for a bifurcated view of English depending on its purpose. The Japanese version of English, or "Japan-oriented English" (*eigo*) is "English for Japanese," *i.e.* for nationalist utilitarian purposes, while the non-Japanese version of English, or "non-Japan-oriented English" (*eikaiwa*) is "English for communication" (McVeigh, 2004). In other words, it is English for climbing the examination-education ladder. He argues that *eigo* is a sort of non-communicative, artificial language designed for testing purposes.

Strategic policy such as "2003 Action Plan" proposed by the government in the new millennium has been considered the result of its self-examination of NNL education at the national level. The growing awareness of interdependency in the globalised world was reflected in the action plan. It is considered a deliberate attempt by government to improve the teaching of NNL, in particular the strategically significant English. Along with the JET programme, the Action Plan clearly comes under the umbrella of language planning with its emphasis on goals that all Japanese citizens will be able to communicate in English upon graduation from middle and high school, and that university graduates will further be able to use English in their work.

According to Butler and Ilno (2005), the Action Plan of 2003 was proposed in response to repeated criticisms that Japan's English education was centred on *juken eigo* (English for the purpose of entrance examination) and did not meet the various needs of Japan for globalisation. Given the importance of English in many aspects such as trade, science and entertainment, there have been calls for a more practical approach to English education in Japan.

Box 15.1. **The outline of the 2003 Action Plan**

I. Goals to cultivate "Japanese with English abilities"

- English language abilities required for all Japanese nationals. On graduating from junior high school and senior high school, graduates can communicate in English.
- English language skills required for specialised fields or for those active in international society. On graduating from university, graduates can use English in their work.

II. Actions to improve English education

1. improving English classes
2. improving the teaching ability of English teachers and upgrading the teaching system
3. improving motivation for learning English
4. improving the evaluation system for selecting school and university applicants
5. support for English conversation activities in elementary schools
6. improving Japanese language abilities
7. promotion of practice research

Such a strategic Action Plan establishes a system for cultivating "Japanese with English abilities" in five years (MEXT, 2003). The formulation of this concrete action plan clarified the goals and directions for the improvement of English education to be achieved by 2008 and the measures that should be taken by the government to realise

these goals. It emphasised the importance for all Japanese to aim at achieving a level of English commensurate with average world standards based on indicators such as STEP test, TOEFL, and TOEIC.

According to Gottlieb (2008), funding for the strategic plan was for the first time incorporated into the national budget. Given that budgets in other areas were being cut at the time, this may be taken to reflect the importance accorded to English education (Aspinall, 2006). Specific steps detailed the strategies to be used to reach the goals set, including upgrading teacher proficiency and pedagogical methods, and improving motivation for learning English through study abroad and other means (MEXT, 2003). Among the strategies to be adopted were that English would be the medium of communication for most of each class, and students would be tracked according to proficiency and small-group teaching would be promoted.

Following the 2003 Action Plan, the teaching of English has attracted both policy attention and large amounts of funding. The status of English in NNL education has changed from a key NNL *(gaikokugo)* to an international language (see Honna, this volume). Keizo Obuchi clearly articulated this focus in the report of the Prime Minister's Commission 2000 (Kawai *et al*., 2000):

> Achieving world-class excellence demands that, in addition to mastering information technology, all Japanese acquire a working knowledge of English – not as simply a foreign language but as the international lingua franca. English in this sense is a prerequisite for obtaining global information, expressing intentions, and sharing values. Of course the Japanese language, our mother tongue, is the basis for perpetuating Japan's culture and traditions, and study of foreign languages other than English should be actively encouraged. Nevertheless, knowledge of English as the international *lingua franca* equips one with a key skill for knowing and accessing the world.

The report recommended that all government departments and public institutions at national and local levels adopt a policy of producing web pages and publications in both English and Japanese and flagged the possibility of future long-term discussion on the feasibility of designating English as an official second language. Hashimoto (2002) reports published reactions as variously encompassing a view that a "second official language" really only means an official language for international communication along with fear that a can-and-cannot social divide with regard to English proficiency would emerge and that Japanese cultural identity would be threatened. One less pessimistic view, however, was that an English-driven change in communication styles would make Japan more competitive internationally. Some private primary schools introduced English not as a compulsory subject but a part of extra-curricular activity. It was reported that English is taught at 97% of the public primary schools. Most schools have difficulty due to inadequate textbooks and teachers' low proficiency in English. Torikai (2005) notes that today Japan views the study of English as a survival skill to assist in communication outside Japan rather than a competence that has any substantial role to play within it.

As Gottlieb (2008) analyses, the strategic plans revealed the orientation the Japanese government took in making NNL policy. It identified English as an international language children should acquire in order to live in the 21st century. It acknowledged that English education has become an extremely important issue both in terms of the future of children and the further development of Japan as a nation. It also pointed out that the present English-speaking abilities of a large percentage of the population are inadequate, and this imposes restrictions on exchanges with foreigners and creates occasions when the ideas and opinions of Japanese people are not appropriately evaluated (MEXT, 2002). As

Gottlieb (2008) indicates, this orientation is not just a one-way information exchange; not only is English important in terms of understanding foreigners, it is also needed in order for Japanese opinions to be properly heard.

When English was first brought into middle schools as an elective subject in 1947, it was not compulsory (except at certain schools) but was studied by most students because many university degrees have a NNL requirement, which led to an emphasis in high school and university entrance exams on English (Kitao *et al*., 1994). Japanese secondary school students, as previously noted, studied English for six years as a compulsory subject and often followed this with further study at university level: at most universities, students must study English for the first two years (Honna and Takeshita, 1999). English education is virtually synonymous with the term "foreign language education". The most recent Course of Study for Foreign Languages guidelines available on the MEXT website (MEXT, 2003d), makes this abundantly clear. Although the "Overall Objectives" introductory section speaks of "foreign languages", the only one referred to by name in the document is English. The only nod given to other languages is a brief paragraph indicating that where they are offered as elective subjects, schools should adapt the curriculum guidelines for English.

English education reforms in Korea

During the first decade of the 21st century Korea experienced more change and challenges than any other period of time in its history. It has been said that other countries could draw implications for their NNL policy from the Korean experience.

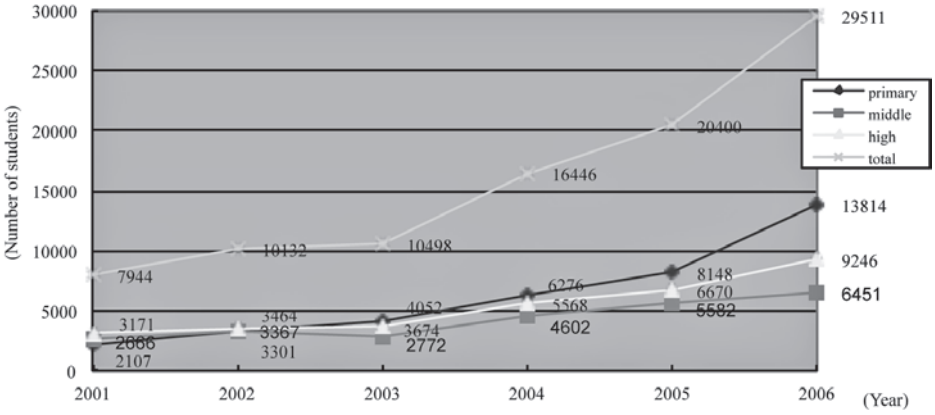
As indicated through the analysis of the historical background to NNL education, English language proficiency has been considered a pre-requisite for being elite in Korean society. It has been widely accepted that people are preoccupied by social status and reputation, and education is supreme. This socio-cultural background has played a significant role in urging changes in NNL education at schools. People want themselves or their children to be of a high social level with a higher degree of English proficiency than others. NNL education at public schools has been criticised for not satisfying their desire for the high social status. The spending for private tutoring each family pays for their children shows how Koreans have invested in improving their English. Strong concern has been expressed over the negative influence on the national economy and the gap between haves and have-nots.

According to MEST statistics (MEST and KEDI, 2009), the total number of primary and secondary students studying abroad has increased since 2001. The number of primary students has more sharply increased than that of secondary students (see Figure 15.3).

It was interpreted that this trend was closely related to the early start of English education at grade 3 of the primary school. Since 1997 when English was introduced at the primary level, some parents sent their children to English speaking countries to be exposed to the target language and acquire it in a natural environment.

The analysis of countries for overseas study (East Asia Institute, 2007) reveals that the first country students go is the United States (34.6%), followed by China (18.0%), Canada (12.6%), East-South Asian countries (11.4%), Australia and New Zealand (8.8%). According to the American IIE (Institute of International Education), the number of Korean students in the United States between 2008 and 2009 amounts to 75 065, which is a record high; it also represents a 9% increase compared to the year before. Out of the whole population of overseas students from non-English speaking countries, Koreans are 11.2%, following

Figure 15.3. **The number of Korean students going abroad for education**



China and India (Park, 2009). Considering the current difficult economy, the increase of the students going abroad is considered an investment for social mobility.

The increasing number of students flying abroad to study NNLs has had a side effect on the national economy. The Bank of Korea said about USD 1.4 billion went to NNL study abroad in 2007. The government expressed concern regarding the increasing deficit caused by the number of the students flying abroad to study. Recently, the data on the balance reveals that over 17 years (from 1993 to 2009), the deficit reached about USD 35.0 billion. In 1993, the deficit was USD 0.26200 billion, but reached USD 4.98 billion in 2007.

The tendency for youth to study abroad has also caused social problems such as "goose fathers". The reference is to fathers who choose to live alone by sending their children with their mothers abroad for a better education. Left behind for financial reasons, wild geese fathers found it hard to live apart from their families, working overtime and holidays to support their family overseas. Financial pressures and psychological problems the patriarchs suffer have become serious social problems. Newspapers report that some of them often die of heart attacks from overwork at night in their deserted homes or lonely offices, trying to fulfil their goal of sending as much money as possible to their families. Others suffer from malnutrition due to poor and irregular meals. Like migratory wild geese, they only see their families during the summer holidays. This is considered a sign of something amiss in society (*www.koreatimes.co.kr/www/news/nation/2010/11/117_ 40060.html*).

To solve these identified problems and to prevent even more serious social problems, the government proposed unprecedented reform strategies. In 2006 English Education Reform Team (later English Education Reinforcement Team) was set up by the MEST with duties of changing and improving NNL education at primary, secondary and high schools. The goals of such an action were to encourage students to remain in Korea instead of going abroad for language study, to cut the national deficit, to reduce private education cost of individual household, and to solve educational inequity through changing and improving school NNL education. The team formulated reform policies and implemented to schools, which drew nationals' attention across the country. In 2007 English education reform was the presidential election campaign promise. Although some people showed concern over unbalanced financial support for English, there was agreement among the public that the school NNL education should be improved if the nation was to be competitive in the globalised world.

Reform strategies can be grouped into three areas: curriculum, teacher education and infrastructure for English education. Through the curriculum revision, English is identified as an international language instead of a NNL. Communicative skills are emphasised and attention was paid to cultural understanding in NNL education. In terms of intensity, the number of English classes at the primary school increased to maximise effectiveness of English education and reduce household spending for private education. The national-level research findings on the effectiveness of the 10-year-old primary English education (Kwon, 2008) had an impact on policy. Under the revised curriculum, children have two (instead of one) English classes per week at grades 3 and 4, and three (instead of two) classes at grades 5 and 6.

A great emphasis is given to the important role of teacher in the effective educational change. Reform strategies were proposed for three sub-areas of teacher education: pre-service, teacher selection and in-service teacher education. Teacher training institutes were required to revise their training curriculum to meet social needs for English teachers with proficiency. The traditional curriculum of teacher training was criticised for its emphasis on theory. In the teacher selection candidates' language proficiency and teaching skills are required for qualification as well as subject knowledge. Customised in-service training programmes were provided to meet English teachers' needs. Six-month intensive teacher training programme is one example. Teachers were given opportunities to go to English speaking countries for language improvement and better teaching. Table 15.1 shows the number of trainees and expenditure since 2006.

Table 15.1. **The number of teacher trainees and budget for six-month intensive training (2006-09)**

Year	2006	2007	2008	2009
Number of trainees	396	912	1 174	2 184
Budget (in millions of won)	2 672	4 092	6 750	9 000

Source: Ministry of Education, Science and Technology (2010), "Plan for Intensive English Teacher Training", retrieved from *www.english.go.kr:80/ebs/jsp/fgz/ahp/Ahp_Teacher_List_B.jsp?forum_id=950&article_id=0000000066399*, accessed October 2010.

Reform policy for native teacher recruitment and employment was proposed by the English Reform Team of MEST. It was proposed that each school has at least one native speaker English teacher. This means more native speakers need to be recruited and employed by the government. Firstly, a local educational teacher-training institute ran EPIK through a government commission, but it was transferred to the National Institute for International Education (NIIED, *www.niied.go.kr*) under the MEST. The recruitment system was reorganised to attract more qualified teachers to teach English at schools in Korea. A new native speaker recruitment program called TaLK (Teach and Learn in Korea) was introduced to employ native speakers qualified to teach English on a Korean government scholarship. The TaLK program started in 2008 in order to invite and train native English teachers and overseas Koreans to teach practical English in after-school classes at rural elementary schools, while the native English teachers employed through the EPIK program teach English during regular hours. The TaLK program was established to reduce household spending for private tutoring. Training programs for employed native-speaking teachers were provided to support their settlement and teaching.

Infrastructure plans were proposed to foster change in English education with the revised curriculum and teacher support designed to support English education at schools. The government proposed the policy to broadcast in English on the national English education channel for the whole nation. This policy was adapted from the Finnish case with 24 English channels. The Korean Education Broadcasting System English (EBS-e, *www.ebse.co.kr/*) is in charge of broadcasting English educational programs for pre-schoolers, primary, secondary, high school students, parents, and teachers. Among the government investment in infrastructure for English education are English-only Zone, English Library, English Centre, English Village, and Online Learning and Teaching Network for rural areas.

More recently, the government proposed the National English Ability Test (NEAT), a domestically developed test, which is designed to measure Korean students' communicative skill in English. It was suggested that the NEAT would replace the current university entrance examination (CSAT), which had been criticised for its failure to bring about change in the NNL education. The rationale for the language test policy is that changes in the national test will bring about changes in NNL education in schools. While the CSAT is limited in measuring its test takers' productive skills, *i.e.* speaking and writing skills, the NEAT is designed to measure language skills with weight on the productive skills.

In Korea, the cost for NNL education can be analysed at both government and household levels. The government-level budget is for the improvement in NNL education in the public sector, while the domestic-level cost is what individual family (household) spends for NNL education. According to OECD indicators, household budget for education is generally higher than in other countries (OECD, 2009). The current government continues to support the NNL reform policy with increased budgets. It was indicated that the budget for 2009 for NNL education was 19.5 billion won (a 186% increase compared to 2008). Details of the increase include new projects for NNL reforms as follows: 10.1 billion for TaLK, 1.3 billion for Teaching and Learning Method Development, 2.86 billion for native teacher support in teacher-training institutions, 1.2 billion for primary English teacher training institutions.

This section has provided an overview of the NNL policies that Korea and Japan proposed and implemented in response to globalisation. It seems that both countries share some commonalities in NNL education policies and innovations. From the historical perspective, it is clear that NNL education in both countries has been affected by socio-political situations. At some point in history the political situation between the countries had a great and long-lasting influence in the NNL education of each other. For this reason, the comparison of innovative strategies two government proposed and implemented shows there are similarities and differences.

Challenges ahead

This section deals with some challenges Korea and Japan have faced, currently face and might face in NNL educational policy-making and implementation. The discussion is based upon comparative accounts of NNL education of the countries from historical, socio-cultural and economic perspectives.

Move from the government-directed to teacher-centred approaches to change

Changes in NNL policies in Korea and Japan are characterised as heavily centralised by the government. One of the challenges such government-directed approaches to changes has been that practitioners play a passive role in the change process as a recipient of

the government decision. This is attributed to the gap between policy and practice. The top-down approach has been criticised for its failure to change NNL education from the traditional grammar-focused language teaching to the communicative language teaching. The government-directed strategy is also criticised for paying little attention to the central role of practitioners in bringing about change to practice. While the government's efforts for the active response to globalisation have gained support, a strong concern is expressed for the government's repeating past experience unless a bottom-up approach is employed. In a bottom-up approach, teachers are not policy consumers, but take responsibility for their own professional development, actively responding to a need for change. It is proposed that change can be effective if the government reform strategy work with voices from practice.

The importance of teachers in the change process is shown in the historical comparative overview. English teacher training over the colonial period put heavy focus on language knowledge and translation, and this continued to have a far-reaching impact on English education in Korea even after colonial period. According to the assumption that teachers teach as they were taught, a vicious cycle went on and little change was made in the NNL education. The role the teacher plays in the change process is stressed and the Korean government has proposed a new policy on NNL teachers and its huge budget has been invested for innovation in NNL teacher education. The Korean government currently supports innovation in the pre-service sector as well as in the in-service teacher training and development. Likewise, in Japan concern has been expressed over qualified English teacher supply if the government introduced an innovative strategy to NNL education.

Stress on teacher responsibility and a sense of ownership is relevant to change in the new century. In the cycle of change in the 21st century, cutting-edge teacher development is increasingly seen as a continuing process which does not stop after initial qualification but continues for as long as a teacher is in the profession. The pace of technological, economic and social change has accelerated from the late 20th century into the 21st century. This gives rise to calls for the transformation of schools and the transformation of work for teachers (OECD, 2001). However, as Stronkhorst and van den Akker (2006) note, despite these accelerating changes, complaints from policy-makers about how little change occurs in classroom practice are common in many education systems, across a range of subjects. NNL teacher professional development is seen as a central measure to return massive investment in the process of NNL curriculum reform.

Assessment

NNL education in both countries has put emphasis on assessment, which has been a hindrance to introducing communicative language. The college entrance examination has been considered one of the key factors that provided a negative wash back effect on the change process. Due to fierce competition for entrance to university, priority has been given to the English test score a candidate earns at the national test. This priority has had a negative effect upon classroom practice, which has hindered change.

It has been suggested that as long as the college entrance examination exists, change can never be brought about in NNL education. This is a rationale underlying a recent policy of the Korean government to develop a national test, which is designed to measure students' communication skills. The government proposed to replace the English test in the college entrance examination with the domestically developed communication-oriented test. It is expected that a test designed to measure communicative skills will lead the traditional NNL class toward communicative practice.

There have been strong concerns surrounding the policy on language assessment. One concern is how valid a locally developed tool is in measuring Korean students' communicative competence. Another concern is related to educational value, that is, the test can be considered as an end not as a means to gaining communicative competence. This might worsen the current situation of the gap among students according to their parents' socio-economic status. It is anticipated with scepticism that the policy will bring another dilemma to NNL education to be tackled rather than providing a solution to the current situation. Some educationalists express concern over how effective the government-directed approach by using the test as a means to an end can bring about change in NNL education.

Technology in NNL education

Japan and Korea are among technologically advanced countries. Over the last ten years, a great deal of the government's efforts has been made to use technology to make NNL education more effective than before. Technology has been used to promote communication across borders. Technology has provided better means to promote intercultural communication depending on how it is to be used in the NNL educational context. Now the use of technology in NNL education is not limited to conventional resources such as cassette tapes and CD-Rom, which have been used most often, but is extended to Internet and other types of mobile equipment. The use of technology is considered a positive sign and will be more encouraged in the government policy.

There are some concerns about the policy to increase technology use in NNL in the ICT age. NNL education technology can be used as a means to achieve more effective learning, but is not an end in itself. It should be emphasised that technology cannot replace language teachers at the classroom, but help them with teaching in the ways only technology can provide, differentiated from other means or tools. Language teachers should have clear goals about why they need to use technology, what goals they want to achieve through the use of technology, and how they are going to use technology to achieve these goals. They also need to be aware of using technology with other resources in a complementary manner. The use of technology does not necessarily mean that teachers throw away all the conventional methods or resources. It should be emphasised that student-student and student-teacher interaction is at the heart of language learning, and technological equipment or facilities can be used as a means to motivate interaction among them at the formal educational setting.

Web-based technology has made distance education without spatial and time limits possible. One can wonder, though, whether this advantage can be used to partially solve inequity problems. One good example is the development of web-based learning and teaching resources for everyone across the country regardless of who one is, where one lives or, when one needs to learn. Internet-based resources include electronic textbooks, model lessons, teacher training materials, remedial materials for students with learning difficulties. Can it be expected that such web-based materials and infrastructure provide all students and teachers with an equal opportunity to learn and teach?

Social equity/exclusion

The historical and socio-cultural analysis of NNL education in Japan and Korea reveals that there has historically been a social inequity problem. In the early days when NNL learning started, just a few children from royal family were given the opportunity for learning NNL and benefited from the opportunity. A very limited number of common people had been

exposed to NNL. As NNL education became popularised as a subject at school, people from different socio-economic backgrounds have identified the social inequity issue. Rich parents quickly understand the importance of NNL education in the globalised world and its returns. They want their children to be prepared for the future with competence in at least one NNL. They provide their children with private tutoring. In the highly competitive Korean society, parental pressure is high and the burden of private tutoring increases every year. Ironically the more NNL education at schools is emphasised by the government, the heavier the burden becomes. This social phenomenon in the given context should not be overlooked in making NNL policies. Priority should be given equal opportunity for every child regardless of their background. This should be included in NNL education policy evaluation.

Multicultural society and NNL policy

Globalisation, to some extent, implies that more people move across borders and that societies become multicultural. The government language policy has a great influence on the multicultural society. It is suggested that the language policy of one multicultural country should take into account the variety of mother tongues and cultures people bring with them (see Christoph, this volume). The language policy should be considered as important as the immigrant policy of the country.

The analysis of NNL policies reveals a heavy focus on English, neglecting other NNL. It seems that NNL policies have failed to meet the needs from the multicultural society. Attention to other languages is reduced, and fewer students choose to learn other languages. This phenomenon can be a serious problem if one considers increasing trades, economic exchanges and movement among non-English speaking countries. It is suggested that countries need to propose an inclusive language policy that values other NNL and provide its nationals an opportunity to pay attention to them. In the long term, this inclusive language policy would give the country improved competition in the globalised and multi-culturalised world.

Policy evaluation

Since the Korean Ministry of Education launched its English Innovation Reform in 2006, there has been a proliferation of policies and strategies toward the goal of improving public school English education. A strong concern has been expressed about changes in the NNL educational policy within a short period of time, more intensive than any other period before. Some expressed concern with the government NNL policy for its populism and short-sightedness. It seems that radical change is expected after implementation of policies to practice. It is suggested that educational change, regardless of context, takes place in the long term. This should be reflected in the policy evaluation process. Short-term policy evaluation has often been carried out to back up the implemented policy, or to provide justifications for keeping or proposing policies. It is suggested that an approach to NNL policy evaluation should be long-term in making judgements on what has and hasn't been achieved in a particular context. Voices from different circles of society should be considered in making decisions. By doing so, results from policy evaluation can provide reliable and objective information for the government to take into account for further decision making. It is also expected that one country can learn from lessons from another, if the long-term policy evaluation is carried out in a valid, inclusive and comprehensive manner. The Korean government's unprecedented changes in the NNL policy have drawn attention from other Asian countries, including Japan. Lessons from Korea are believed to provide implications to other countries' will and action toward innovation in NNL education in their own context.

Annex 15.A1

Chronology of English education in Korea and Japan

Period	Japan		Korea	
	Era	Incidents (year)	Era	Incidents (year)
19th century: The beginning	Meiji (1868-1911)	British *HMS Phaeton*'s appearance in Nagasaki Bay (1808) Meiji Restoration (1868) "Modernisation" Ministry of Education established (1871) English-medium of instruction at Kaisei School (Tokyo University) (1872) English at junior high schools (optional/compulsory 1881) Japan-China War (1894)	Choseon Dynasty (-1897)	"Country opens to the West" Korean-American Treaty (1882) Korean-Great Britain Treaty (1883) King Gojong's strong will for NNL Privilege to Yangban, the royal family Dongmunhak (first English language school, 1883) Opening of Yugeong Gongwon (Royal English School, 1886) English education at Mission schools (Baejae Hakdang,1885; Ewha Hakdang,1886; Gyeongsin School, 1886; Jeongsin School,1890)
20th century: Ups and downs		Russo-Japanese War (1904-1905) "The rise of nationalism-Nihon Jin"	Gwangmu Era (Great Han Empire, 1897-1910)	The Protectorate (1905) English language schools under one name, Government Hanseong Foreign Language School (1909)

Period	Japan		Korea	
	Era	Incidents (year)	Era	Incidents (year)
20th century: Ups and downs (cont.)	Taisho Era (1912-25)	Establishment of English Teaching Research Institution by Palmer (1923)	Japan's colonial rule (1910-1945)	"Under Japanese Rule"
		New immigration law in US (1924)		Annexation Treaty (1910)
		First Radio Program (the Primary English Programme, 1925)		Shutdown of Hanseong Foreign Language School (1911)
				March First Movement (a nationwide movement of independence (1919)
				Adoption of Harmony between the two countries (Nissen yuwa) and cultural policy (bunka seiji) (1919-)
	Showa Era (1926-1988)	Reduction of English lessons at Schools (1931)		"Conciliatory approach to educational policy"
		Manchurian Incident (1931)		"Quantitative expansion"
		Withdrawal from the League of Nations (1933)		English as regular subject at Gyeongseong Normal School (state-run teacher training school, 1922)
		Japan-China War (1937)		Gyeongseong Imperial University (the first university in Korea, 1924)
		Joining the Axis Powers (1940)		"Japan embroiled in war: monolingual policy: total assimilation of Koreans, adverse period for English education, 1936-1945"
		Pacific War (1941)		Restrictions of the use of English, books in English, and travel to America and Europe
				Reduction of English lessons in middle schools/removal of English at higher-education entrance exam
				Antagonism against mission schools from 1939

Period	Japan		Korea	
	Era	Incidents (year)	Era	Incidents (year)
20th century: Ups and downs (cont.)	Showa Era (1926-1988) (cont.)	"End of World War II"	US Military Government Rule (1945-1948)	"The US Army Military Government in Korea, USAMGIK, 1945"
		General Headquarters: Allied Government (1945, US Occupation)		Announcement of English as the official language (1945)
		Independence from the US (1952)		Utilisation of Koreans with proficiency
		English education in Junior High Schools (compulsory, 1947)		English ability and degrees from American schools imprinted as highly effective tools to reach higher social positions
		The Suggested Course of Study (1947)	Republic of Korea (1948-)	"Social stabilisations, economic growth and internalization"▪
		"Economic Miracle, 1950s-1970s"		Syllabus for English education at school (1946-1954)
		Revised Suggested Course of Study (1951-1958)		Increase of the study-abroad students in American institutions
		STEP Test in Practical English Proficiency (Eiken) (1963)		English Curriculum revisions (1954-1999, 6 revisions)
		The 18th Olympic Games (1964)		
		Course of Study (1973) and Revision (1978) Introduction of the fist TOEIC test (1979)		College Entrance Exam, CSAT (1993)
		Japan Exchange Teaching Program (JET, native-speaker English teachers recruitment, 1987)		Native-speaker English teacher recruitment program, EPIK (English Program in Korea, 1995)
				Primary English Education (1997)
21st century: Reforms and move to globalisation	Heisei Era (1988-)	"Internalisation"	Republic of Korea (1948-) (cont.)	
		The New Revised Course of Study (1989)		
		Strategic Plan (2002) (Revised Course of Study for NNLs) Action Plans (2003)		7th National Curriculum (2000)
		Listening test in entrance exams (2006)		English Reform Team under MOE (2006-)
		Revision of the course of study (2010)		Amendments to National Curriculum (2007-)
		Primary English Education (2012??)		Withdrawal of English from CAST, replaced by a home-developed English test, NEAT (National English Ability Test) (2013-) (still to be decided)

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Chapter 16

Language learning and Chamorro culture in Guam

By Simone Bollinger*

What are the competencies required of a responsible member of a global society, and how will he or she acquire them (see Hinton, this volume)? The answer offered here is explored through non-native language learning. Research by socio-linguists has focused on language and socialisation and tells us that competencies required of a community are passed on through language; hence through learning a second language, one can also learn a new set of competencies. This chapter reviews theories of language acquisition as a basis for pedagogy. It examines the idea of interlanguage, the linguistic system used by learners of a second language, and the idea of an interperspective, the perspective developed through interaction with non-native language and culture. It offers an example of what a curriculum focused on teaching language through culture might look like, using the indigenous language of Guam.

* Harvard University School of Education graduate; Guam Community College

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

"*If there is a knower of tongues here, fetch him;*
There's a stranger in the city
And he has many things to say."

Mirza Ghalib, translated by Shamsur Rahan Faruqui

The above quote combines language, perspective and awareness of otherness, which is the goal that I kept in mind while developing this chapter. What do we know about these three abstract concepts, and how can we use this knowledge in a classroom that aims to teach a second language? There have been many theories established since the 1940s and some have since been harshly critiqued; yet the debate over how a second language is learned continues to be at the forefront of modern linguistic studies (Mitchell and Myles, 2004). This chapter seeks to bridge theory and practice. While the theories examined below are taken and understood from the book *Second Language Learning Theories* by Mitchell and Myles (2004), this chapter is in no way a comprehensive review of said book, but instead focuses on select theories as a basis for a thought experiment on how theory might play out in a Chamorro classroom. In the second half of this chapter, The ABCs of Chamorro[1] will be offered as an example of a language curriculum that teaches language through culture. Chamorro, the indigenous language of the island of Guam, is endangered due to the diminishing population of native speakers and now, more than ever, measures must be taken to secure the future of the language and the culture. A media-based curriculum, the ABCs of Chamorro and its sister curricula, the ABCs of Japanese (Hawaii and Tasmania focused) and the ABCs of French, have had encouraging results in schools across the globe. The crux of the curriculum is its focus on the 21st century learner, keeping in mind brain science and linguistics.

What do we know about second language acquisition and what should we keep in mind while developing teaching pedagogy? The suggestion offered here considers research regarding both the role of a second language learner and the role of a language in shaping a culture. It seeks to twist the emphasis on learning from rote memorisation and consumption of information into creative production of language. In keeping with this goal, it is necessary to teach a language along with all of its cultural baggage: competencies and perspectives cannot be left behind. Teaching a language through culture allows not only more time for learners to internalise grammatical rules, but also sets language in its natural context, offering the learner cultural awareness and improving motivation. Awareness of otherness will prove to be a vital competency in global communities, and language a key vehicle of its success.

Behaviourism: Why it failed and what it has taught us

Using behaviourism as its underlying theory, language pedagogy in the 1950s was based on psychological notions of stimulus and response (Watson, 1924; Thorndike, 1932; Bloomfield, 1933; Skinner, 1957, all as cited by Mitchell and Myles, 2004). When

applied to language learning, a particular circumstance will elicit a particular response; if the response is successful and communication occurs, this response will be reinforced; continual reinforcement forms habits. Second language learning, then, entails replacing old habits with new ones, and the more similar the languages are, the easier the task is.

In the Second World War, a "progressive" approach based on behaviourism was used to teach American soldiers about to embark on an undercover mission to Germany (see della Chiesa's "Motivation Vortex", Chapter 1). The success of the soldiers and their lives depended on their ability to learn German quickly and without an accent. The soldiers were successful, but the reasons for this success were misinterpreted: it was the method that received the laurel wreath, while at least one internal factor, motivation, was ignored.

The success of the progressive approach led to decades of the audio-oral and audio-visual approaches, based on a very narrow behaviourist understanding of language learning. However, the approach did not fare as well in schools, where the motivation factor was nowhere near as strong as it had been with the soldiers. Although the theory itself came under scrutiny, these approaches survived deep into the 1970s.

In 1957 Skinner published *Verbal Behavior*, which applied behaviourism to language learning. Chomsky's critique of the book proved to be revolutionary to the field of psycholinguistics and the study of language acquisition (Mitchell and Myles, 2004). Chomsky argued that children do not learn by stimulus and response, but are instead guided by an innate faculty that allows them to discover, internalise and apply rules to language production; his theory is known as generative grammar (*ibid*.). Piaget's (1978) cognitive development theory also viewed inner driving forces as influential in a child's interaction with the environment (Piaget and Inhelder, 1966, as cited by Mitchell and Myles, 2004). These views of child development and language acquisition were in direct conflict with behaviourist theory, which focused on outward stimuli.

Another offshoot of the behaviourist view of language, Contrastive Analysis (CA), soon came under scrutiny as well. According to behaviourist theory, in learning a second language, old language habits must be replaced by new ones; old habits can either help or hinder the learning of new habits, depending on how closely the first language (L1) and second language (L2) structures resemble each other (for a more detailed explanation of behaviourism and language learning, please refer to Mitchell and Myles, 2004). CA is the study of pairs of languages to identify grammatical, structural and lexical differences, which were then used by teachers of second languages as drilling points for grammar instruction. However, Hernandez-Chavez (1972; as cited in Mitchell and Myles, 2004) discovered that although the plural in English is marked in a very similar way in Spanish, Spanish-speaking learners of English still left out plural markers (as cited by Mitchell and Myles, 2004). This and other similar studies proved that CA could not accurately predict errors that second language learners would make. Therefore, instead of trying to predict these errors, researchers began to study what these errors actually were; this became known as Error Analysis – "the systematic investigation of second language learners' errors" (*ibid*., p. 38). Claims of innate faculty at work and the birth of Error Analysis (further discussed below) moved the study of language and learning away from behaviourist theory, and researchers began to study L1 acquisition in children.

Breakthroughs in non-native language learning theories: Error analysis and interlanguage

In the late 1960s and early 1970s, researchers such as Klima, Bellugi, Slobin and Brown discovered that in language learning "children all over the world go through similar stages, use similar constructions in order to express similar meanings, and make the same kinds of errors" (Mitchell and Myles, 2004, p. 34). The discovery of this common order of acquisition was revolutionary (see *ibid*.), and in 1967 Corder began research that documented the order of acquisition of second language learners. These researchers studying Error Analysis described the errors of L2 learners, proving that *a)* L2 learners, similar to L1 learners, produce language following an order of acquisition; *b)* that this order is not the same as the order of L1 learners; and *c)* undermined CA, as many of the errors committed in L2 learning did not have to do with the L1 of the learner (Mitchell and Myles, 2004). Error analysis brought attention to the language produced by learners of a second language when confronted with utterances of the target language, which Selinker (1972; as cited in Mitchell and Myles, 2004) referred to as *interlanguage*.

Interlanguage is based on two fundamental concepts: that "the language produced by the learner is a system in its own right, obeying its own rules; and (that) it is a dynamic system, evolving over time" (Mitchell and Myles, 2004, p. 39). This means that the grammatical mistakes that L2 learners make are not useless errors, but constructive ones that point at the rules of the language that the learner has, or has not, internalised. For example, although a learner has probably never heard the word *eated,* his or her utterance: "We eated pizza" hints that he or she understands that verbs in the past tense take on the "-ed" ending, but has not yet internalised the irregular verb rule. This learner is not merely repeating a response, but inventing one based on an internal developing linguistic system. The fact that learners of second languages produce language in a systematic manner, and that this system evolves independently from the system used to teach language (referring to the order of grammatical structures presented in a classroom) with its own rules points at an innate faculty at work within the learner. If we learned language like we learn other processes such as tying our shoes, then we would follow the steps offered to us. Since this is not the case in language learning, this implies that it is different from other aspects of cognition, as Universal Grammar theorists posit.

Universal Grammar theorists examine language learning from the perspective of language. Because they understand language learning as a separate cognitive ability, Universal Grammar theorists study the linguistic system of interlanguage and how it is constructed (for more on Universal Grammar, see Belmont, this volume). Information about a learner's linguistic system (interlanguage) could have revolutionary results for language pedagogy. No longer should a learner's errors be treated as representative of his or her lacks, but instead as an inescapable part of the learning process. Instead of fighting a complex cognitive function that is yet to be fully understood, curriculum should be informed by the research outlining the task of the learner. Future research could address the following questions: What might a curriculum that follows the second language learner's order of acquisition look like? Would such a curriculum benefit the learner?

While understanding the role of the non-native language learner is vital in developing curriculum and pedagogy, there is another perspective that cannot be ignored: a strand of sociolinguistic research known as language socialisation.

Language socialisation

Researchers such as Ochs, Schieffelin and Heath understand that language and culture are acquired simultaneously, each aiding in the development of the other (see Broad; Lizárraga, both this volume; Mitchell and Myles, 2004). Socialisation, according to Schieffelin and Eisenberg (1984), is the lifelong process that individuals undergo while becoming "competent" participants in a society. According to Schieffelin and Eisenberg, language acts as a means and result of socialisation, so not only does a child learn what words mean and how to use them, he also learns about himself and the world around him through language. There are many skills, behaviours, and cultural competencies (Ochs and Capps, 2001; B. della Chiesa, personal communication, 2009) that a child learns through language and without learning these culturally accepted norms and values, a child could easily become Hymes' (1967; as cited by Schieffelin and Eisenberg, 1984) "cultural monstrosity" – capable of speaking but culturally incompetent (as cited by Schieffelin and Eisenberg, 1984).

In addition, proper grammar alone is not enough to ensure smooth communication; Pan and Snow (1999) point out that acquisition of language requires much more than linguistic competence, and includes a "body of knowledge speakers of a particular speech community acquire about how to use language effectively to achieve communicative goals" (p. 229). A visitor to a new country who wishes to make friends, for example, must be aware of this new body of knowledge that accompanies the language and culture. While speech communities abound and it is impossible to teach all of the competencies that accompany Spanish, for example, it is possible to give students the opportunity and skills necessary to become aware of the existence of cultural differences, by studying these differences between the learner's mother culture, and another culture.

The processes of language acquisition and socialisation are fundamentally intertwined, however, and to separate the two could only be done heuristically. Hence, in order to understand either process completely, the study of one must be done in consideration of the other. Therefore (and here we begin to tie all of the above mentioned concepts together), I posit that language teaches culture, and conversely, language can be taught through culture (see della Chiesa, Chapter 25, this volume). As Mitchell and Myles (2004) pointed out, Error Analysis proved that *a)* no matter the context (classroom, naturalistic, mixed), the system used by L2 learners is similar regardless of the language, and *b)* this system is both similar and different from the system used by children learning L1. Variations across languages are not so great so this task is possible, (*ibid*.) but the question of motivation must play an influential role here. What could motivate a learner who already speaks a language to learn another one?

Since research presented above claims that language and socialisation are interrelated, and that language learning is a distinct aspect of cognition, the question arises: is socialisation part of this distinct language aspect, a result of it, or something else completely? Furthermore, how does interlanguage relate to socialisation? I would hypothesise that learning a new language generates an interperspective, or an inter-identity, that evolves through interaction with other cultures.

The more one learns about another culture, the more he or she would have access to foreign perspectives which one could choose to accept or reject. Either way (rejection or acceptance) these types of interactions cause a person to think deeply about his or her own values and perspective, which is undoubtedly a good thing in a world where it is becoming increasingly common and crucial to communicate with people from different cultures. Much like an interlanguage, an inter-identity would be one's perspective formed

by comparing two or more cultures; the learner begins to choose values, competencies, etc. and in doing so, defines the rules for his or her own system of beliefs, or identity. This comparison becomes more acute over time, as well as more metacognitive, and is as dynamic as his or her developing language system.

What does socialisation to a global world entail? At this point I would hypothesise that understanding and awareness of otherness are crucial in patching misunderstandings that result from cultural differences, but surely this is an important question for future research to address. Moreover, I would argue that the inter-identity or interperspective is a competency that will be required of members of a globalised world.

Teaching a second language through culture

I believe that at the low and intermediate levels of language learning, the focus should be on comprehension, conversation and communication. Errors are a natural and inescapable part of the learning process and may be beneficial in a learner's construction of a linguistic system that he uses to communicate. In my experience teaching Spanish and ESL, I have learned that most students are uninterested in grammar and it is extremely difficult to motivate them to study it. They do, however, enjoy learning about cultural practices that differ from their own; these differences can be observed in examples of culture such as sports practices, traditions, forms of entertainment, youth's use of new media, movies, music, fashion, etc. By providing students with the tools and examples that lend themselves to the study and discussion of cultural differences, youth can have exposure to the target language and enjoy learning about things that they are intrinsically interested in. When students are engaged in an activity they naturally ask questions about grammar which a teacher can then expand on, creating supplementary activities to offer practice and explicit instruction. It is almost as if for adolescents, grammar is like medicine: it goes down smoothly if embedded in a tasty treat. To extend the metaphor even further, grammar, like medicine, has patching powers; it can make poorly expressed ideas concrete and once students realise that grammar instruction can make their communication clearer, they will ask for it by name.

In learning about cultural products and practices, students can form perspectives about other cultures and develop an awareness of otherness. This awareness may prove vital in this global era, which requires that people from different cultures frequently come in contact with one another. Not only might a heightened awareness of differences be beneficial in interactions with people from different cultures, it might also serve to prevent conflict between people of the same culture, as differences, or otherness, exist across all individuals. Hence, language pedagogy that teaches language through culture could potentially serve two purposes: it could increase students' motivation to learn another language by focusing on topics that are of more interest and relevance to students than grammar alone; and it could develop students' perspectives and awareness of otherness, which could result in smoother interactions with other people. Students may learn to inquire before acting in order to resolve misunderstandings that arise in interactions.

Thought experiment: A Chamorro classroom

Why Chamorro? Why Guam?

Chamorro is a language unique to the Mariana Islands, a volcanic archipelago east of the Philippines and South of Japan. In its present form, it is an amalgamation of Spanish, English and the native tongue of the Marianas, of which Guam is the southernmost island. The language is in danger of becoming extinct because of the diminishing population of native speakers, the post-World War II Americanisation of those natives, and its replacement by English as the common language for all residents, many of whom come from other countries. During the Americanisation of Guam, youths in western-style public schools were prohibited from exercising their language and culture (J. Bollinger, personal communication, 2009). If a language disappears, how long before the culture follows?

Presently, Guam is facing a situation that will dramatically alter its future. It is a territory of the United States, home to two strategic military bases. The Department of Defense is relocating more than 8,000 marines and their families from a base in Okinawa, Japan (PBS, 2009). This expansion will place a heavy burden on the already stressed and outdated infrastructure of the island, its environment, and its people. Currently, the Chamorro people make up 40% of the total population of the island (*ibid*.). Immigrants from the Philippines, Asia, and other islands in Micronesia constitute a large portion of the rest of the population. The public schools are overcrowded and violence is an increasing problem. Now, more than ever, the island's education system needs to assume a leading role in teaching awareness of otherness and cultural acceptance. However, aside from the pending military build-up, Guam's situation is not so different from that of numerous diverse communities, where the example offered can be applied to teaching second languages in this global era.

Hypothetical culture class: weeklong lesson plan for 6th grade intermediate level

Sometimes there is a disconnect between the culture of the teacher and the culture of the student. While we as teachers want our students to be able to perform on tests that reflect what we expect them to get out of the material, different students may use different tools or topics to learn similar or different things. A curriculum that offers students a way to show what they have learned without expectations that they have learned the exact same thing as every other student is a curriculum that allows more students to shine. Piaget (1978) was mentioned earlier in this chapter, and his ideas that a child's inner forces are what guide his interaction with the environment are taken seriously here. Giving students space to explore different topics gives students a chance for creativity, self-expression and developing deep thinking skills.

The yearlong project for this Chamorro culture class is taken from Rolbin's framework of the ABC's of Japanese. Students are expected to create the ABC's of Chamorro, in which each letter of the Chamorro alphabet is the first letter of a Chamorro practice, product, perspective or experience. For example, A could stand for *Ayuyu*, a large coconut crab found on the island that is considered a delicacy. The students would then be expected to give information detailing the habits of the *ayuyu*, physical characteristics, cooking style, etc. This can either be done in essay form, as a presentation to the class, or as an online webpage.

As a precursor to its use in schools, Rolbin and I, with the support of the Micronesian Language Institute at the University of Guam, have been working with Chamorro language teachers to create an ABCs of Chamorro. Our version will act as an example and a source

of topics for students who will study the language used in the videos, before creating their own.

The classes therefore, will be presentations on Chamorro culture and practices, legends, myths, folklore, cooking classes etc. always offering exposure and interaction with the language, including structured vocabulary and grammar frameworks. This will come in the form of mini activities where students have to create their own versions of a myth (for example) or complete an activity about question words (*hafa* means "what", students will recognise this word in the common greeting of the island: *hafa adai*, meaning "what's going on"). Students will choose which words or phrases representing cultural practices and experiences stand out to them, and that they think are worth sharing with others. The result would be a variety of presentations on a wealth of subjects, as different things will stand out for different students, much like different parts of this lesson plan presented will stand out for the different readers.

The first day of the week will be devoted to the introduction of the topic. During this day, the students receive in Chamorro the context in which the vocabulary and grammar will be set. They will also receive substantial interaction with the language itself, both as listeners and participants. Please note that while the example here is taken from an informational video, it is imperative that the material be presented in a variety of forms: narratives, informational texts, historical perspectives, etc. This allows students access to a variety of topics and ideas, perspectives and focal points, which they can then expand on.

Monday/lunes: E para E'guihan (E for Fishing)

Estorian donkalun guihan yan y talaya (Stories of big fish and nets)

Teacher introduces the theme of the week and vocabulary with visuals:

Gaputulo – hair	guihan – fish	donkalu – big
Koni – to catch a fish	Talaya – a net used to catch fish	eskapa – escape

Students watch the two and a half minute clip on fishing, then the teacher hands out the script with the vocabulary words missing. As a class, student work to make meaning out of the sentences, guided by the teacher's questions: "What do you notice?" And "What puzzles you?" (These questions are taken from Eleanor Duckworth's approach, Harvard Graduate School of Education, 15 January 2010). The teacher should also ask questions about how the students figured out sentences, making the process of deciphering a language an external process, capable of being reflected upon.

Afterwards, in pairs the students work on comprehension questions and vocabulary worksheets to reinforce their learning.

Tuesday/mattes

After a warm-up and recap of the previous day, the second day will focus on the language structure chosen from the video. In this topic, the structure is "E'guihan kumeke ilek-na 'go fishing' gi fino ingles" (*E'guihan* means to go fishing in English). In pairs, students will practise the structure by naming pictures in Chamorro (*Haggan* means green sea turtle in English), playing short games of charades, and by choosing a topic for their ABCs that begins with the letter "E". They may also begin to write a five to ten sentence description of their topic in English, which they will later translate.

Wednesday/metkules, Thursday/juebes

This is the production stage of the class. Students begin researching and describing their topics. This includes a making a storyboard with visuals. The teacher and teacher's aide walk around and help students write out their topics. They must decide what images are appropriate and translate their sentences into Chamorro. On the last day they present their stories and boards to the class in Chamorro.

The focus of these two days is on giving students a chance to use the words and structures that they have at their disposal to produce their own explanations of topics. This means that there will be mistakes, and the teacher needs to acknowledge these mistakes as a valid part of the learning process. Teachers should be aware of which grammatical structures their students are constantly relying on or asking for, and they should support this inquiry with appropriate lessons on these points. Here, the teacher plays the role of teacher-researcher, studying and trying to understand the students' ways of forming meaning, much like she asks them to study and consider another culture.

Friday/betnes

Students take a field trip to Gef Pago, a Chamorro cultural centre/village located in the southern part of Guam. They watch a demonstration of a fisherman using a talaya, and take a tour of the village where they observe men and women working together to make a talaya, fish, cook and clean. They are told the legend of the fish who tried to eat the island: The island of Guahan was in trouble; a giant fish was eating away at the middle of it. The men tried to kill the fish but it was too big for their spears. The women and men sat together and devised a plan to trap the fish. The women used their long hair to weave a net. They sang to attract the fish and the men trapped it and pulled the fish in.

Afterwards, students and teacher discuss the meaning of the story and what cultural values are reflected in it, while they enjoy lunch.

The focus of this final day of close interaction with both the culture and language is for students to think deeply about a cultural practice that may or may not be similar to one that they are familiar with, and have the opportunity to see how the language can come alive. This is done in hopes that the students will begin to form an interlanguage (their own linguistic system and way for them to express themselves) and an inter-identity (another way for them to see themselves as participants in a larger world).

This weekly lesson plan works under the assumption that the students are familiar with the method and types of questions. It requires that the students work together and support each other, and there is less focus on individual accomplishment or perfection. Instead, students are encouraged to communicate their ideas by creatively using the tools at their disposal. As an ongoing project, the students create their own videos, taping themselves in front of a green screen, and adding visuals and live footage behind them. The final product will be uploaded to a blog or website, where their work can be shared with the world.

Conclusions

Second language learning is an increasingly important field that holds many possibilities for future research. The perception of language acquisition needs to be expanded from a focus on facility with grammar to include an understanding that with language come cultural competencies, perspective and an awareness of otherness. The tools used in the

instruction of a second language are limitless, as language can be used in any context. The process of second language learning needs to be seen as a timely and highly complex process involving many factors such as motivation, engagement and the development of cultural competencies; flawlessness should not be the goal of beginning and intermediate levels, and the students' imperfect production of language must be respected and encouraged as an integral part of acquisition. Moreover, focusing on communication validates students' interlanguage, and gives them more opportunities to gain confidence and practice. Globalisation requires of present and future generations global competencies, and teaching language through culture is one way to broaden perspectives, a first step in establishing diplomatic relations.

Box 16.1. **What kind of cultural competence should students aim to achieve?**

I spent four years teaching at a Jewish Day School in New York, where half of each school day is devoted to secular studies (taught in English), and the other half is devoted to Judaic studies (taught in Hebrew). I was a Judaic Studies teacher, so I was expected to conduct all my classes in Hebrew. I learned Hebrew at a similar Jewish Day School in Canada. I am not a native speaker, nor have I lived in a Hebrew-speaking community for longer than a summer. My Hebrew is good enough that I can understand Israeli news anchors who face the screen, speak slowly, and avoid slang, but not good enough that I can understand Israeli sitcoms without subtitles.

As a teacher, I often worried that I was doing a disservice to my students by conducting my classes in a language that I do not know perfectly. I became even more worried when I encountered the idea that "knowing" a language requires both linguistic competence and cultural competence; I realised that my cultural incompetence might have been a worse problem than my flawed technical skills. The Hebrew I taught my students was riddled with North American doxa (to borrow Bourdieu's term for cultural habits we mistakenly assume to be rules of nature). For example, I often told my students – in technically correct Hebrew – to "raise their hands". Hand-raising is what North American students do to signal that they would like to speak. Israelis, however, do not raise their hands in class; they point one finger in the air, and they refer to it as "pointing", using the same word as the one they use for "voting". It did not occur to me that the custom of requesting permission to speak by raising an entire hand in the air was simply a construction of my culture and not a rule of nature.

I became nervous that it might have been presumptuous of me – a teacher deeply rooted in North American doxa – to think I could (or should) conduct a Hebrew-immersion class for American students. Two ideas helped allay this concern.

First, I reminded myself that my goal as a teacher was not to prepare my students for seamless integration into Hebrew-speaking society. Rather, my aim was to enable them to participate fully in Jewish religious and cultural life, which requires a certain skill set. According to the vision of our school – a Modern Orthodox, Zionist institution – that skill set might include the ability to read and understand Hebrew texts such as prayer books, the Bible, and rabbinic literature, and the ability to communicate in Hebrew during visits to Israel. I am not qualified to prepare students for transplantation into an Israeli classroom, but I am reasonably qualified to prepare students to participate fully in their Jewish communities.

The second idea came from my friend Karen, an Orthodox Jew who teaches Islamic Studies at a Catholic college. She pointed out that I was regarding Hebrew as the property of the modern state of Israel. She reminded me that Hebrew was the language of the Jewish people long before it was the language of the modern Jewish state, and that Hebrew is not the property of the Israeli teacher who instructs her students to point their fingers, any more than it is the property of the North American teacher who instructs her students – in Hebrew – to raise their hands.

My reflections on this topic have left me with a lingering question. If "knowing" a language requires both linguistic and cultural competence, what kind of cultural competence should students of Hebrew rooted in the Jewish Diaspora aim to achieve?

Amy Newman, Canada – United States

Note

1. The ABCs of Chamorro is a language curriculum being designed at the University of Guam by Simone Bollinger and Cyrus Rolbin, with teachers of Chamorro. It is an adaptation of the ABCs of Japanese, by Rolbin.

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Chapter 17

Language learning in Peru: "De mi cerebro, su neurona"

By Alejandro Belmont *

This chapter aims to analyse language acquisition and educational outcomes in the Peruvian Quechua native speakers learning Spanish, considering the implications of neuroscientific analysis in the reinforcement of cultural paradigms. Based on the relationship between history, culture and linguistics, the issues resulting from learning Spanish as second language are presented. These are then concretely examined through the impact of functional convergence to establish how learning both languages efficiently becomes a complex yet necessary endeavour. This bridges the analysis to temporally-relevant brain functions that are affected when learning both languages, using the Event-Related Potential framework. Cognitive stimulation through effective child-rearing practices is exemplified as a potential tool for improving language acquisition of either, and both, languages at an early age, taking into consideration socio-cultural concerns.

* Harvard University School of Education graduate; visiting researcher in Dallas, Texas, and Lima, Peru

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Introduction

In a remote village of the Peruvian Andes, I met a first grade class of 30 eager and curious Quechua-speaking students. Their parents wanted a single outcome of their whole schooling process: for their children to learn Spanish. Most of them could only utter a few words, usually "*hola, buenos días professor*" ["hello, good morning professor"] and "*adios professor*" ["goodbye professor"]. Some of them refrained from speaking at all. I wondered immediately how their bilingual education was structured and how the teacher and parents helped these children learn both languages effectively. I decided to approach the only first grade teacher in the school and asked her: how do you teach them Quechua and Spanish in order to develop bilingualism? She answered with the following phrase: "I teach them numbers and some words in Quechua and do the same in Spanish until they go on to second grade and start doing more things in Spanish and less things in Quechua". Was that a structured and effective pedagogy for developing bilingual proficiency so that children could handle both languages appropriately? What did "handling two languages appropriately" entail? Would parents be happy with this intuitive instructional process? Did parents or teachers know any better? This is when I decided to approach a clever 16-year-old student with an incredible ability for playing the drums and congregating fellow classmates for a school activity. When I talked to him, I realised he spoke a different kind of Spanish than the one I had been used to my entire life. I could understand only half of his phrases and wondered what would happen if he decided to leave the village and look for a job or go on to tertiary education which is only available in predominantly Spanish-speaking cities. Could he, as a Quechua-speaking Spanish second language learner communicate his thoughts and intents accurately? What would teachers and professionals who are speakers of a standard Spanish variety think of his Quechua-influenced Spanish? How could he integrate his mother tongue, his identity and his culturally-specific abilities in a society dominated by Spanish and where Quechua is stigmatised? These are questions that place language acquisition as a priority for educational policy in Peru.

The concept of language acquisition is a fundamental piece of the developmental puzzle pertaining to education and learning. In the case of Quechua L1 (first language) learners of L2 (second language) Spanish, the differences that morpho-syntax (sentence structure based on word inflection and paradigms) between both languages generates in the brain provides important evidence on how the learning process occurs, and the impact of this difference for effective second language learning. Proficiency and experience constitute significant predictive factors for difference in levels of L2 fluency. In order to generate native-like learning of more languages or develop better bilingual programmes among the Quechua-speaking population of Peru, for example, not only are the factors associated with linguistics relevant for such an endeavour, but also the socio-cultural context(s) in which language has developed and interacted throughout history. In order to further develop these issues, the chapter will be divided into five sections: first, the relevance of bilingualism and culture; second, a brief analytical background on Quechua L1 learners of L2 Spanish from a cross-linguistic perspective; third, a look at a neuroscientific approach for overcoming interference from L1 to L2; fourth, the acknowledgement of cognitive stimulation as a resource for satisfactory L2 language learning; and fifth, concluding remarks.

Bilingualism and cultural preservation in Peru: Educational goals?

In postcolonial and/or multicultural countries, the ideological tension between assimilation and pluralism related to culture and linguistics is constant (see Cho; Fuchs; Tarozzi; Worden, all this volume; Hornberger, 2000). As with any multicultural country, the desire is to achieve a national identity while preserving and integrating other cultural groups, that is, to create an intercultural national identity. One of the ways to start this process is through inclusive education. In Peru, a colonial empire of the Spaniards, the ancestors of the current Andean indigenous Peruvian population, the Incas, were forced into a subordinate position. Their native language, Quechua, was progressively put aside as an inferior language to Spanish through prohibition and social denigration beginning in the 16th century (Coronel-Molina, 1997; Garcia, 2004; Hornberger, 2000). Recently, as an independent nation, top-down efforts without grass-roots involvement such as the first National Bilingual Education Policy promulgated in 1972, as well as the National Intercultural Education and Bilingual Intercultural Education Policy in the 1990s (Lopez, 1996; Pozzi-Escot, 1989), have had non-Spanish-speaking individuals learning two languages through transitional bilingualism, where the initial level of education starts with the use of the native language (*i.e.* Quechua) and is later transferred to a second language (*i.e.* Spanish) (Broom, 2004). Spanish-speakers, on the other hand, do not go through this demanding process and keep the country's principal language and favoured identity. As examples of forced and progressive assimilationism, both colonial and post-colonial Peru have promoted an ideology that is generating social and educational difficulties for the largest Quechua-speaking population in South America (Hornberger, 2000), counting for about 50% of the total Peruvian population, including bilinguals (Escobar, 1978).

Concretely, in the results of Reading scores of PISA in Peru (World Bank, 2007), when income inequality was controlled, there happened to be more internal variance in the equally poor than in the wealthier sector, a group of the population where Quechua is not the representative language (Escobar, 1978). This was a result of the language difference between the bilingual Quechua-Spanish rural sectors and other monolingual Spanish-speaking rural sectors (World Bank, 2007). Numerous studies in Peru (Cueto and Secada, 2001; Cueto, 2003; Cummings and Tamayo, 1994; World Bank, 2007) point this out, obtaining high correlations between having Spanish as a first language and student achievement. Children that are not able to read or comprehend satisfactorily when entering fourth grade are less likely to keep learning effectively (Willms, 2006). Moreover, if the level of Spanish proficiency in Quechua-speaking students were high, structural interference between languages (a major cause for poor bilingualism, as we will explain later) would not occur (Thomason and Kaufman, 1988). This emphasises the implementation of a diversified school curriculum or programme to help non-Spanish speaking children learn Spanish and raise their educational and cognitive capital without losing proficiency in their native tongue (World Bank, 2007). Moreover, growing up bilingually provides other positive outcomes such as better metalinguistic skills and greater sensitivity to structural and systematic characteristics of language (Bialystok, 2001).

Cases around the world evidence a similar status quo in the educational opportunity and linguistic development of Peru, while others demonstrate exceptional advancement under similarly complex conditions. South Africa is clear example of a multilingual and multicultural nation where the dominant language (English) serves as a vehicle for empowerment and academic achievement, while other African languages are undervalued. In the past, education in indigenous languages as a form of revaluation was actually a process of restriction to the access of English (Broom, 2004). Currently, as in the Peruvian

context, transitional bilingualism is the main policy for language learning, which generates low levels of L2 English and prevents a great portion of the population from realising their potential in society with similarly low levels in standardised tests like PISA (*ibid.*; World Bank, 2007). Nonetheless, arguing that high-quality transitional bilingual education is the appropriate system of language instruction depends on the goals of society (as we will expand later), with an emphasis on the quality of instruction rather than the language of instruction.

Conversely, Singapore is the perfect illustration of an adequate bilingual education plan. In this case, language policy became a product of the political will of a government with a long-term plan to turn its nation into an economic power. Using a language-in-education policy based on an interdependent hypothesis, that is, developing academic concepts and skills in both L1 and L2 (Cummins, 2000), they have reached education performance equal or even greater than other monolingual, English-speaking countries, when their predominant home languages are Mandarin, Malay, Tamil, among others (Dixon, 2005). As in the case of Quechua, these languages are essentially oral and are spoken only at home. However, schools are required to develop literacy in both native tongues and English. Even though the principal language of instruction was still English, every school taught one of the native languages as a required subject (*ibid.*). This promotion of native languages has led to an additive bilingualism, where learning an L2 is achieved without losing proficiency of an L1, with both languages valued in the society (Lambert, 1974).

Again, in the case of Peru, even if ideological and hardly practical initiatives have been assumed (Garcia, 2004), without a linguistically-appropriate pedagogy, political and economic power still rest on the "white" Spanish-speaking mestizo (Indian-Spanish) or non-indigenous population in a society constituted by racial discrimination, superiority and control in relation to the "other Peru" (Matos Mar, 2004). Language, and more specifically, language education, becomes a societal tool for reinforcing socio-economic stratification and prejudice.

As Pennycook (1994) suggests, to understand the reinforcement of power structures through language one must know both the meaning of language in social context and the process through which this meaning came to be. If we analyse Quechua in an already globalised and therefore open social system (Luykx, 1996), even if most of its speakers acknowledge its use inside their own community (*i.e.* informal interaction with fellow members and transmitting traditional practices), as well as its role in the expression of emotions and filial relationships, a large number also admits their shame for speaking it and a desire to acquire Spanish to become prestigious members of a national society (Hornberger, 1988). With a higher access to schooling, this shame is a result of speaking a "Quechua-influenced Spanish" or non-fluent Spanish that does not provide them the corrected tool for accessing education and employment or dignifies them as functional citizens of a nation (*ibid.*). There is an ambivalent value-judgment, where both languages are thought as indispensable for social interaction and development subject to context, except when learning Spanish is negatively affected by their Quechua.

Also as a result of the historical interaction of languages, Spanish monolinguals have owned a Western identity as a sign of higher status in society. This has generated denigration of Quechua-influenced Spanish and related ethnic and cultural characteristics, which have become stigmas of socio-economic and intellectual underdevelopment, and due to the rejection of any kind of ethnic resemblance to their own mestizo ancestry, this has also exacerbated racial discrimination (Callirgos, 1993). Reinforcing this predisposition, from an educational standpoint, a bilingual Quechua-speaker that does not exhibit a normative form

of Spanish, will likely have experienced learning difficulties in his/her Spanish-focused school career and, to Western Spanish society, will prove to be underdeveloped under the current employment industry and socio-cultural ideal of sophistication (*ibid*.). Given that school is thought as the reproductive tool of social order (Bourdieu and Passeron, 1977), individuals who do not "fit" this model of cultural capital are paradoxically excluded from the dominant society through education. The Quechua-Spanish linguistic duality keeps reinforcing an inadequate, idiosyncratic cultural comparison, where one social group or identity is depicted as inherently superior to the other.

Bearing in mind that in such circumstances language per se is not the sole contributor for socio-cultural fragmentation but rather a major catalyst for the continuation of prejudicial premises, a set of educational parameters for learning Spanish in Quechua populations must build off the foundations of such premises. On an initial approach, a linguistic interpretation of this socio-cultural problem requires examining the interaction between both languages. Determining why a language is affected by the other is not only an examination of educational implications for bilingualism and school learning, but also a consideration of the effects of speaking Spanish "like a Quechua" as an exacerbation of historical prejudice and the challenge of constructing an intercultural Quechua-Spanish identity (Hornberger, 2000).

From Quechua to Spanish: A concern with functional convergence

One of the requirements for a Spanish-dominant society to integrate the Quechua-speaking population is to analyse the linguistic effects of transitioning from Quechua to Spanish. Theories such as Universal Grammar (UG) (Chomsky, 1982) regard the way in which humans learn a language by establishing that one possesses a universal set of parameters and principles that determine the development of languages and its fundamental characteristics (Mitchell and Myles, 2004). Occasionally, these characteristics can vary between languages, affecting the learning process of a second language. For Spanish and Quechua, having completely opposite forms of grammatical structure creates greater difficulties in the process of becoming proficient when learning either one as a second language.

In the case of L1 Quechua learners of L2 Spanish, one of the main cross-linguistic variations that affect the transition from one to another is that related to functional categories or, in other words, the function of words in a grammatical as opposed to a lexical sense (*ibid*.). For UG, a first step in acquiring the sentence structure of a language requires having set the order of words based on the input of language children receive. Having started with a type of categorical syntactic organisation in Quechua, for example, will affect the acquisition of an L2 language with a different set of syntactic rules (*ibid*.; Weinreich, 1953). As Odlin (1989) and Romero (1993) have pointed out, bilingual Quechua-Spanish speakers demonstrate the morpho-syntactic influence that occurs, related specifically to word order. Similar to Japanese L1 speakers of English, Quechua L1 speakers transfer the SOV (Subject-Object-Verb) order to L2 Spanish, which possesses a SVO word order, similar to English. Nominal phrases, using a combination of a noun and a preposition (or postposition) show this interaction: *de mi abuela su perro*, "my grandma's dog", translated literally in "of my grandmother her dog" (Quechua word order). This same phenomenon happens other languages such as oral German, with the genitive progressively disappearing to be replaced by a similarly dative construction (B. della Chiesa, personal communication, 2011). This form of linguistic interference between L1 and L2 is frequently called functional convergence and happens very often in bilingual L1 Quechua children (Sanchez, 2004). When compared with monolinguals of Spanish, these grammatical modifications are not evident. In her study, Feke

(2004) provides evidence of this convergence when finding that Quechua L1 children with L2 Spanish actually established a "steady state interlanguage[1] grammar". That is, L2 input interacts with Universal Grammar and L1 grammar to produce a different grammar than the one of native speakers (Mitchell and Myles, 2004; White, 2003).

As a consequence of inadequate bilingual efforts in Peru, the transition from Quechua to Spanish through a subtractive process leads to the creation of "interlect" or Quechua-influenced Spanish, defined by Escobar (1978) as a social dialect or version of Spanish spoken by people from lower socio-economic levels who have either Quechua or Aymara as their mother tongue and are in the process of acquiring Spanish. Recalling the socio-cultural factors described in the previous section, this form of Spanish is one that continues to represent underdevelopment and lower social status in Peru due indirectly to a convergence of linguistic characteristics, such as grammatical structure, and the awareness of the difference it generates between this resulting dialect and normative Spanish (*i.e.* word order).

A neuroscientific approach to understanding second language (L2) learning

To evaluate the possibility of reducing functional convergence in L1 Quechua learners of L2 Spanish and thereby improving grammatical proficiency, analysis of neural processing should be taken into account. In electroencephalogram (EEG) analyses of the brain using event-related potential[2] (ERP) components associated with syntactic processing, native speakers elicit a biphasic response characterised by an early negativity (*e.g.* N170) and a late positivity (*e.g.* P600) that is different from monolingual speakers. These two components measure automated brain responses to unusual words and syntactic anomalies, respectively, and their correspondent repair processes (Friederici, Steinhauer and Pfeifer, 2002). In that sense, L2 learners evidence a different way of processing words than native speakers. Factors such as vocabulary, phonological patterns and syntactic rules in L2 have been found to affect syntactic processing for L1 speakers, eliciting these different responses which, in turn, are also associated with greater neural plasticity for automated grammatical processing early in development (*ibid*.; Osterhout *et al*., 2008; Weber-Fox and Neville, 1996). Nonetheless, it has also been found that when the level of proficiency of L2 language is high, which again is not only determined by the age of acquisition (Herschensohn, 2009), these particular brain responses become the same for native and late, non-native speakers in the case of late, less automatic components (*i.e.* P600) (Hahne, 2001). In other words, syntactic processing demonstrates relative automatisation (Friederici, Steinhauer and Pfeifer, 2002).

Considering that syntactic rules may be fixed, the effective learning of vocabulary and corresponding phonological characteristics could be a possible support for accomplishing the same level of proficiency in L2 learners. In this case, when actualising for the early interference in bilingual development of L1 Quechua speakers of L2 Spanish, it is evident that both languages need to be differentiated explicitly in order to avoid convergence once the syntactic processing ability of L2 learners is intact. This last aspect requires, on one end, that cognitive functions associated with language processing have developed adequately. On the other, it also requires sufficient exposure and practice of each language in order to reach good proficiency levels, which are both a result of contextual support in home and school. Rather than suggesting a school curriculum for bilingual education, our objective here is to consider the characteristics of home upbringing for children who participate in bilingual education, such as the one existing throughout the Peruvian Andes. Though only an initial hypothesis, focusing on the early cognitive skills stimulated at home, such as the incorporation and production of vocabulary, is important as this has already been strongly associated with language learning and reading comprehension (Nagy and Scott, 2000; Lesaux *et al*., 2010).

Perspectives for improvement and the relevance of cognitive stimulation

When considering the use of a second language in an educational context (*i.e*. reading and writing) as is the case of Spanish, the effects of cognitive stimulation and socio-cultural characteristics on linguistic abilities must be acknowledged. It is already known that differences in maternal input between low-income and high-income families, as well as varied cultural backgrounds, have shown different patterns of growth in vocabulary production (the main predictor of reading comprehension) (Hart and Risley, 1995; Pan *et al*., 2005) and, as shown above, with a repercussion in syntactic processing (Friederici, Steinhauer and Pfeifer, 2002). Therefore, in view of an adequate transition from Quechua to Spanish, without sufficient stimulation early on, the difficulties of performing in either language will be increased (Borovsky and Elman, 2006; Hart and Risley, 1995).

When considering early linguistic stimulation, there is relationship between the way parents talk to their children and the development of literacy skills (Hart and Risley, 1995). This is also true when controlling for socio-economic factors, although it has been documented that children with high-income and highly educated mothers tend to receive longer utterances and a greater variety of words than low-income mothers, which in turn lead to higher vocabularies in their children (Hoff, 2003). This may be partially a consequence of differences in verbal ability of mothers, which can provide richer linguistic repertoires when interacting with their children or as Rowe's (2008) study suggest, mediated by knowledge of child development, as well as cultural differences that abide for differences in techniques of interaction between low SES families (Rowe, Pan and Ayoub, 2005).

In the case of the characteristics of communication between parents and their child, one must evaluate the former's skills or characteristics as an independent variable for cognitive development. As an example, Rowe's (2008) study on child-parent communication with American parents from different socio-economic backgrounds shows that child-directed speech predicts vocabulary skills one year later, and this is associated with parental knowledge of child development as a mediating factor of socio-economic status. This different level of knowledge determines how complex, varied, frequent and more adjusted utterances between parent and child become. As a result, for this study, it is not precisely native parental verbal abilities that influence language development in children, but rather the knowledge based on education levels and high socio-economic status privileges (*e.g.* more access to information *via* experts, more educational media, publications, better preschools, etc.).

Other studies such as the one by Pan *et al*. (2005) predicting vocabulary growth in low-income mother-child dyads also observed a relationship with varied maternal lexical input and growth within low SES families. Still, in contrast with Rowe (2008), they find that maternal language and literacy skills affect the development of vocabulary. It may seem that while both can predict the same outcome in language production in children, the effect of mothers' literacy behaviours with children can influence this variance when comparing low-income families, which may be considered the consequence of a socio-economic and/or culturally dependent factor (as we will discuss later on) such as parental knowledge of child development. Having a sound environment in the household for adequate linguistic and cognitive development requires, ultimately, for parents to understand the needs of their child in the different stages of life. In the case of low SES families, fostering resilience through stimulation and accurate decision-making are essentially based on the successful use of information in practice.

Adding to this notion, from a computational perspective, Borovsky and Elman (2006) analyse differences in linguistic experience to explain word learning ability related to

changes in semantic category structure (*e.g.* ways of categorising specific objects). By manipulating the quantity of language input, frequency and sentence complexity within categories, they found that improvements in category structures correlates with improvement on word learning ability when input remains the same. This leads to the conclusion that it is categorisation as a cognitive ability that essentially leads to lexical proficiency (Tomasello, 1999), that is, the complexity and grouping ability of information rather than the quantity. If we relate this result with Rowe's (2008) conclusions, it is possible to consider that not only should parental education in language development lead to more frequent and diversified child-directed speech, but it should also favour training children on category development to increase their word learning abilities and make up for reduced contact with written language in contexts where access to print is limited. What is more, it is the interaction that occurs between the child and the parent when reading a book, where questions are asked, relationships are encountered and words are learned, that actually promotes development, more than reading per se (Snow, 1994). This acknowledges the relevance of analysing the verbal interaction between parent and child in the general context of learning.

On these terms, another aspect to consider is social-pragmatic aspects of speech, which makes reference to the different beliefs and knowledge that parents have towards child-rearing and development. Child-rearing patterns become a consequence of culture (macro-system) influencing the family (micro-system) by generating specific behaviours as part of lifestyle rituals (Bronfenbrenner, 1979). Studies such as the one by Richman, Miller and LeVine (1992) demonstrated how Gusii mothers of Kenya contrasted with middle-class United States mothers in the way they communicated with their children: the former only did so through scarce eye contact and responded only to distress signals, which corresponded to their belief that there was no use in talking to children before they were older because they could not understand (similar studies include Harkness, 2002; Hagunseth, Ispa and Rudy, 2006; Holloway and Fuller, 2005). Furthermore, as Ochs and Schieffelin (1986) mention, "[…] prelinguistic and linguistic behaviours of the child must be examined for the ways they are continually and selectively affected by values and beliefs held by those members of society who interact with the child" (p.183). Thus, cultural paradigms have an impact on human development in the process by which a family subscribes to the goals of its community or society. It would then be ethnocentric to say that idiosyncratic actions evidenced through child-rearing practices are incorrect or insufficient for language proficiency according to scholastic parameters. However, the definition of social competence through language socialisation varies when the goals of a community are influenced by those of another. In the Quechua-Spanish dyad, one must question if previous cultural configurations and social routines of a collectivist Quechua society are enough to nurture competent individuals for the individualistic Spanish society. More concretely, one must ask if the linguistic/cognitive behaviours of Quechua homes are preparing children for the linguistic/cognitive demands and goals of Western education, when differences in patterns of socialisation may generate differences in cognitive skills (Leontyev, 1981). This is where developmental pragmatics and language socialisation merge, while also explaining discrimination and cultural devaluation as outcomes of an ethnocentric view of societal goals.

In the case of Quechua-speaking mothers, Jacoby, Cueto and Pollitt (1999) explain that the nature and frequency of children's experiences at home have a powerful effect in predicting their performance. For example, dealing with patterns of day-to-day living, which includes rural-domestic labour of children with farm animals, reduces the opportunities for mother-child interaction in the way one would expect from Western cultures (Panez, 2004). At the same time, limited written resources and parent illiteracy also hinder the opportunities for standardised forms of literacy stimulation (Jacoby,

Cueto and Pollitt, 1999). Differently, in atypical Quechua families, children have a greater contact with urban culture and Western social codes (*i.e.* language and forms of interaction), developing abilities and social patterns more in tune with formal education and, consequently, leading to achievement (Uccelli, 1999).

From this perspective, rather than introducing families to Western practices that may progressively lead to cultural elimination, creating a more effective (developmentally appropriate) – yet still culturally congruent – approach to mother-child interaction could prepare children cognitively for language learning and overall school performance. Possible approaches may include focusing on certain informal cognitive trainings such as category learning (Borovsky and Elman, 2006) to improve linguistic skills by letting the child establish culturally-relevant relationships (Heath, 1982) in his or her interaction with surrounding objects. Also, promoting orally-driven interactions that foster question-answer sessions in story-telling would be appropriate considering the essential oral characteristics of Quechua (Jacoby, Cueto and Pollitt, 1999). However, even before evaluating the possibilities, there is a need for ethnographic analyses of both family practices and corresponding child outcomes in order to design tailored programmes that will use or blend together with cultural patterns. As an issue of cognitive development, it will also be imperative to ensure that children are sufficiently nourished (for further discussion, see Gorman, 1995; Grantham-McGregor, 1995; Pollitt, 2002; Wachs, 1995).

Conclusions

In synthesis, it is important to take into account the relationship that exists between socio-cultural context and language development (see Broad; Fuchs, this volume). On the one hand, language is both the means and the result of enculturation, extending into cognitive development as a whole (Ochs and Schieffelin, 1986). This is especially true when actualising the effects of culturally-bound child-rearing practices in the cognitive development of children and subsequent second language learning. On the other hand, a possible intervention must not only acknowledge the difference of cultures and practices, but also try to provide information about proper care and stimulation that does not interfere with the lifestyle or does not correspond with their educational level (*e.g.* literacy), and thus can be successfully incorporated. Making sure these aspects are formally targeted can lead to a context of language learning that can improve skills in their native language and prepare them to learn a second language, where proper stimulation can foster underlying cognitive structures that affect language acquisition. Peru must take its own affirmative path, integrating social and cognitive science to acknowledge the lessons that international comparative studies bring to the forefront.

Box 17.1. **Linguistic heritage: Roots to a forgotten language**

The intricateness, diversity, and the changing process of a language is a fascinating area. If one were to take a Darwinian approach, survival of the fittest language, is the extinction of language part of the evolutionary process of a globalising world? Are we moving towards a universal language?

History has shown the impacts of war and the conquering of other cultures. One of the many effects of this has been the domination of one language over another. However, many cultures continue to have a link to their linguistic heritage. An example that I am more familiar with is Mexico. The history of the Conquistadores from Spain shows how a culture and language became dominant over the indigenous languages that were present.

There is a small presence of a variety of indigenous cultures in current Mexico. The official language of Mexico is Spanish; however, the government recognises several indigenous languages (*e.g.* Nahuatl). For instance in Chihuahua, Mexico the Rarámuri (also known as Tarahumara). The Tarahumara language is considered a Uto-Aztecan language. The number of speakers of this language is growing smaller. My cousins and siblings are examples of this. My paternal grandparents were bilingual; they spoke the Tarahumara language as well as Spanish. Little parts of the Tarahumara language were informally passed down to my father and his siblings. This was primarily due to the lack of support in Chihuahua for bilingual education, and the negative views Mexicans have towards indigenous cultures. The term *Indios* (Indians) is used as a derogatory term.

The passing down of the Tarahumara language stopped with my father's generation. My paternal grandparents passed away before my siblings and I were born. We were not exposed to any components of this language as children. We were exposed to Spanish; however once we started school, our education was in English. Although I have not learned the language and am not connected to the Tarahumara culture, there is a link that is grounded to that small part of my identity. As the pool of those who speak unique languages get smaller and younger generations assimilating into the dominant culture and language, what outcomes will this have on identity contemplation?

Adán Rodriguez, Mexico-United States

Notes

1. White (2003) refers to the concept of *interlanguage* as "the proposal that L2 learners have internalised a mental grammar, a natural language system that can be described in terms of linguistic rules and principles" (p. 19).
2. Luck (2005) explains that event-related potentials "[…] are the neural responses [electrical potentials] associated with specific sensory, cognitive, and motor events […] extract(ed) from the overall EEG by means of a simple averaging technique (and more sophisticated techniques, as well)" (p. 4). For example, in an experiment, a person would read a word (or set of words) on a screen and electrodes attached to a cap would record electric potentials of the different areas of the brain as he or she reads. Later, the brain waves would be analysed for amplitude and latency with reference to relevant cognitive-processing components.

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Part IV

Movements, Languages and Migrations

Chapter 18

Why study abroad? Why not!

By Lisa Mulvey *

Today it has become increasingly important to open minds to cultural awareness and understanding as the world's populations become more and more interconnected in the global age. In the American higher education system, participating in a study abroad programme is one way that students can access, learn about, and function within these foreign countries, languages and cultures. This chapter begins by providing an overview of four common reasons for and benefits of studying abroad. Next, it summarises current study abroad trends and statistics, including who is studying abroad, where they are going, and where they come from. Finally, it seeks to shed light on factors, both positive and negative, contributing to current United States college students' decision whether or not to study abroad, using survey research from students at an American public university. The conclusion will propose future avenues for further research in the field.

* University of New Hampshire; Harvard University School of Education graduate

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

In the interconnected world we live in today, opening minds to cultural understanding has become a necessity. Cultural understanding means more than tolerating difference; it is about recognising the essential "sameness" that is shared at the core of all human beings (see Hinton, this volume). The layer above our core contains our differing cultural identities, and when we come to respect or even understand that layer in others we are setting out on the path to cultural understanding.

In the United States as elsewhere in many cases, one of the only types of exposure people get to other societies, customs and ways of life from childhood is studying a non-native language. As such, language learning is an important avenue by which to cultivate interest in and understanding of other cultures (see della Chiesa, Chapters 1 and 26, this volume).

Arguably the most valuable way to learn a non-native language is one in which the learner is able to connect to the cultures of the speakers of that language. Methods that typically do not create pathways for that connection, such as rote memorisation, can render language learning a stressful endeavour and impede inquiries into foreign cultures (Heusinkveld, 1985). This chapter will later discuss non-native language learning and other pathways to one form of cross-cultural interaction: study abroad. First it will provide an overview of the benefits of studying abroad, then highlight current study abroad trends and statistics in the United States higher education system, and draw attention to current issues in international education. Finally it uses a survey designed as a tool to shed light on the extent to which a number of factors can influence a college student's decision of whether or not to pursue study abroad.

Why study abroad?

Most Americans who have completed coursework in foreign countries can agree that doing so benefited them in a number of ways. The current Under Secretary of State for Public Diplomacy and Public Affairs, Judith McHale, summed it up at the Institute of International Education's (IIE) Open Doors 2009 Study Abroad briefing, "today more than ever before, study abroad can help our students to understand our interconnected world and to participate productively in the global economy" (Open Doors, 2009). Global awareness is just one important benefit of pursuing foreign study; others include promoting international peace and security, enhancing academic learning, and personal as well as professional growth.

Create global awareness

Technological trends over the past several decades have made links with foreign countries more accessible than ever before. With this new interconnectedness has come increased exposure to religions, languages, and lifestyles different than our own. To respect, learn about, and try to understand and appreciate these values and ways of life is to be culturally competent, which seems now more than ever to be essential to functioning in today's world.

The final report of the American Association of State Colleges and Universities (AASCU) Task Force on Global Responsibility states that today's American students "must be educated in a global environment that provides comfort and understanding of the cultures. Even to function at home, as most of our graduates will, in an increasingly diverse United States environment, a new sensitivity and understanding is required" (Center for Global Education, 2009). In other words, studying abroad not only offers the opportunity to function in and adapt to a foreign society and culture; it can also instil a new perspective on diversity in one's own community.

Promote international peace and security

The events of 11 September 2001 made it clear that United States security is dependent on mutual understanding and tolerance between America and other nations. In order to build more peaceful and stable relationships with foreign governments, we need to be able to rely on education that is globally focused and promotes exchanges among students with their international counterparts (see Hinton, this volume). One United States undergraduate pointed to this concept in reflecting on experience meeting students from a wide range of international backgrounds while studying abroad:

> Each conversation with these people opened my mind a little more to a world larger and more complete than what I had known before my time abroad, and each conversation challenged my views – forced me to assess and re-evaluate the views I held. But despite the many, and often aggravating differences in opinion I encountered, I was continually reassured by our ability to listen, for the most part, with open and willing minds and address through debate and questioning some common concerns and issues. It gave me hope for the success of future world leaders and peoples who already strive to solve the problems that plague our international system – Miriam Mossbarger (Center for Global Education, 2009).

As higher numbers of United States college students choose to study abroad, the body of Americans with unique firsthand perspectives and insights into the issues facing populations around the world continues to grow. Promoting these international exchanges can ultimately allow us to cultivate more peaceful and supporting relationships with countries and people around the world.

Enhance academic learning

At first glance, the benefits of completing coursework in another country seem the most obvious for students studying or majoring in a non-native language or foreign culture. These students will be able to learn as much outside of their foreign classrooms as in them. A junior in college majoring in German, for example, would inarguably enhance his or her academic programme by studying in Germany or any other German-speaking country. The experience would provide firsthand learning of both language and culture to augment what is merely learned in books at home with what can only be learned through personal experience.

Although it is often less evident to most American college students, studying abroad can be just as valuable for those majoring in subjects other than non-native language or foreign culture. No matter what the major, many international and foreign universities offer courses that may not be provided on certain United States campuses. Furthermore, studying abroad can often introduce a person to professors and students alike whose new and diverse perspectives on the subject matter may shift or challenge his or her own. Familiarising

oneself with new approaches to the same content can open the mind to "greater possibilities of thought and action" (Center for Global Education, 2009). It can spark ambitions to develop, improve, and challenge current protocols and ways of thinking in all fields.

Experience personal and professional growth

The personal benefits that can be gained by studying abroad are countless and invaluable. If the destination country is one in which a language other than English is spoken, then improving proficiency in that language is an obvious benefit. Moreover, immersion in a foreign culture can have the unique quality of stripping away many of the daily comforts and cultural norms a person is accustomed to and overwhelming them with new and unfamiliar ones. In adapting to such an environment one gains a sort of independence that can seldom be acquired in one's home culture. The adaptation process opens new pathways toward the discovery of opportunities and interests that may never have been realised in the home institution, country, language, or culture. Students may thus find possibilities for rewarding changes in the course of their education, careers, or lives in general. Navigating a foreign culture is challenging. Confronting and overcoming the challenges may build confidence and enhance critical thinking skills. As IIE's CEO and President Allan Goodman aptly put it, "no one who studies abroad remains unchanged by the experience" (Center for Global Education, 2009).

Overview of study abroad trends and statistics

Who is studying abroad?

In the 2007-08 school year, approximately 262 000 American college students studied abroad (Open Doors, 2009). This is an 8.5% increase from the previous year, and a 130% increase over the last decade (*ibid*.). Of the students studying abroad during the 2006-07 school year, 3.3% were freshmen, 12.9% were sophomores, 36.6% were juniors, 21.3% were seniors, and the remainder either graduate students or unspecified. Caucasian students represented an overwhelming portion of those studying abroad during the same school year at 81.9%; 6.7% were Asian/Pacific Islander, 6% were Hispanic, 3.8% were African-American, 0.5% were Native American/Alaskan Native, and 1.2% were multiracial (NAFSA, 2009).

Like ethnic and racial origins, the academic fields of this same group were not represented equally. According to the categorisations used by the IIE Open Doors 2009 Report, the largest portion belonged to the social sciences field, at 21.4%. Business and Management was the second most highly represented field at 19.1%, 13.2% belonged to Humanities, 7.7% to Fine or Applied Arts, 7.3% to Physical or Life Sciences, 7.2% to Languages, 4.2% to Education, 4.1% to Health Sciences, 3.1% to Engineering, 1.5% to Maths or Computer Sciences, 1.5% to Agriculture, 6.6% to other fields, and 3.1% were still undecided (*ibid*.).

Where are they going?

In the same year, Europe hosted 57.4% of American students studying abroad. Latin America ranked second as a destination region, with 15%, 10.3% studied in Asia, 5.7% in Oceania, 4.2% in Africa, 1.2% in the Middle East, 0.6% in North America, and 5.6% travelled to multiple regions. The top ten destination countries of United States study abroad students as of 2008 were the United Kingdom, Italy, Spain, France, China, Australia, Mexico, Germany, Ireland, and Costa Rica (Open Doors, 2009).

Where do they come from?

The greatest number of United States students studying abroad in the 2007-08 academic year came from California (NAFSA, 2009). The smallest number came from Alaska, with a mere 142 students enrolling in study abroad programmes (see Tables 18.A1.1 and 18.A1.2). According to a 16 November 2009 IIE press release, there has been a recent trend in which smaller institutions are sending higher proportions of their students abroad, while larger institutions are sending lower percentages but higher absolute numbers (Open Doors, 2009). During the 2007-08 school year, 23 institutions sent more than 80% of their students abroad at some point during their undergraduate study: Antioch College, Arcadia University, Austin College, Berea College, Carleton College, Centre College, DePauw University, Earlham College, Elon University, Goucher College, Hamline University, Hartwick College, Kalamazoo College, Lee University, Lewis and Clark College, Oberlin College, Pepperdine University, Saint Olaf College, Taylor University, Transylvania University, University of Dallas, Warren Wilson College, and Wofford College (*ibid*.).

Government support for study abroad

Year of study abroad

The United States Senate has increasingly recognised the importance of promoting study abroad programmes and increasing study abroad enrolment over the last several years. In 2006, it passed a resolution designating that year as the "Year of Study Abroad" in order to boost awareness of the value of an international education. The resolution included 13 reasons why the senate officially supported a national push for this issue. Among the reasons was international education being a crucial means by which to create goodwill toward the United States. The resolution also highlighted the estimate that 79% of Americans "agree that students should have a study abroad experience sometime during college, but only 1% of students from the United States currently study abroad each year" (Vistawide, 2009). Other reasons were the wish to raise cross-cultural competence in order to "avoid offending individuals from other countries," and to rectify the appalling estimation that 87% of American students aged 18 to 24 are unable to locate Iraq on a world map and 83% cannot find Afghanistan (*ibid*.). Recent trends in globalisation serve to highlight the shortage of American college *graduates* with international knowledge, non-native language proficiency or cross-cultural skills, all of which are qualities required to satisfy the still growing needs of international businesses and institutions (*ibid*.).

Simon Study Abroad Bill

Perhaps the most noteworthy and high profile initiative aimed at promoting study abroad today is the Simon Study Abroad Bill that the United States House of Representatives recently passed as part of the Foreign Relations Authorization Act. In 2003, Senator Paul Simon of Illinois expressed his vision for the bill, which includes the establishment of a national programme to support and fund the internationalisation of college campuses all over the country, with a goal of reaching 1 million students studying abroad each year (NAFSA, 2009). The programme will include efforts to influence institutional reform as well as drastically increase participation in study abroad programmes. It aims to diversify and expand both the body of students going abroad as well as their destinations. Although many of the objectives of the programme will be defined once the bill is signed into law, its principal aim is to provide more funding for students wishing to study abroad, and to push institutions of higher education to tackle the factors that hinder students from doing so (*ibid*.).

Although Senator Simon passed away shortly after expressing his hopes for the bill, the programme is continuing to gain support today (*ibid.*). He stated in a final speech "if we want to improve our nation and the world, we must be willing to sacrifice a little. This major national initiative…can lift our vision and responsiveness to the rest of the world" (*ibid.*). As outlined by the bill, the programme will be more likely to succeed if United States colleges and universities can address the on-campus factors that deter students from opting to enrol in study abroad programmes. It will be essential to first identify these factors according to their individual importance.

Language and study abroad survey

In hopes of shedding light on why students do or do not study abroad, 100 students were surveyed at an American public university. The students were randomly approached at lunchtime on a weekday, which was done in order to increase the chances that the group consisted of a variety backgrounds, academic levels, and fields of study. The first 100 surveys that were distributed are included in this study; no surveys were omitted. The research questions for this study are, "to what extent is language a motivating factor, either positive or negative, for studying abroad among the students at this college?" "What are the other factors either motivating or deterring students from choosing to study abroad?" "How do these vary by programme/major of study?"

The survey itself can be found in Annex 18.A1. The sample included seven freshmen, seven sophomores, 28 juniors, 43 seniors, and 15 graduate students. For those students who had studied abroad or who were planning to study abroad (33 out of 100), the destination countries listed were New Zealand, Italy, Germany, Spain, Australia, the United Kingdom, France, Mexico, Belize, Ghana, Cuba, Peru, Portugal, Ireland, Hungary, or multiple countries.

Majors and fields of study were split into 5 categories: Liberal Arts and Humanities, Business, Health and Human Services, Engineering and Physical Sciences, and Life Sciences and Agriculture. Thirty-two students were Liberal Arts majors, of whom 8 had studied abroad and 17 had not and did not plan to. Twenty-three students were Business majors, of whom 10 had studied abroad and 7 had not and did not plan to. Of the 15 students who were Health and Human Services majors, 2 had studied abroad and 12 had not and did not plan to. Fifteen students were Engineering and Physical Sciences majors, of whom none had studied abroad and 11 did not plan to. Finally, 9 students surveyed were Life Sciences and Agriculture majors. One had studied abroad, and 6 did not plan to.

Linguistic competencies

Like studying abroad, learning a non-native language brings countless benefits to an individual's cultural competence (see della Chiesa, Chapter 25, this volume). Not only can learners gain the ability to communicate with a whole new population with whom they could not readily communicate before; they may also discover a great deal about the rules and particularities of their native language. As Goethe said, "those who do not know other languages know nothing of their own" (Tochon, 2009, p. 653). Many people find that gaining proficiency in a second language allows them to express their thoughts, views, and feelings in a different way. Furthermore, to learn a language is also to learn a culture. Languages do not exist in a vacuum; the vocabulary, grammar and structure of a language present windows through which the learner can discover the values and norms of other populations. In today's interconnected world, cross-cultural communication is essential. Individuals with competencies in multiple languages are indispensable to peaceful and responsible

coexistence, understanding, and progress. The question is whether or not systems of education are meeting these important standards by preparing students to be plurilingual. The methods through which a language is taught in school may dictate the extent to which students are engaged in foreign cultures and committed to pursuing further language study.

The survey asked students to describe their experiences with language learning by indicating their first language and any other languages that they have studied throughout their education. In this survey, English was indicated as the first language of 95 of the 100 students, and 97 reported that they have studied at least one non-native language in their lifetime. These languages were Spanish, French, Portuguese, Latin, Russian, American Sign Language, Indonesian, Italian, Japanese, Chinese, Greek, German, Arabic, Hindi and English as a second language. Students were encouraged to report more than one language, if applicable. Approximately two thirds of the students had studied Spanish; approximately one-third had studied French, and the remainder of the languages each had fewer than 10 reported learners. Participants selected from a list of reasons for choosing a language to study: undergraduate programme requirements, high school curriculum requirements, college institution general education requirements, interest in the culture associated with the language, or other. Again, students were asked to select multiple answers, if applicable. The most popular reason for studying a non-native language cited by the students was that their high school required it (66 out of 100). This reason was followed by interest in the culture (44 out of 100), general education requirements (27 out of 100), other (19 out of 100), major requirements (12 out of 100), and finally minor requirements (8 out of 100). Students who indicated "other" listed reasons such as inspirational teachers, family ties to the language, interest in expanding cultural horizons, the belief that it can enhance one's vocabulary in the first language, previous travel to a country where the language is spoken, and usefulness of knowing another language.

Fifty students reported that they have studied or were studying a language in college. Fifteen of these students had studied abroad, 4 planned to study abroad, 4 had considered or were considering it, and 27 said that they have not studied abroad nor did they plan on it. The students were also asked to rate their proficiency in the non-native language(s) as well as whether they viewed their language learning experience as positive or negative. Out of all the proficiency responses, "absolute beginner" received 16 marks, "beginner" received 35, "intermediate" received 57, "advanced/proficient" received 11, and "fluent" received 8 (there were more than one answer for each student that had studied more than one non-native language). For those who viewed the experience negatively, the reasons listed included the feeling that the teacher was ineffective, difficulty of the language, and difficulty learning a language in a classroom setting. However, most students viewed the experience as positive. One student noted, "I feel that foreign language should be taught starting at a younger age in America. I feel it is too difficult to start learning so late in life. It is humbling to see people from Europe who can speak multiple languages fluently. It is something I wish I could do."

Factors in the decision to study abroad

Like learning a non-native language, pursuing foreign study begins with a decision affected by an abundance of factors both intrinsic and extrinsic. Intrinsic motivation can include natural curiosity of other countries and cultures or even prior travel experiences, for example. One student may wish to improve her proficiency in a non-native language; another may have heritage ties in a certain country that spark interest in discovering his family history and roots.

In the college setting, extrinsic motivations often involve programme requirements. According to the survey they may also include the desire to increase competitiveness in the job market, as study abroad experience can serve to enhance one's resume. Some students reported that they chose to study abroad because they wish to become more attractive candidates for graduate study, and still others study abroad as a result of encouragement by faculty members and administrators.

Less widely known, however, are the many factors that influence a student's decision not to study abroad. These may include a wide range of things such as lack of information, time, money, or a combination of the three. Many students in the survey did not feel studying abroad is relevant to their interests or fields of study, and some, surprisingly, were even persuaded not to pursue foreign study by professors or other administrators, often due to issues involving programme requirements.

The same 100 students that answered questions about their language experiences also responded to questions about study abroad. Students were first asked to select one of the following statements that best described their experience with study abroad: *a)* I have studied abroad, *b)* I plan to study abroad, *c)* I am considering or have considered studying abroad, or *d)* I have never studied abroad nor do I plan to study abroad. They were then asked to report the factors influencing their choice.

Of the 100 students surveyed, 22 indicated that they have studied abroad, 11 marked that they plan to study abroad, 11 said that they were considering studying abroad, 55 indicated that they have never studied abroad nor do they plan to, and 1 did not respond to the question. Of the 44 that either have, plan to, or are considering studying abroad, 43 marked factors positively influencing their decision. Among those 43 students, the most widely cited factor was the desire to experience another culture (41 out of 43). The second most important factor was an interest in working, living, or studying internationally after college (25 out of 43). Third was the perception that it looks good on a résumé or would assist in getting a job after college (24 out of 43), and fourth was the desire to improve skills in a non-native language (21 out of 43). Sixteen out of the 43 students indicated as a factor that it was highly recommended to them, placing that reason fifth in order of importance (3 cited a friend/classmate, 1 cited a professor, 11 cited multiple sources including friends, professors, and advisors, and 1 did not identify a source of the recommendation). The sixth factor was that the student's major required studying abroad, with 7 out of the 43 students citing this reason. Finally, 6 students marked "other." These responses included a variety of factors, such as love for the language spoken in the destination country, general education fulfilment, desire to experience personal/family culture and heritage, fun and travel, and childhood experience hosting foreign exchange students.

The results of this particular sample suggest that those who choose to or consider studying abroad primarily do so because of a genuine desire to experience a culture other than their own. Secondary but strong factors among this sample seem to include improving language skills, résumé building, and preparing for living, working, or studying internationally after college. Programme requirements and advice from peers or faculty seemed to be the factors carrying the least weight in the decision to study abroad.

Fifty-six students responded to the question asking for factors influencing their decisions not to study abroad (55 of whom indicated that they had never studied abroad nor did they plan to, 1 of whom indicated that he or she was considering it). The responses to this question were a bit more evenly distributed than to the previous question. The most widely cited factor influencing the decision not to study abroad was the cost, with 31 out of the 56 students who responded marking this reason. Second and third were not wishing

to spend so much time away from family and being fearful of the commitment in general, both with 15 out of 56. Fourth was "other" (15 out of 56), which included several different responses.

Most students who marked "other" said that there was simply not enough time to study abroad while satisfying the requirements of their majors and graduating within four years. Some seniors noted that they did not study abroad due to poor planning on their parts. A few science majors complained that there were either not enough study abroad programmes geared toward science majors, or that it was too difficult to transfer science credits from foreign institutions. Other students indicated that there were limited study abroad programmes approved by their undergraduate programmes or majors. The fifth and sixth most cited reasons were the perception that study abroad is not relevant to the student's major, and simply having no interest in studying abroad (both with 9 out of 56). The 9 students who felt that studying abroad was not relevant to their majors belonged to the following fields of study: civil engineering, mechanical engineering, health management, journalism, nutrition, tourism, biology, and business administration. The seventh ranking factor was discouragement from studying abroad (6 out of 56): 4 of these respondents cited administrators as the source of discouragement, 1 cited a professor, 1 cited a friend, and 1 cited family. The students that indicated that they were discouraged by either professors or administrators said that they were told that studying abroad does not fit with their major or that it would be too difficult to transfer credits back to their home institutions. The eighth ranked factor was the perception that the student did not speak a non-native language well enough (5 out of 56). Interestingly, despite being listed as a reason for discouragement from sources such as professors or administrators, the least cited factor influencing a student's decision not to study abroad was that the credits would not transfer to his or her home institution (4 out of 56).

It would seem that the most important factor influencing the decision of college students in this sample who choose not to study abroad is expense. Close behind are fear of the commitment and hesitancy to spend so much time away from friends or family.

Conclusions

The programme created by the Simon Study Abroad Bill will seek to address issues that currently prevent or discourage students from choosing to study abroad. I believe that further survey research and open dialogues with students are necessary in order to begin efforts to target and minimise these issues. Surveys such as the one conducted above may prove to be a valuable tool in gauging the prevalence of certain campus-specific dynamics carrying weight over students' decisions concerning study abroad. In this sample, cost seemed to be a pervasive issue that acted as a barrier to international experience. It can be just as important, however, to pay attention to the factors that encourage students to study abroad so that they may be further promoted and supported. In this sample, such factors were a sincere yearning among students to experience other cultures, the desire to improve language skills, the attractiveness of adding study abroad to one's résumé for potentially living or working internationally after college.

In addition to surveys, further research should be conducted to determine how study abroad programmes can be expanded to more diverse destinations, and should continue to try to shed light on language learning experiences as influential factors in decisions to study abroad or even pursue international careers. Although 97 out of the 100 students had studied a non-native language, only 33 had studied abroad or were planning to study

abroad. This indicates that contrary to what many may believe, studying a non-native language may not necessarily translate into a desire to study abroad.

While the benefits are well documented, it is now time to determine the best ways to spread these benefits to a larger percentage of American students and thus craft a more globally educated, peacefully minded, and culturally competent population. As one undergraduate student put it, "study abroad did teach me something about people – despite differences in culture, religion, race, experience, and age, people are just people. No matter where you go, there will always be conservatives, liberals, free-thinkers, mainstreamers, people who challenge the *status quo* and people who embody the *status quo.* Sharing a common humanity means we will share common concerns, common experiences, common fears and joys, and through that find a common language with which to communicate our differences" (Center for Global Education, 2009).

Annex 18.A1

Sample survey

Year (circle one): Freshman Sophomore Junior Senior
Major: _____
Minor: _____
1. What is your first language? English Other: _____
2. Have you ever studied a foreign language? Y / N (if no, skip to #3)
a. If yes, which one(s)? _____
b. For how many years?
__ in pre-/elementary school __ in middle school _ in high school _____ in college
c. What made you choose this/these particular language(s)? Please check all that apply.
_____ It is required for my major
_____ It is required for my minor
_____ It was required by my high school
_____ It is a gen. ed. requirement at my college
_____ I am interested in the cultures/countries associated with the language
*Please explain*_____
Other
*Please explain*_____
d. Rate your proficiency in the language (if more space is needed, please use margins or back of form):
Language: _____
Proficiency: Absolute Beginner Beginner Intermediate Advanced/Proficient Fluent
Language: _____
Proficiency: Absolute Beginner Beginner Intermediate Advanced/Proficient Fluent
e. Would you say your language learning experience has been mostly positive or mostly negative? Please give a brief explanation._____
3. Please choose one or more of the following that describe your experience with study abroad:
_____ I have studied abroad
Where?_____ When? Fall/Winter/Spring/Summer 20_____
_____ I plan to study abroad
Where?_____ When? Fall/Winter/Spring/Summer 20_____
_____ I am considering studying abroad
Where?_____ When? Fall/Winter/Spring/Summer 20_____
_____ I have never studied abroad nor do I plan to study abroad
4. If you have studied abroad or plan to study abroad, please give your reasons by checking all that apply (feel free to also rate your reasons in order of importance – 1 being the most important; also feel free to leave some blank if they did not or will not factor into your decision to study abroad)
_____ It is required by my major
_____ I want to experience another culture

_____ It was highly recommended to me by __ a professor __ an advisor __ a friend/classmate
_____ I want to improve my language skills
_____ It looks good on a résumé/ I think it will help me find a job after college
_____ I am interested in working/living/studying internationally after college
_____ Other. *Please explain*: _____

5. If you do not plan to study abroad, please give your reasons by checking all that apply (feel free to also rate your reasons in order of importance – 1 being the most important; also feel free to leave some blank if they do not factor into your decision against studying abroad)

_____ I do not think studying abroad is relevant to my major/interests
_____ I do not speak a foreign language well enough
_____ It is too expensive
_____ I do not want to spend that much time away from friends/family
_____ I cannot find a programme for which the credits will transfer to my college
_____ I was discouraged from studying abroad by: __ professor(s) __ administrator(s) __ friend(s) ___ family member(s) ___other. *Please explain*_____
_____ Studying abroad does not interest me
_____ I am fearful of the commitment
_____ Other. *Please explain*: _____

Additional comments: _____

Thank you for your time!

Table 18.A1.1. **Top 10 and bottom 10 US states in number of students studying abroad (2007-08)**

Top United States states	Number abroad	% of Total enrolled in college in the state	Bottom United States States	Number abroad	% of Total enrolled in college in the state
California	27 133	1.07	Mississippi	941	0.61
New York	21 277	1.81	Hawaii	757	1.14
Pennsylvania	16 326	2.25	New Mexico	756	0.56
Massachusetts	12 587	2.72	Nevada	743	0.64
Ohio	11 149	1.77	Idaho	507	0.64
Texas	10 922	0.86	South Dakota	399	0.8
Michigan	9 580	1.49	North Dakota	363	0.73
Minnesota	9 579	2.44	Montana	316	0.67
Illinois	9 525	1.14	Wyoming	306	0.87
North Carolina	9 098	1.81	Alaska	142	0.46

Source: NAFSA, 2009.

Table 18.A1.2. **Top five and bottom five US states in percentage of students studying abroad (2007-08)**

Top United States states	Number	Percentage of college students studying abroad	Bottom United States states	Number	Percentage of college students studying abroad
Vermont	1 838	4.36	Idaho	507	0.64
Washington, DC	4 479	3.89	Arizona	3 825	0.61
Delaware	1 737	3.31	Mississippi	941	0.61
Rhode Island	2 493	3.01	New Mexico	756	0.56
Massachusetts	12 587	2.72	Alaska	142	0.46

Source: NAFSA, 2009.

Box 18.A1.1. **My sister, off to Columbia**

My congratulations are not to you, but to Columbia.
To you, I give everything precious and ephemeral,
Knowing only together can we resist forgetting.
At this moment, the only change is at the doorway
Where a lion now hangs with the fighting Irish and blue devil.
Everything else is the same: the clustered house sandals,
The umbrella dangling from the knob, the scuff marks on the floor.
At this moment, they still belong to you.
When you leave, nobody will know who you belong to.
Nobody will be able to look at you and know you are loved,
You are exceptional, you are more than their opinion.
You will either be honest to strangers or lie to yourself.
I want you to remember everything colleges like these
Will make you forget or wilfully abandon –
Did you know we left Vietnam in our best clothes?
Mom in her brown dress, Dad in his gray slacks,
Hoai Xuan and I in matching jumpsuits.
We ate ramen on the floor in Thailand,
puckering our lips to cool the noodles.
We waited a month for an airplane in Japan.
During the flight, dad was so scared
He didn't even dare use the restroom.
Back then, the world was too unwieldy for us to navigate.
What Columbia will teach you is that you can trample fearlessly
over anything because you are smart and powerful.
But that's not who you are. And that's not where you come from
When you leave, nobody will know who you belong to.
Nobody will be able to look at you and know you are loved,
You are exceptional, you are more than their opinion.
You will either be honest to strangers or lie to yourself.

Dinh Xuan T. Phan, Vietnam-United States

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Chapter 19

Migrants, language and education: An international perspective

By Esther Yoona Cho *

Migrant children across countries and contexts may have very different experiences in terms of the education and economic outcomes. This author takes a closer look at two neighbouring countries and how they deal with migrant students and immigration: The United States and Canada. Immigration policies as well as language and educational policies and interventions are described for each of the countries. The author finds that these school systems must employ highly trained teachers who are prepared to work with a population of students who may not speak the national language. She also confirms the benefit of positive representations of migrant children's languages and cultures in the academic environment.

* Harvard University School of Education graduate; Education Research Program at the Social Science Research Council (SSRC), USA

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

Throughout the span of human history, the flows of peoples within nations as well as across vast oceans have fashioned and fuelled the world's social, economic and cultural dynamics that is experienced so vividly today in every corner of the globe. As a response to ever multiplying and diversifying populations, governments have established immigration and immigrant policies to varying degrees and outcomes reflective of their unique national histories and identities. Language, being one of the most prominent of ethnic markers, is the primary means through which nations have sought to integrate immigrants into the dominant society (Schiffaeur *et al*., 2004). Such efforts to incorporate immigrants through language acquisition have been particularly salient in schools, as nation-states "have seen it as one of their prime duties to establish, fund, and increasingly direct a mass system of public education… in order to create [both] an efficient labour force and a loyal homogeneous citizenry" (*ibid*., p. 2). The extent to which immigrant students are supported in schools, however, has shown to vastly differ across countries (OECD, 2006). When comparing the outcomes and experiences of immigrant students, it is further evident that such differences cannot solely be attributed to immigrant characteristics but rather significantly reflect the national approaches and attitudes to immigration and the integration of immigrants (*ibid*.).

Therefore, in this chapter, I attempt to further investigate the varying language acquisition experiences of immigrant youth by examining this phenomenon in two neighbouring countries – Canada and the United States (for a related discussion in the European context, see Tarozzi, this volume). I will begin my discussion by presenting the motivation for choosing these two nations in particular. I will then explore the social landscape of each country as immigrant "receivers" in light of their immigration policies and patterns in order to elucidate respective national orientations towards immigrants and their integration into society. The second portion of this chapter will examine the responses of each nation to the influx of immigrant students per their language and education policies and interventions. It is my hope that this investigation will inform policies and programmes affecting the livelihoods of immigrant youth and instigate more comparative research and analyses across countries faced with challenges of vast linguistic diversity.

Rationale: Canada and the United States

Despite their comparable histories of immigration and development, data from an international literacy survey administered in 2003 by the OECD divulged markedly different outcomes of students in Canada and the United States. One of the objectives of the Programme for International Student Assessment (PISA), an internationally standardised exam that evaluates reading, maths and science literacy of 15-year-old students, was to discover where immigrant students succeed out of the seventeen participating OECD countries (2006). It compared the outcomes of students with foreign parents and who did not speak the school language at home with native students who were born in the country and spoke the school language at home. Findings from the assessment revealed that while the achievement gap between these two student populations in the United States was the third largest of all OECD participants, Canada had among the smallest differences (*ibid*).

In fact, the report showed that second-generation immigrants in Canada out-performed their native peers in reading assessments (*ibid*). For the purposes of this chapter, time and space limitations do not allow for a discussion of the detailed results of the PISA survey, including individual comparisons of 1st generation students and 2nd generation students with their native counterparts (for some details on Germany, see Christoph, this volume). However, this report does highlight the striking differences in the academic outcomes of Canadian and American immigrant students, which, more importantly, further indicate the differing transition and integration experiences of immigrants and immigrant youth in these bordering "traditional settlement countries" (*ibid*, p. 18).

Overview of national contexts: Post-1945 immigration

Before delving into the immigrant policies and interventions of the two countries, a general understanding of who is indeed crossing the northern borders of the North American continent would prove beneficial to engaging in further discussion on the integration of immigrants. The post-1945 era, with the 1960s in particular, marks a significant turning point in immigration history in both Canada and the United States (Reimers and Troper, 1992; Pedraza, 1995). After decades of isolationist and restrictionist policies from the World Wars and the massive economic depression of the 1930s, both countries re-opened their doors to large-scale immigration: Canada, beginning in late 1947, primarily for reasons of economic and population growth; and the United States, with the ratification of the Immigration Act of 1965, for heightened priorities of economic growth, racial and ethnic harmony, and foreign policy considerations (Reimers and Troper, 1992). With these new, more open and tolerant policies, came also a dramatic shift in the countries of origin of the new waves of immigrants. While immigrants to both Canada and the United States had historically come predominantly from European nations, more linguistically and culturally distinct individuals have passed through the North American borders in the last four decades. In 1957 ninety percent of immigrants to Canada had come from the United Kingdom and continental Europe; a mere three decades later in 1987, half of the newcomers were migrants from Asia, 5.9% from Africa and 14.4% from Latin America (Sullivan, 1992). Similarly, the United States has experienced a major influx of immigrants from Latin America and Asia, drastically different from the more culturally and linguistically "adaptable" immigrant groups of the 19th and early 20th centuries (Pedraza, 1995).

While each nation's experience with waves of unanticipated immigrant groups in the 1960s had been remarkably similar, the responses of the respective governing bodies to these immigrant groups of more phenotypic, linguistic and cultural diversity have been markedly different. Such is crucial to consider, and, hence, the impetus for this discussion, for governmental policies and interventions indubitably have a significant impact on the transition experiences and social outcomes of immigrants, and, moreover, further shape the greater political, social, and economic dynamics of the nation-state as a whole.

Overview of national contexts: Citizenship and incorporation

Although immigration waves and policies have fluctuated over the course of their national histories, the interaction that both Canada and the United States have had with immigration has been "intimate, … long-standing, and well-institutionalised" (Freeman, 1995, p. 887). The conferring of citizenship is often viewed as the ultimate representation of integration into a society, aptly captured by immigration scholar Irene Bloemraad (2006) in the introduction of her piece *Becoming a Citizen*: "Citizenship is not only a legal status that

accords rights and benefits, but it is also an invitation to participate in a system of mutual governance, and it can be an identity that provides a sense of belonging" (p. 1). Citizenship policies and, hence, trends of naturalisation are often a clear reflection of a nation's attitudes and approaches to immigrants and their ethnic, cultural and linguistic identities. Having both been founded on a liberal philosophy of immigration as a means to population growth and economic expansion, Canada and the United States historically have had remarkably similar naturalisation trends. However, with Canada's establishment of a comprehensive policy of multiculturalism and expansion of government interventions for the transition of immigrants, the trajectories of immigrant political incorporation of the two countries have become significantly divergent (Bloemraad, 2006). Statistical and experiential accounts of immigration and citizenship clearly demonstrate that immigrants more successfully and easily integrate into the social and economic fabric of the Canadian nation. National censuses in 2001 reported that 72% of foreign-born residents in Canada had acquired citizenship, nearly twice the proportion of individuals in the US. Such patterns of immigrant incorporation are further apparent in the human face of the nation-states – their respective governing entities. In 2002, while the proportion of foreign-born members (15%) sitting in Canada's House of Commons was close to the national percentage of foreign-born residents (19%), directly south of the border, less than two percent of the United States Congress was foreign-born, significantly less than the national proportion of 11% (*ibid*).

While the statistics presented above solely demonstrate the political incorporation of immigrants in the respective nation-states, they are also representative of their relative priorities and efforts, whether in institutionalised laws and policies or in societal attitudes and perspectives, to integrate immigrants into their new surroundings. The United States has no formal policies on newcomer settlement (with the exception of individuals who enter as refugees) nor immigrant diversity, but simply a mélange of minority policies and civil rights legislation (*ibid*). Upon investigation of Canada's explicit policies around immigration and multiculturalism in comparison to US's nebulous patchwork of policies and interventions, it appears evident that "Canada has turned the integration of immigrants into a societal endeavour – an endeavour distinctly denied as a 'two-way street,' where both immigrants and current citizens are expected to adapt to each other, to ensure positive outcomes for everyone in the social, cultural, economic and political spheres" (Frideres, Burstein and Biles, 2008, p. 4).

Policy and non-policy on cultural and linguistic diversity

Compared to the United States, it is evident in its policies, provisions and programmes for the immigrant population that Canada has embarked on a more interventionist approach toward the incorporation of immigrants. An expansion of policies and funds directly serving immigrant and minority populations was instigated by the release of a White Paper on immigration in 1966 (Reimers and Troper, 1992). It called for a revolutionary and comprehensive overhaul of Canadian immigration regulations, in large part to eliminate any iota of discrimination on the basis of race or ethnicity. Confronted by the reality that more than one-third of Canadians were of non-British and non-French origin, political leaders commissioned that the "contribution of Canada's other ethnic communities" be officially acknowledged (*ibid*., p. 36). In response, Prime Minister Pierre Trudeau announced a multiculturalism policy in 1971, formally declaring Canada to be a multicultural nation within a French-English bilingual framework (Cummins, 1984): "National unity, if it is to mean anything in the deeply personal sense, must be founded on confidence in one's own individual identity; out of this can grow respect for that of others and a willingness to share ideas, attitudes and assumptions. A vigorous policy of multiculturalism will help to create this initial confidence."

Promoting ethnic and cultural pride while facilitating incorporation into Canadian society is the essence of Canada's policy of official multiculturalism. It implicitly proclaims that immigrants are not expected to renounce their unique cultural and linguistic identities and loyalties to the homeland upon entry nor even naturalisation. The United States likewise prides itself on, and is often recognised for, its embrace of cultural and social pluralism and diversity. The difference in the two nation-states lies, however, in the official policies and non-policies around multiculturality and categorisation of diversity. While the United States has long been perceived as "the melting pot" and the "land of opportunity," the government lacks formal policy on immigrant diversity, and, hence, holds a *laissez-faire* approach to the integration of immigrants.

American multiculturality is usually defined in racial terms, often overlooking pan-ethnic racial identities and the unique experiences and characteristics of immigrants (Bloemraad, 2006). Programmes of diversity and multiculturalism that strive to eradicate racial discrimination do indirectly service non-white immigrants. However, this absence of policy or "non-policy" results in the dearth of resources and services that meet immigrants' unique settlement needs, particularly those related to cultural and linguistic barriers (Hammar, 1985).

Immigrant integration via language

Canada's socio-political framework of multiculturalism manifests itself in the government-funded and endorsed services for newcomers. Canada's settlement programmes that focus on linguistic incorporation and transition into the labour market reflect the nation's approach of identifying structural factors related to discrimination and disadvantage and developing policies to promote equality in opportunity and outcome (Bloemraad, 2006). The administration of citizenship adjudication and immigration services in Canada falls to the stand-alone federal department Citizenship and Immigration Canada (CIC) while in the United States, the Bureau of United States Citizenship and Immigration Services (USCIS) is housed under the Department of Homeland Security (Frideres, Burstein and Biles, 2008). Even upon cursory glance of the nomenclature of these Canadian and American governmental entities, it is apparent that though they are parallel structures, citizenship and immigrant integration are the prevailing concern of the former, while security and border control are the primary foci of the latter.

While the CIC is centred on four main services including the Immigrant Settlement and Adaptation Program (ISAP), the Host Program, and refugee programmes, its primary investment in settlement and integration is language instruction through the Language Instruction for Newcomers to Canada Program (LINC). In the 2003-04 fiscal year, CAD 100 million, more than half of the CIC budget, was devoted to LINC (*ibid*.). Since 1992, the LINC programme has funded basic language instruction in either one of Canada's official languages, French or English, to adult immigrants as soon as possible after their arrival. The programme provides monetary supports to community service organisations that offer language instruction to adult immigrants for up to three years from the time they start training for employment (*ibid*). In addition to language skills, LINC participants report that the programme helps them gain basic knowledge of Canadian history, the political infrastructure and civics – structures that are most likely put in place to allow newcomers to feel more prepared to participate in society (*ibid*).

In contrast to its northern neighbour, the United States is wary about interventionist government policies and programmes, precluding the INS from possessing legal authority to disburse funds for direct settlement assistance to newcomers (Bloemraad, 2006). While the

United States boasts a similar socio-political approach to multiculturalism, these ideologies are not explicitly manifested in material provisions specific to immigrants, due to the philosophy that individual choices, a constitution of individual rights, and anti-discriminatory legislation would facilitate the successful incorporation of newcomers into society. The involvement of the federal government in the integration of immigrants, especially in providing language acquisition services, is, therefore, not as direct nor as defined in the United States as appears to be the case in Canada. In the United States assistance with newcomer settlement is only provided for the refugee subgroup of immigrants through private-public partnerships. The government allocates funding to states, individual refugees, and non-profit organisations to provide settlement services of language instruction, employment training and job placement (*ibid*). The country has attempted to initiate more proactive efforts, however, to foster immigrant integration and participation in American civic culture, despite continued indirect participation characteristic of the noninterventionist United States government. One step that the United States government has taken is the establishment of the Office of Citizenship in the Bureau of United States Citizenship and Immigration Services in 2002 (USCIS, 2009). The Office of Citizenship has developed a "Guide for New Immigrants" in numerous languages which includes information on settlement, employment, education, citizenship and community organisations that offer English classes. Moreover, initiatives for immigrant promotion and outreach have been introduced in Congress, such as one to establish a United States Citizenship Foundation that would allocate monies to organisations that provide language and employment services (Bloemraad, 2006).

Integration of immigrant youth in schools

The discussion thus far has served to illuminate the current socio-political climate of Canada and the United States and the "symbolic" and "material" steps that each nation-state has taken in response to immigration since the 1960s (Bloemraad, 2006). Upon exploration of various key policies (and non-policies in the case of the United States) that have influenced the integration of immigrants, it is evident that, though Canada and the United States have similar histories of development and immigration, the immigrant populations of each country experience varying degrees of incorporation due to their divergent trajectories of immigrant and diversity policies. While both the United States and Canada are often distinguished by their cohesive ethnically and linguistically diverse societies, boasting appellations such as "the melting pot" and the "mosaic" respectively, the policies and interventions discussed above imply an emphasis on acquiring the cultural and linguistic norms of the dominant society (*ibid*).

How are such macro policies and national attitudes toward immigrant integration manifested in schools? How do Canadian and American schools aid the transition of their youngest immigrants into their socially constructed academic environments? Moreover, what policies are in place that may promote (or discourage) the preservation of the heritage languages and cultures of immigrant students? (for details on Germany, see Christoph, this volume). In the ensuing pages, I will discuss these issues in an attempt to shed some light on the aspects of the Canadian education system that may contribute to the impressively small gap between native and immigrant student performance that was manifested in the 2003 PISA survey.

Immigrant education in the United States

As expected from the dearth of explicit policy and direct intervention for the integration of immigrants on the macro level, the United States also fails to consider how

best to incorporate the children of newly arrived immigrants in society, particularly in the schools. In the United States, one in five youth under the age of 18 is an immigrant child, both United States and foreign born; by 2040 it is projected that they will make up one-third of the nation's youth (Louie, 2005; Suárez-Orozco, Suárez-Orozco and Todorova, 2008). It is vital that policymakers and educational administrators take active steps to reform these social institutions where students not only spend the majority of their formative stages of development, but also get a glimpse of the cultural, social and political dynamics of the dominant society. No national education policies are put in place to help immigrant youth transition smoothly into their new academic surroundings, and, hence, the larger social fabric of the United States. Considering that immigrant children comprise the most rapidly growing group of the youth population in the United States, there is no doubt that there must be more rigorous and proactive initiatives that address the specific needs of immigrant students (Suárez-Orozco, Suárez-Orozco and Todorova, 2008).

Though there is a dismal absence of policies and interventions that explicitly target the needs of immigrant children, it appears from the enactment of the No Child Left Behind Act (NCLB) in 2001 (reauthorisation of the Elementary and Secondary Education Act [ESEA] of 1994) that the United States government is becoming more cognizant of the substantial gaps in academic achievement across student populations of particular ethnic, linguistic, and schooling backgrounds. While prior to 2001 the instruction of English Language Learners (ELLs) was addressed separately from other student groups in federal and state policies, NCLB has mandated that content standards, assessments, and accountability be the same for all students, including ELLs (Bailey, 2007). The inclusion of ELLs as a specified subgroup in accountability reports is a crucial and essential addition to the ground-breaking legislative act. Hence, NCLB has driven teachers and administrators to pay closer attention to the needs of ELLs, leading to more discourse on the most effective instruction and curriculum for this student population. It now requires that educators place more emphasis on the development of literacy of ELLs by developing curricula and assessments of English language proficiency that can help them meet the federal mandate. Though immigrant children are only a subset of the ELL population, policies such as NCLB provide a glimmer of hope of the increasing awareness of the unique needs of this student group.

Despite federal efforts to provide all students with education of increased and equalised quality by mandating high standards and national goals, it is clear that the dissemination of such rhetoric in the classrooms themselves proves to be a far greater challenge. Besides these high benchmarks, the national government provides no concrete, direct guidance on the most effective programmes and interventions for teaching ELLs. Hence, the methods of instruction and criteria for credentials for English as a Second Language (ESL) and bilingual teachers differ state-by-state and even schools within just a few miles of one another (see PISA). Schools implement a range of ESL programmes, *i.e.* Sheltered English Immersion, Transitional Bilingual Education and Dual Language Education, which vary by the amount of instruction in English, instruction in students' native languages, and the time period given to students to transition into mainstream English-only classes (Suárez-Orozco, Suárez-Orozco and Todorova, 2008).

The lack of direct federal support in both funding and pedagogical delivery, the extreme inconsistencies in priorities and resources across schools, and the dearth of knowledge on best policies and practices for immigrant students highlight the neglect to integrate immigrant youth into the schools in order that they may be incorporated into society at-large. When considering this paucity of nationally consistent government supports and research-driven, evidence-based classroom practices, the substantial achievement gap between native students and immigrant students evident in the PISA results is unfortunately not surprising.

Box 19.1. **No hot cheetos: On loss and longing**

There were no hot cheetos in the Lobby Shop.
What do you mean, this is not important?
Is loss not an absence, and what is absence without longing?
Of course it matters that there were no hot cheetos in the Lobby Shop.
I write the words that I don't see written and when has anyone
in the history of this world written that there were no hot cheetos in the Lobby Shop?
Believe me, I understand the faultiness of wanting to be understood—
To be a young García Márquez reading Faulkner on his way to Aracataca,
engrossed by the loneliness of the American South and his own unknown Colombia.
Intimately, they knew the other's isolation and wrote themselves into existence.
So I too will write Texas into existence, the lonely and unknown
Mexicans, Blacks, and Vietnamese in overcrowded schools that fund
their homecomings and proms with 50-cent sales of hot cheetos.
I will write about my sister coming home for Christmas and crying
because she couldn't get a decent bowl of phở or even a bag of hot cheetos
at that Catholic giant of a university in the cornfields of Indiana.
My father, who lost his education long before this poem was ever written,
could not understand her misery, her dismissal of a USD 45 000-a-year gift.
What could I say to a man who had starved or a girl who was sobbing,
asking me between hiccups and heavy breaths if it was true, wasn't it true?
What could I say but that, last time I checked, and as you now well know:
There were no hot cheetos in the Lobby Shop.

Dinh Xuan T. Phan, Vietnam-United States

Immigrant education in Canada

As mentioned in the introductory sections of this chapter, the outcomes of the 2003 PISA survey demonstrated a remarkably minimal gap in the performance of immigrant students and their native peers in Canada. Upon investigation of Canada's language and education policies, it is clear that, as anticipated, the nation's interventionist approach to the incorporation of immigrants into society is clearly manifested in immigrant education. This is particularly salient in its comprehensive explicit language instruction, which, according to the OECD report "Where Immigrant Students Succeed," is one of the most significant factors that distinguish Canada from other immigration countries (see Brink *et al*., this volume). This report further found that the Canadian province British Columbia and the Netherlands are the only areas from the PISA participating countries where explicit curricula are put in place for pre-primary education programmes, whereas most nations rely on implicit language learning for early childhood (*ibid*). Hence, for the purposes of this discussion, I will focus on the language programmes in British Columbia, which also has the municipality with the highest proportion of immigrant population in Canada (Richmond) (Ip, 2008). However, before examining the language support system of British Columbia, it is crucial to note that its programmes may not reflect those across all provinces in Canada. Though funding is provided primarily by the federal government, the Ministry of Education of each province provides curricular guidelines for ESL instruction and determines the dissemination of its resources.

British Columbia

British Columbia provides a systematic, rigorous language education for its immigrant students starting from the pre-primary grades (OECD, 2006). As part of the kindergarten curriculum, children with limited proficiency in English (L2) receive five to eight hours per week of L2 language support. For immigrant students in primary school, the Ministry of Education allocates funds for supplementary language support if the following criteria are met:

1. Evidence from a recent English language assessment that student lacks proficiency and cannot achieve expected outcomes of standard curriculum without additional support;
2. A current annual instruction plan that meets the specific identified needs of the student;
3. Supplementary services including pull-out instruction and in-class language assistance;
4. Specialised professional development for teachers to address unique language needs of students;
5. Detailed documentation of direct support given through additional services by an ESL specialist; and
6. Record of student progress.

For immigrant students with limited L2 proficiency in the secondary school level, schools provide a preparatory programme that is organised into three phases: *reception, transition*, and *integration*. The programme begins with a stronger emphasis on extensive ESL courses while also providing grade level content courses. In the *transition* phase, there is a gradual shift towards more standard content courses and fewer language support classes until students reach the *integration* phase, in which students only receive one block of L2 assistance. Students on average stay in this system for up to three years, but the length of language support depends on individual need and development; students may stay at the *reception* phase for several years (OECD, 2006).

It is evident from the ESL programmes in British Columbia that more systematic and explicit language education programmes with clearly defined goals and standards can help facilitate the successful integration of immigrant youth. In fact, such comprehensive and consistent L2 support interventions are the very aspects of schooling that distinguished those countries with the smallest gaps in performance between native and immigrant students on the PISA assessment (*ibid*).

Conclusions on Canada and the United States

In sum, the discussion above illuminates the crucial role of national policies and the social institutions that manifest these policies on the integration of immigrants. It is highly apparent that immigrant policy and non-policy around language, ethnic and cultural diversity, and education in Canada and the United States mirror their national attitudes and approaches to immigration and immigrants, which in turn significantly determine how successfully immigrants are integrated and incorporated into the social and cultural fabric of society. However, it is further vital to consider that the implementation of such policies may not reflect the original intentions of the creators. For instance, the heavy emphasis placed on learning the official languages as quickly as possible coupled with the

dearth of resources to preserve and utilise heritage languages and cultures do not align with Canada's national rhetoric of multiculturalism. While immigrant nations must prioritise the development and effective implementation of research-based language interventions to scaffold both immigrant adults and youths in L2 acquisition, it is also essential that these countries value, nurture and leverage the cultural and linguistic vitality of these individuals in our globalised society.

Though this comparative analysis of Canada and the United States is by no means a complete report on the complexities of immigration and education in these two countries, it highlights the urgent need to re-examine current immigrant and immigration policies in order to ensure the holistic well-being of immigrants and the social cohesion of receiving communities. Such is essential not solely in the two North American countries discussed above. Nation-states around the world must recognise that, though to varying degrees, they are confronted with similar struggles and challenges or, if not yet, soon will be as the world only becomes increasingly interconnected (see Lizárraga; O'Donnell; Worden; Tarozzi, all this volume). In order to highlight the critical reality of this issue, I will present snapshots of the current situation in three countries, France, Finland, and Japan, concerning immigrant incorporation particularly through language education.

Box 19.2. **Case study – France**

Immigrant populations

In France, because it is prohibited to gather census on ethnicity, language and religion, there is a dearth of consistent and detailed demographic statistics on its foreign population (Noiriel, 1995).* What is evident, however, is that, though the percentage of immigrants has remained the same since World War II, the countries of origin of migrants have shifted from predominantly southern European nations such as Italy, Greece, and Spain to former colonies and more "alien" lands of North Africa, Sub-Saharan Africa, and Turkey (van Amersfoort and Penninx, 1998). The more culturally and linguistically diverse immigrants of the contemporary age have posed more challenges to this country that has for centuries firmly believed in the "assimilationist strength" of its culture *(ibid)*. Since 1981 when France first incorporated measures on immigration into its government policies, specialised organisations and programmes have been established to facilitate the incorporation of immigrants into French society. While the government has invested in a range of domains such as housing and vocational training to improve living and employment conditions, much of its focus has been on civic, social and language education in order to shape immigrants into Frenchmen as quickly as possible (Kruyt and Niessen, 1997).

Attitudes toward "languages of origin"

France's strong national identity that leaves immigrants no choice but to rapidly integrate themselves into French civil society is further reflected in the schools, particularly in language policies and the attitudes and responses of teachers and administrators toward minority students and their language backgrounds (Schiffaeur, *et al*., 2004). Driven by the philosophy that education should be free, accessible and equal for all, schools are geared towards "removing social and cultural differences," which is evident in the admissions applications devoid of questions on ethnic and native language background and the strict boundaries between private (home) and public (school) spheres (Kruyt and Niessen, 1997).

Box 19.2. **Case study – France** *(continued)*

At initial thought such a philosophy of equitable delivery of education appears reasonable. However, it is highly plausible that the lack of awareness and understanding of students' individual cultural and linguistic backgrounds may in fact perpetuate false judgments and distort truths about certain ethnic populations, especially due to the apparent phenotypic differences between native French and the majority of contemporary immigrants (*i.e.* from North and Sub-Saharan African nation-states). Moreover, though the educational system claims to absorb all differences in the name of equality and unity, in reality, it disregards the unique cultural and linguistic characteristics of minority students (for a discussion of a popular speech pattern among French minorities, see Fuchs, this volume), inferring that they are perceived as negative liabilities that need to be adjusted to fit the French norm both in ideology and speech. Such indeed appears to be the case upon consideration of the language programmes and policies of the French school. Increasing efforts to teach mainstream European languages in early bilingual programmes while neglecting the language needs of immigrant students portray the hierarchy of languages that blatantly exists within the French educational system (Helot and Young, 2002). In fact, instead of the words "minorities" and "minority languages," or as in Canada, "heritage languages," the French State cautiously refers to languages spoken by immigrants as langues d'origine (languages of origin), often associated with poverty and former colonisation (see Brink *et al.*, this volume). Moreover, the term "bilingual" is never used in official documents to refer to immigrant students, but rather only for the acquisition of "prestigious" European languages (Helot and Young, 2002).

The simple existence of the aforementioned lexical particularities insinuate the belief that French should become the primary language even though another language may have been one's original tongue and reflect the false notion that "languages of origin" impede the acquisition of French. Such policies not only reinforce the negative connotations associated with migrant languages but also significantly undermine the cultural and linguistic capital that immigrant students possess that could potentially serve to strengthen their personal relationships with parents and other members of their ethnic community, to develop their identity as global, dynamic individuals, and to support their literacy development in the dominant language (Tse, 2001; Cummins, 1979). The lack of knowledge of language acquisition research continues to fuel the national orientation towards minority languages as a "problem," deemed as a "potential threat to the civilising project" (Ruiz, 1984; Schiffaeur *et al.*, 2004). Pervasive xenophobic ideologies, negative perceptions of bilingualism for immigrant children, and notions that "languages of origin" do not possess cognitive value or social and economic capital as do more "modern" languages are a significant factor in the programmes put in place, or lack thereof, to support the academic experience of immigrant students (Helot and Young, 2002).

Language programmes

Language policies that stress the "absolute priority" of the French language have been the driving force of language programmes for foreign-born students *(ibid)*. Confronted with an influx of immigrants from new countries of origin, special reception classes were created in the 1970s for newly arrived non-French speaking foreign children as temporary gateways to mainstream classes. In these classes d'initiation (CLIN), immigrant children have been expected to acquire sufficient linguistic competence to be able to integrate into regular education within just one year (Costa-Lascoux, 1989; Glenn and de Jong, 1996). Such unreasonable expectations indicate the dearth of knowledge of research on second language acquisition by the educational administrators in France. Solely focused on making sure that young newcomers assimilate as quickly as possible to the dominant French culture, they evidently do not consider the myriad of factors, *i.e.* age of arrival, educational background, native language competencies, and difficulties adapting to a new land, that influence language acquisition and the social, affective and academic development of immigrant children (Suárez-Orozco, Suárez-Orozco and Todorova, 2008).

For youth that arrive in later grades, *i.e.* after the age of twelve, some schools offer one to two years of *classes d'adaptation* (CLAD), either of general education or of vocational training and work preparation. Some schools also provide a period of intensive French instruction, the duration of which depends on their schooling background in their homeland (Glenn and de Jong, 1996). It is likely that these temporary support classes, if offered at all, would not sufficiently prepare them to navigate the French educational system in which the

Box 19.2. **Case study – France** *(continued)*

reputation of the secondary school as well as performance in upper secondary courses and the college entrance exam (*baccalauréat*) have a pronounced impact on the rest of one's academic and vocational trajectory (Alba and Silberman, 2009) (see Christoph, this volume). Furthermore, in some schools, as is unfortunately the case with many nations with underdeveloped specialised language programmes, language minority students are grouped with those with low cognitive and intellectual skills as if the pedagogy for one population would be appropriate for the other (Costa-Lascoux, 1989).

In addition to *classes d'initiation* and *classes d'adaptation*, more commendable attempts were made to teach courses on the languages and cultures of origin (LCO) in order to foster students' respect for their cultural and linguistic heritage *(ibid)*. However, such efforts proved to be an insurmountable challenge due to the lack of quality teachers and resources to provide for all immigrant students who came from a vast range of linguistic backgrounds. Moreover, LCO courses were quickly disputed by many of the immigrant parents themselves (Alba and Silberman, 2009). Unfavourable parental responses are not surprising, however, when considering the previously discussed negative attitudes towards the blatant ethnic marker of (non-French, low-status) language that pervade French society. Research studies further substantiate the significant impact that national attitudes and government policies towards dominant and minority languages have on parental preference of the language of instruction as well as the language spoken at home (García, 2005; Kemppainen *et al*., 2008).

From the examination of the three chief educational measures taken for the integration of immigrant students, it is evident that, though specialised interventions may be established with veritable intentions, without adequate resources and evidence-based supports, the outcomes will be inconsistent and disconnected from policy discourse (Costa-Lascoux, 1989). Moreover, the acknowledgement and embrace of ethnic diversity in schools may be the surer path to a truly equitable schooling environment, contrary to the deliberate ignorance and invisibility of differences that exist today.

* Due to strong national principles of republicanism and Jacobinism in France, cultural specificities are interpreted to encourage discrimination and inequality by marking individuals as different, whether by religion, ethnicity, or language. Only in the last couple decades has this ideology begun to be countered by social researchers.

Box 19.3. **Case study – Finland**

In international discourse around immigration, Finland is not deemed a priority nation or oftentimes not even considered in the discussion. However, it is crucial to recognise that this country that has been widely characterised by its homogeneous population is also experiencing significant changes in its demographic make-up due to recent patterns of migration (Taskinen, 2005). This nation, therefore, is not only an interesting area of investigation, but also could prove to be a paradigm for countries that are likewise undergoing a drastic shift towards greater ethnic and linguistic diversity.

A bilingual nation

Before examining the details of immigrant flows and language interventions catered to these populations, it is crucial first to understand the social and educational effects and implications of having two official languages – Finnish and Swedish. The constitution ensures that government authorities and institutions equally provide for the cultural and societal needs of both Finnish-speaking and Swedish-speaking populations, despite the fact that only five percent of the inhabitants declare Swedish as their mother tongue (Statistics Finland, 2006). Such is a clear reflection of the value and significance that the nation as a whole places on knowing, conserving, and embracing one's cultural heritage.

Box 19.3. **Case study – Finland** *(continued)*

It is very likely that the strong emphasis on non-native language learning in the Finnish curriculum is more salient due to the existence of two national languages. Not only does this promote dual-language competencies for all citizens, but from living in a completely bilingual and bicultural society, it also encourages them to be more open-minded in understanding and embracing diverse peoples and cultures. It is evident that the Finnish government recognises the value of non-native language learning when the first non-native language, the most popular being English, is introduced to students in the third year of comprehensive school. Then in the seventh year, students begin learning the second national language, that is, Finnish for students attending Swedish schools and Swedish for students in Finnish schools (MFA, 2008). This schooling system that ensures that students are taught in their mother tongue as well as equipped with knowledge of two non-native languages has proven to be quite successful thus far. Considering the results of the PISA survey and the 1994 IEA reading literacy study, it is apparent that, though Swedish children are language minority students and may be expected to have lower achievement, their level of literacy is comparable to their native Finnish-speaking counterparts.

A new wave of immigration

In the discussion of immigrant education in Finland, the Finnish National Board of Education (FNBE) (2007) highlights that "instruction in Finnish or Swedish and instruction in students' own mother tongue will reinforce their multicultural identity and build a foundation for functional bilingualism" (p. 1). The FNBE *(ibid.)* continues to declare that "every effort is made to develop and support the student's skills in his mother tongue" (p. 1). These educational principles reflect the national immigration policy that immigrants are entitled equal rights and treatment as the native population (Latomaa and Nuolijärvi, 2002). Efforts to provide educational services in one's mother tongue can seem feasible when the country is a relatively ethnically homogeneous society, the explanation that is usually given by international scholars for their success as a nation. But, although Finland is not as diverse as other European countries, migration trends these past couple decades indicate that Finland also is rapidly transforming into a multiethnic, multicultural and multilingual society (Sahlberg, 2007). Though only 1.7% of the population may be of immigrant background, what is more astoundingly significant is that this small group of foreigners represents 150 different languages (Taskinen, 2005). Furthermore, in some areas, particularly in some Helsinki suburbs, immigrants account for a majority of the population in schools.

Immigrant populations

From the beginning of the 1990s, the traditional out flux of migrants has decreased while the influx of migrants has increased rapidly. A major proportion of arrivals in the 1990s has been that of repatriates from Russia and Estonia (Taskinen, 2005). From 1990 to 2000, the Russian population experienced an increase of more than 800% while the Estonian population grew by more than 230% (Latomaa and Nuolijärvi, 2002). There has also been an increase in asylum-seekers coming from more than sixty-five different countries, *e.g.* Somalia, Chile, Vietnam, Yugoslavia, Iraq, Turkey, and Iran. Others have also moved to Finland for a specific job or for family reasons such as marriage with a Finn. Though at first glance the proportion of immigrants to the native population may seem trivial, such patterns of immigration cannot be ignored in the discourse of educational policy and practice, especially when these individuals come from a myriad of cultural and linguistic backgrounds. For instance, research has shown that most Ingrians do not speak Finnish and the children of these immigrants have found it difficult to adjust to their new surroundings (Taskinen, 2005). It would not be surprising to find the same to be true across immigrant groups in Finland considering that the influx of migrants is a fairly new phenomenon and challenge that the nation faces. However, it is crucial that the government and, in particular, the Ministry of Foreign Affairs and the National Board of Education, quickly take steps to improving social services for non-native individuals in order to expedite and ease their adaptation into a new society.

Language programmes

Schools have already begun working towards integrating immigrant children into society through language instruction. Finnish as a second language (FSL) classes* were added to the national core curriculum in the late 1990s and are now offered at all levels of education, from preschool to the university level (Latomaa and Nuolijärvi, 2002). Moreover, schools have begun to make efforts to actively support proficiency in the mother

Box 19.3. **Case study – Finland** *(continued)*

tongue of immigrant children. A recent article in the International Nordic News revealed that the city of Helsinki is opening its first school where the language of instruction is Spanish (Nordal, 2009). This institution, which will have two streams – one for proficient-Spanish speakers and the other for non-Spanish speakers, is a response to an increasing number of parents who not only want their children to learn a second language, but also be educated in one. Such steps in education appear to be hopeful in promoting the integration and equality of immigrants. However, the mere novelty of such programmes calls for further scrutiny. It has been found that FSL instruction varies greatly across different areas of the country: some municipalities offer FSL for the entire span of a child's school career while others do not even provide the full three years that are nationally funded (Savolainen, 1998; Suni, 1996). Moreover, while FSL teacher training programmes were developed at a number of universities in the 1990s, the growing linguistic and cultural diversity of students has been found to be a challenge for effective training as well as practice (Matinheikki-Kokko and Pitkänen, 2002).

* Instruction in Swedish as a second language is not as extensive as FSL, for only 2.2% of immigrants live in Swedish-dominant surroundings, and the three largest municipalities (Helsinki, Espoo and Vantaa) with the greatest numbers of immigrants are predominantly Finnish.

Box 19.4. **Case study – Japan**

Immigrant populations

Along with Finland, Japan is an advanced developed nation that has recently transitioned from being a country of net emigration to one of net immigration. Since the late 1980s, driven by severe shortages in domestic labour, Japan has had to open its doors to foreign workers. The 900 000 immigrants coming predominantly from East and Southeast Asia, Latin America and the Middle East only represent 0.71% of Japan's total population (Tsuda, 2006). However, its exponential increase and its vast linguistic and cultural diversity, like that of Finland, should draw the attention of policymakers particularly to the implementation of language interventions that would aid the integration of the newcomers.

Attitudes toward immigrant groups

This notion of helping foreigners integrate themselves into society, however, is one that completely opposes the official national rhetoric that denies the possibility of Japan becoming a country of immigration (Pak, 2000). The Japanese government unfortunately continues to uphold a restrictive naturalisation and immigration policy, focused more on maintaining strict border control than the social integration and rights of immigrants *(ibid.)*. Japan adheres to the *jus sanguinis* nationality law, granting citizenship only to descendents of Japanese nationality. Hence, the government's staunch stance that "all foreigners should be admitted on a temporary basis only," allow it to ignore the struggles and challenges of immigrants and not provide even the most basic social services and rights, including education and health. Moreover, the immigration of family members of migrant workers is prohibited due to fear that families would be encouraged to settle in Japan *(ibid.)*.

Regardless of these policies, however, the reality is that there is an increase in immigrants and immigrant families who are settling in Japanese society for the long term. The foreign-born population in Japan more than doubled from 1983 to 1999, from 700 000 to 1.6 million (Usui, 2006). Perpetual negligence of this inevitable phenomenon towards more diverse communities will only grow to be detrimental for the social, economic and political fabric of Japan at large. Hence, it is crucial for the Japanese national government to recognise these trends in their early stages and collaborate with local governments in accepting immigrants as a part of the community.

Box 19.4. **Case study – Japan** *(continued)*

The role of local governments in schooling

Due to the dearth of national supports, municipal governments have had to undertake the responsibility of addressing the needs of foreign residents who have settled in their neighbourhoods (Tsuda, 2006). Those communities with large immigrant populations have been particularly receptive, offering services such as language classes, translation services, consultation for various welfare issues, and health insurance coverage. Local governments have also taken the role of extending the right to schooling to immigrant children, who, if in accordance with national policy, would be dealt with with apathy due to their temporary status as non-citizens. It was only two decades ago, in 1992, that local boards of education introduced special Japanese language classes for immigrant children. Since then there have been increasing efforts initiated by teachers and local schools to alleviate the linguistic challenges experienced by immigrant students. However, disadvantaged by lack of governmental support and funding as well as by mere inexperience with linguistically diverse classrooms, teachers are left alone to face these daunting challenges. Moreover, there have been increasing numbers of unschooled immigrant children due to the absence of specialised targeted language supports for these students. For example, children of Brazilians of Japanese descent, who comprise the largest number of newcomers in Japan, have three schooling options: Japanese public schools, Brazilian private schools or neither. However, because public school classes are only conducted in Japanese while private school tuition is unaffordable by most immigrant parents, many children are left to roam the streets during the most crucial, formative period of their lives. Hostile prejudiced attitudes towards immigrant communities are only fuelled when the Japanese government itself creates these "truants" and "delinquents" of immigrant children (Yamanaka, 2006).

In the city of Hamamatsu, where only 66% of immigrant children were found to have enrolled in schools in 2002, the municipal board of education has endeavoured to "support volunteers who teach the foreign resident community the benefits of attending school and learning Japanese" (*ibid*., p. 107, original italics). This statement insinuates that the administration believes that immigrant parents do not desire that their children obtain a proper education; however, research has shown repeatedly that recent immigrants have a strong will and drive to succeed in their new land that distinguishes them from natives (Suárez-Orozco, Suárez-Orozco and Todorova 2008). It is highly likely, considering past studies of migrant communities of other nations, that there is nothing more that these newcomer children desire than to learn Japanese, be accepted, and feel at home in their surroundings. Hence, the "foreign resident community" does not need to be taught the "benefits of attending school," but rather need to be assured that their youth will indeed experience the benefits of education when attending Japanese public schools. On the contrary, studies by Japanese scholars have found that many immigrant children struggle with "language handicaps …, misunderstanding and prejudice on the part of teachers and school administrators, and social isolation and rampant bullying by their peers" (Yamanaka, 2006, p. 106). Therefore, not only do schools need to adopt specialised research-based language interventions that would allow immigrant students to acquire the linguistic competencies necessary to succeed in all content areas, but also to foster a safe and nurturing environment that embraces diversity. It is essential that the national government recognises the extreme urgency of addressing the issue of immigrant education and, not simply recruit "volunteers" but invest in preparing effective, globally minded teachers who can thoroughly support these students to learn successfully the Japanese language while preserving their linguistic and cultural heritage.

In recognition of the value of all cultures, a number of local governments have made laudable attempts to encourage interactions and relationships between the Japanese and immigrants by establishing international exchange offices which organise special cultural events and activities for the community. One cannot deny that, despite well-intentioned efforts by municipal governing bodies and community groups, a rigorous reform of immigrant education policies on the national level is more than essential. "The time is ripe for the Japanese state to accept the multiethnic, multilingual reality of the country and to redefine its nationhood accordingly" (*ibid*., p. 116).

Conclusions

Considering the discussion above of Canada, the United States, France, Finland and Japan, it is more than evident that both traditional and recent countries of immigration around the world must not delay in taking rigorous steps in reforming their citizenship, education and language policies that hinder the successful integration of newcomers. More specifically, schools must be thoroughly and consistently resourced with specially trained teachers and research-based systematic language support programmes that not only equip immigrant students with L2 competencies but also the academic skills and content area knowledge necessary to smoothly transition into mainstream classes.

Unfortunately, many educators still hold bilingualism of migrant children as responsible for linguistic delay, academic underachievement, and identity issues (Helot and Young, 2002). Before embarking on new initiatives, policymakers, administrators and teachers must first recognise that the source of academic and linguistic difficulties is not rooted in the use of their languages of origin, but rather the lack of cohesive support and recognition for their heritage cultures and languages. Students could be taught to capitalise on first language knowledge by using cross-linguistic transfer strategies, which not only would improve literacy in the second language, but also bolster their self-esteem and recognise the value of preserving home language and culture (García, 2003). Affirmation of students' unique identities by expressing respect for the language and cultural knowledge that the children bring to the classroom has proven to promote academic development, while neglecting a child's home background could have detrimental effects on affective development and the motivation and ability to learn (Cummins, 2000).

Hence, the potential advantages of bilingual and bicultural education for students of non-native backgrounds and the importance for all teachers to be trained to support language acquisition for immigrant students are clear. In light of the dismal reality of the current schooling situation of immigrant students today as well as a plethora of language research, it is indubitable that policies and programmes around language learning, both of the society's dominant language as well as heritage languages, must be carefully re-considered and resourced as a prioritised area in the educational domain. Investment in the well-being, education, and, therefore, the integration, of immigrant populations will not solely benefit them, but, more significantly, it will ensure the development, prosperity, and social cohesion of our local communities and the globalised world at-large (see Christoph, this volume). This exploratory investigation of Canada, the US, France, Finland and Japan ascertains the need for more comprehensive research and in-depth analysis of the immigrant situation in areas around the world as well as collaboration and accountability among international, national, and local bodies to ensure that all individuals, migrant or native, are granted the rights and services they deserve as citizens of this world.

Box 19.5. **Immigrants vs. immigrants**

My mother cast down her weary eyes. "Go," she said in a trembling voice. "I don't have to do anything you say you stupid, fu-" the Somalian immigrant shouted at my mother and raised his hand. "Joo need to leef nao!" In her limited English, my mother stood up to her confronter and he shot her a deadly glare while exiting the room.

"Ay mija, es que esas personas son salvajes! No saben cómo portarse como la gente civilizada!" My mother was telling me one of the many stories of conflict between Hispanics, Latinos, and Somalians at the local beef plant, and it had my mind spinning in a million directions.

Should I be angry at an entire race for the actions of one man? Should I reduce the entire population of Somalia to savages simply because one, as a chosen representative of that nation by my mother, does not have respect for elders or the law? I was torn because, on the one hand, I would never want anyone to hurt my mother. On the other hand, however, better judgment told me that this is one man out of millions, and that, as an immigrant from another nation, he simply has another doxa and is therefore different from Hispanic immigrants. As I began thinking of the differences in cultural charges between Somali and Hispanic immigrant groups, I realised that there were more similar cultural charges than I had previously thought.

As the daughter of immigrant parents, I have witnessed the story of a "typical" Mexican immigrant unfold before my eyes. Immigrants seek out brotherhood among immigrants from the same community. They hunt for grocery stores that carry foods from the homes they left behind. They attempt to demonstrate to their children a culture and way of living that fades away as the days, months, and years go by. Many times, these people are forced into jobs where all that matters is that they have the physical strength to perform the job. Don't speak English? No problem, you'll be killing cows all day long anyway. Any sort of knowledge or skills immigrants may bring are pushed to the side as the limits of their physical strength are tested in order for them to provide a meal for their families.

Now, the Somali immigrants at that beef plant may tell a similar story. Their experiences may closely parallel that of a Mexican immigrant's experience; in other words, Somali immigrants and Hispanic immigrants may share some cultural charges as immigrants in the United States with little command of the English language. Even though it should be recognised that these groups may share some cultural charges as NNLL immigrants in the United States, it should also be recognised that there are clear differences between the groups. In order to better understand the tensions between the Somali and Hispanic immigrants, research should attempt to identify the differences and similarities between them. That way, these groups may find ways to communicate and avoid confrontations like the one my mother experienced.

Although I am still appalled and saddened about the situation my mother faced with that man, I am beginning to realise that shared (and different) cultural charges may explain part of the stories behind the conflicts.

Beatriz Valdez, Mexico-United States

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Chapter 20

Migrants, early tracking and social mobility

By Vanessa Christoph *

Migrant children suffer from lowered expectations and poor educational standards in many countries around the world due to a number of factors. In this chapter, we explore the case of Germany, a country with a very rigid tracking system. The author finds that children who are migrants and from lower SES families are more likely to be tracked into the lower tiers in the German educational system, even when they score at similar levels with higher socio-economic status children. The economic, social and cultural capitals of migrant students are explored, as is language competency and its effect on school placement as well as future employment outcomes.

* ZNL Centre for Neurosciences and Learning, University of Ulm, Germany

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This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

As a "good" education contributes to better chances and security on the labour market, social position, reputation/prestige, participation in society, and integration (see Geißler and Weber-Menges, 2008; Harring, Rohlfs and Palentien, 2007), this chapter will examine to what extent migrants have a part in good educational opportunities and associated social mobility.

For children of migrants, a good knowledge of the language of the host country is essential for educational success, and this success is (usually) necessary for social upward mobility (OECD, 2006). This article will therefore discuss the influence of family background on language skills and on educational success of migrant children, as the family's migration background still plays a role in regard to integration and life chances of later migrant generations. (Language) Development in migrant children, as in children of socially deprived backgrounds, needs to be fostered through formal and informal ways of learning, and can particularly have a positive influence on later educational success if started at a very young age. For example, in the German context, the early informal confrontation with the German language, *e.g.* through contact with German speaking children in kindergarten or the use of German language media, is just as important as a formal contact with the language in pre-scholarly institutions, which should see to it that children of migrants be confronted with the language used in school early on, as they need to master it to be able to follow school lessons – not only in German class. If they only learn "school German" when they enter school, in the long term failure is practically inevitable, especially compared to socially privileged children, whose sociolect,[1] due to cultural similarities, is closer to the school language, or even corresponds to it.

In Germany, children are generally tracked into three different types of schools after four years of primary school. These school types (*Gymnasium, Realschule* and *Hauptschule*[2]) largely differ in regard to expectations of students' abilities and accordingly in their curricula. Tracking, however, is not only based on prior school performance (which is widely related to social background), but it is also based *directly* on the students' social background, leading to strong educational inequality (see Programme for International Student Assessment, PISA). As the Progress in International Reading Literacy Study (PIRLS) has shown, disparities in achievement between fourth grade students with and without a migration background are smaller than between the 15-year-olds that PISA has analysed. This seems to indicate that the tracking as of fifth grade influences later school performance, depending on the school type. The fact that primary schools generally are socially more heterogeneous than for instance the *Hauptschule,* which is socially extremely homogeneous and usually contains large proportions of underprivileged children, could be a relevant aspect here. The German Federal Statistical Office (2010) confirms that children with a foreign nationality or migration background proportionally attend the *Hauptschule* much more often than German children, and on average reach a much lower school graduation level – if any at all.

Of course, a good school qualification alone does not guarantee a good professional status later in life. Apart from *racial* discrimination, migrants and their descendants may also be confronted with *statistical* discrimination based on negative experiences of employers with

representatives of a particular group, which leads them to later prefer to employ somebody of a different ethnic group or simply Germans. Good German language skills are necessary, but no guarantee for successful integration or social mobility. One can deduce, however, that in the long run insufficient German skills lead to a low(er) school-leaving certificate, to inferior professional training, and later to a profession with low(er) income and social prestige, which largely hinders social upward mobility.

Bourdieu and Passeron (1964, 1970) showed a tight connection between social background and adult socio-economic status. This occurs, in great part, because many societies are structured so that an individual's children are most likely to remain in the social class of their parents, a phenomenon termed "social reproduction". This is true for migrant children as well as for other children, but along with usually low resources and worse starting conditions, migrant children often have an additional handicap through language problems that make social upward mobility even harder for them to achieve. In their children's education parents will usually strive for the preservation of their social status, in order to avoid their child's social downward mobility (Henz, 1996). This ambition is probably most pronounced in the upper classes that would dislike losing their elitist status. The lower classes strive for upward mobility (at least theoretically), but are always confronted with the risk of failure, as the outcome of investment in longer education is often uncertain – however, they do not need to fear a further social decline. Still, many children of blue-collar workers (or their parents) decide not to continue onto higher education, as belonging to a specific social class pretty much predefines educational goals. These are generally also affected by the educational success or failure of the parents, which often leads them to doubt a possible educational success of their children, if they themselves have failed (Ditton, 1992). Another problem could be that families may be sanctioned by their own status group if their children achieve social upward mobility; if they are very strongly rooted in this group, they may choose to abandon this option rather than to be excluded from their group (Henz, 1996). Furthermore, educationally disadvantaged parents may fear that their children become estranged from them, if their upward mobility is too great, *e.g.* when the discrepancy of cultural and social capital between them becomes too important. In general, through "symbolic violence" (Bourdieu and Passeron, 1970) the educational norms specific to each social class usually arrange for the preservation of the social status of each class, by avoiding educational mobility (Henz, 1996) and thus leading to social reproduction.

Ethnic, cultural, geographic background and Bourdieu's habitus

Just like socio-cultural and socio-economic aspects, different ethnic and cultural characteristics underlie the habitus, as defined by Bourdieu (1978). If the social or cultural environment changes, people need to integrate the rules that prevail there, in order to be able to function as a member of that society (Barlösius, 2006). If the discrepancy between original habitus and current situation is too great, however, or if the integration into the new society was not or not sufficiently successful, the habitus cannot adjust fast enough or in an adequate manner, which may lead people to feel disoriented in their new environment (Mounier, 2007). Apart from possibly weak German skills, this can also affect the parents' understanding of the education system, *e.g.* as concerns their rights and obligations, possibilities and alternatives concerning the choice of schools, educational decisions and opportunities, as well as bureaucratic knowledge about formalities, deadlines for applications etc. For Becker this lack of information is mainly responsible for the fact that in Germany Turkish parents register their children in kindergartens and schools that are

disadvantageous for them in terms of educational opportunities (Becker, 2010). As at the preschool age particularly many educational decisions by parents are orientated on friends, it can be especially important to break out of one's ethnic milieu and to create and cultivate interethnic relationships – especially to locals – that can contribute to social integration through individualisation, in the sense of unbinding oneself of one's own ethnic community. Becker has shown, for example, that Turkish parents who have many German friends tend to choose kindergartens with a lower proportion of migrants, which is important for the development of their child's German language skills and educational success.

Socio-economic background and the role of Bourdieu's capital

The socio-economic status and associated unequal opportunities for educational success are closely connected to Bourdieu's different types of capital, whereby the parents' economic capital (*e.g.* through affordable tutoring or the choice of better (private) schools) and cultural capital (*e.g.* through their own positive academic experience) strongly influence the academic achievement of their children; among other things, by motivating them to learn and by enhancing their cognitive abilities, as *e.g.* PIRLS and PISA have shown. Furthermore, educational success of children is directly influenced by the socio-economic status of their parents, which is generally lower in migrants than in the local population (Geißler and Weber-Menges, 2008), and has an influence on the educational aspirations of parents for their children. Ditton (1992) has shown that the aspirations of parents of the upper class are the highest. For parents of the lower class it is often sufficient that their child – as they themselves did – attend a *Hauptschule*. PISA has also confirmed that children of parents with a high ISEI (International Socio-economic Index of Occupational Status) job on average achieve better reading skills than those whose parents have a lower ISEI job; in Germany the difference is particularly pronounced, compared to other participating states (OECD, 2001). Educational aspirations are apparently related to the desire of the transgenerational preservation of social status. Moreover, since the educational expansion of the 1960s, institutionalised cultural capital has also become more important for the upper class, as cultural capital, (particularly in form of academic titles) has gained more importance compared to economic capital, which therefore is (usually) no longer sufficient for the inheritance of social status.

Language competencies

Knowledge of the German language is a "central aspect of the integration of migrants, maybe even the most important one" (Esser, 2006, p. 23; *own translation*). It is of course related to the individual level of education, the ethnic concentration of the residential area and of inter-ethnical social contacts (*ibid.*). Much can be (and is) said about whether or not it is generally advantageous for children to speak the language of their country of origin within the family. Often, however, people do not think about or do not take into account which consequences it might have for educational paths and opportunities, if children only start learning the language of the host country (correctly) when they begin school.

For many children, especially for those who attend kindergartens and schools with a high proportion of migrants originating from the same region and thus speaking the same language, there is not enough time to achieve the same proficiency level as privileged children whose mother tongue is German. It is therefore very likely that they will end up in a *Hauptschule*. As far as learning a non-native language is concerned, general experience – supported by neuroscientific findings (*e.g.* Neville and Bruer, 2001) – has shown that it is particularly easy for children to learn a new language, and the earlier the better and the

Box 20.1. **Losing linguistic roots**

One of my greatest regrets is that I cannot speak my parents' native tongue, Hindi. If they had spoken in Hindi to me at home, I would have inevitably learned English once I started school anyhow. But they chose to speak English to both my younger sister and I because when my older sister started school she was confusing the languages, and the teachers asked my parents to speak in English to her, so that they could better understand her. I would imagine that most teachers today wouldn't advise this … or least I would hope so. They would realise that this advice would be depriving someone of one of the greatest gifts (a second language) a parent can give to a child. Although it is a school's responsibility to promote and help nurture a mother tongue by supporting parents in doing so, I don't know if you can put the responsibility onto the schools to in fact implement bilingual classrooms in each of these languages. For example, in California alone there are over 100 different native languages that are spoken by California families. Where do you start in deciding which languages will take precedence? How exactly could policy makers decide which languages are "worthy" of teaching and in funding to get the right resources, while other languages would be neglected? I do believe it is a school's responsibility to encourage and support families in helping students maintain and learn their mother tongue (this can be done in several ways by creating a culture with a strong home-school connection), but it is perhaps too big of an expectation to expect schools to teach in these languages.

Vaneeta Ahuja, India-United States

Losing a language in Thai society – there were a lot of Chinese immigrants in Thailand, including my family. At that time, there were a lot of Chinese schools. But during the Cold War, the Thai government was afraid of China disseminating communism, and decided to close down all the Chinese schools. That is the reason why most Chinese descendants in Thailand can't speak Chinese. This is losing not only a language, but also a culture.

Natpat Chanjavanakul, Thailand

Box 20.2. **Immigrant students in the United States and English thesaurus**

The number of language minority students in the United States has risen sharply over the past decade with more than a 200% increase in limited English proficient student populations reported in at least 14 states between 1993 and 2004. In my classroom, the problem of language reached far beyond just students who are traditionally considered language minority. We were also teaching children that are third generation from Mexico. The grandparents of these children were migrants who moved frequently. Their children, the parents of today's children, were moved from school to school, state to state, in continual transition with no standard instruction as they moved across the nation. They were invisible in the classroom. Eventually that generation settled in Midwestern towns and "broken English" was used at home as they worked to learn the new language. Their children have lived in the communities for their entire lives. Rather than being bilingual, they have become "semi-lingual," unable to speak with native-like skills in either language. Many struggle with the conversational and academic languages as well as mathematics.

While working with these students and their parents on a construction worksite, I noticed that most of the English words used were either one or two syllable words. An English teacher colleague pulled all of the writings from her Hispanic students over the last five years. She inspected them to gauge how students used words in their own narratives. This teacher found a preponderance of one-syllable and some two-syllable words (R. Scheer, personal communication, 2008). Multi-syllable words were either conversational terms such as "beautiful" or "graduation" or they were words extracted directly from the literature or assignment. There were frequent misuses of tense, ownership, and prepositions. These findings raised a question for us about the nature of the presentations that we make to students. If students were writing mainly in one-syllable words, were the students' listening skills strong enough to understand teachers who were using more complex words? What clues could research give us to help these students in the classroom?

Nancy Schoolcraft, United States

easier. Therefore, it should be self-evident for children of migrants to be confronted with the language of their host country as early, as frequently and as intensely as possible. It has been shown for example that the probability of Turkish children needing coaching in German at the end of preschool is reduced the longer they visit a kindergarten (Becker, 2006). The language problem is thus generally rather a problem of social marginality than of migration *per se* (Petri, 2005). However, the education system does not provide sufficient German language support programmes for children who do not speak the school language at home.

Is early tracking after primary school reasonable or does it contribute to educational inequality?

Migrant children often begin their educational path with a disadvantage compared to their German schoolmates. These deficits are not only reflected in their achievement in the first school years (see PIRLS), but the PISA studies have also shown that the disparities continue to grow with age, whereby students of the *Hauptschule* that most children of migrants attend, perform particularly badly.

Box 20.3. **On tracking**

I think tracking is harmful to children, whether explicit or implicit. In the United States, I see the danger of this in the popular public school buzzword "differentiation" (the requirement that all students receive instruction at their level and the teacher needs to show lesson plan modifications for each level in the classroom). While the intention behind this is positive, I think it leads to the natural conclusion that it is ok for our expectations of children to be different. "Differentiation" is meant to be a framework for providing support for kids who need more help and kids who need to be pushed further in their thinking, but in practice, it allows teachers to make assumptions about what a child's level is, without necessarily providing evidence. This is basically tracking. I also feel like the problem of implicit tracking in the United States is exacerbated by the way we assess our students on a national level. There is absolutely no attention paid to the growth an individual has made – only how far behind they are or not. This is a huge problem for non-native speakers just coming in to the system. In some states, they are required to take the summative tests immediately, in some after only one or two years. To expect a child to match up with their peers in language and content this quickly is absurd. We need to start paying more attention to how much growth a child is making and continue to build on their strengths throughout school, regardless of where they fall in relation to their peers. For native speakers who may be behind for one reason or another, this results in many cases in not having the same opportunities for "extracurriculars" such as non-native language (in some schools this is a graduation requirement) or art. Some students take and fail remedial classes so many times, they never have the opportunity to find an entry point into learning that is applicable or interesting to them (as non-native language learning could be!).

Whitney Elliot, United States

PIRLS has among other things, analysed the relationship between social background and reading literacy skills of fourth grade students, by using the level of parents' education (ISCED), their social class or occupation, and the cultural capital of the family (number of books present in the household). The higher or the more positive these aspects are, the better the educational achievements of the children. In *no* participating state is the relationship between socio-economic status and literacy skills more significant than in Germany.

German children without a migration background achieve much better results in reading than children of migrants. The proportions of each group that attain the five different reading

proficiency levels shows that on average migrants achieve lower results than Germans. Only about 7% of the German students belong to the high-risk group of students who do not get past level II, compared to 26% of migrant children. 44% of migrant children reach the still acceptable level III, compared to 31% of German children, who in turn are much better represented in the higher levels IV and V that allow for independent continuing learning – 62% compared to 30% (Schwippert *et al*., 2007). These results also reflect the fact that in Germany parents with a migration background on average possess lower levels of education than their German counterparts (and more often no school leaving certificate at all), and more frequently have lower qualified jobs (*ibid*., IGLU 2006). The objectivated cultural capital in form of books is also related to social status, and is therefore generally lower in migrant families compared to German households (Schwippert *et al*., 2007, IGLU 2006).

If we consider the variables of migration background, number of books at home, social class and level of education of the parents together, in order to examine their common influence on their children's reading literacy skills, it becomes clear that the social situation of the family accounts for a 27 point[3] deficit (*ibid*.); the social status thus has a large impact, and most migrants belong to the lower strata of society, which makes them particularly vulnerable. So, even if their migration background *per se* does not necessarily play such a great role, their social situation contributes to the likelihood that their children will have low educational opportunities and success. Their educational achievement is also influenced by the proportion of migrants in their primary school, as especially the proportion of children of the same ethnic background in one class (or even in one school) can largely hinder the acquisition of the German language. If the proportion of migrants is high in school, students not only have the possibility to speak their mother tongue at school, which lowers their motivation to learn German; they are also reluctant to actively participate in the lessons conducted in German, when the proportion of migrants of the same origin is high in class (Seitz, 2006). This additionally hinders teaching and raises necessary learning efforts (Esser, 2006).

Recommendations concerning the choice of the secondary school type

As PIRLS has shown, academic achievement at the primary school level is related to numerous factors that are particularly based on socio-economic and socio-cultural family situations, and that leads to disparities in achievement between different groups of students. Here, migrant children are particularly disadvantaged. All these factors are taken into consideration when teachers need to express recommendations at the end of primary school about which kind of secondary school a child should enrol in to continue his/her education. In some *Länder* these recommendations are binding, in others, parents make the final decision.

Ditton (1992) describes how these recommendations by teachers[4] and the educational aspiration of parents are related to social class – with and without considering the mid-term grade average in year four. It becomes clear that if only the social class is taken into account, recommendations for the *Realschule* are expressed equally for children of the three social classes (about 28%). The middle class is divided rather equally across the three types of schools, with a slightly larger proportion of recommendations for the *Gymnasium*. In the recommendations for the *Hauptschule* and the *Gymnasium* however, there is a great disparity between the upper and the lower class, with much more students of the lower class receiving a recommendation for the *Hauptschule*, and much less for the *Gymnasium*. For children of the upper class the proportions are inversed and even more pronounced, as expected, with less than 6% receiving a recommendation for the *Hauptschule*, but 67% for the *Gymnasium* (p. 128, Tab. 4).

When the grade average is taken into consideration for the recommendations, the social class still plays a direct role, as it contributes to different recommendations despite the same grade average. Students with an average of over 2.2 generally receive a recommendation for the *Gymnasium*, but even here the proportion of students of the upper class is highest with 90%, and the proportion of the lowest class is the lowest with 74%. Of the latter a quarter of the children still receive a recommendation for the *Realschule*, which is only the case for a small minority of the upper class. As far as the middle class is concerned, it is surprising that it is their students (and not those of the lower class) who receive the highest proportion of recommendations for the *Hauptschule* with this grade average. For the middle grade average (2.2-2.9) the recommendations for a *Realschule* are quite similar for the three groups. It is however remarkable that proportionally more students of the lower and the middle class receive recommendations for the *Hauptschule*, while more children of the upper class still receive recommendations for the *Gymnasium*. Apparently, teachers are convinced that students of the upper social class will perform better later on, even though they have the same grade average at this stage. This is probably due to the fact that teachers believe they will receive more support from their parents, in order to be successful at a higher achievement level (*e.g.* through their parents' own academic experience); or teachers prefer to avoid conflicts with parents, by adjusting their recommendations to their aspirations. Even more striking is the disparity between recommendations for the under and the middle class compared to the upper class when the grade average is below 2.9. Even though none of the students receive a recommendation for the *Gymnasium*, a majority of the upper class obtains recommendations for the *Realschule*, while a majority of the other classes receives recommendations for the *Hauptschule*. Children from a lower social status need to achieve up to 77 points more on the PIRLS reading literacy scale than children whose parents work in higher job categories, in order to obtain similar recommendations (Ditton, 1992; The National Report on Education, 2006) – the migration background *per se* only has a marginal influence on the teachers' recommendations (*ibid*.). Ditton presumes that the upper class receives a "social bonus" (*ibid*., pp. 133), as "the discrepancy between the privileged position of the parents and a possible enrolment into a *Hauptschule* seems so enormous to the teacher, that such recommendations are only given – or even considered – in extremely exceptional cases" (*ibid*., pp. 132; *own translation*).

The National Report on Education 2006 also confirms that primary school students with a migration background obtain lower grades than their German counterparts, despite the same performance, which leads to different recommendations. Ditton (1992) furthermore shows that parents of the upper social class tend to send their children to a *Gymnasium* more often, even though they may have a lower grade average, whereas parents of the lower class tend to send their children to lower school types, even though they may have received a better recommendation – as a result of "symbolic violence" (see Arnold *et al*., 2007). Children from a lower social status need to achieve up to 77 points more on the PIRLS reading literacy scale than children whose parents work in higher job categories (Ditton, 1992, p. 288) – the migration background *per se* only has a marginal influence on the teachers' recommendations (*ibid*., p. 289).

The National Report on the Situation of Migrants in Germany (2010) and the Federal Statistical Office (2010) confirm that the proportion of students with a migration background who attend a *Hauptschule* is particularly high, while their proportion visiting a *Gymnasium* is particularly low (von Below, 2007). Although only 9% of all students had a migration background in 2008 (Federal Statistical Office, 2010, p. 211: Tab. 4.1.2), 43% of all *Hauptschul*-students, 26% of all *Realschul*-students and 21% of all *Gymnasium*-students had a migration background (National Report on the Situation of Migrants in Germany, 2010, p. 592, Tab. 20; Kristen, 2002).

The proportion of migrants in a school or in a class also seems to have a certain influence on the recommendations, with migrant children attending schools with a particularly high proportion of migrants, generally having lower chances to receive a recommendation for one of the higher school types: with each additional percent of migrants in a class, the chances drop by 2% (Kristen, 2002). Students with a migration background who do not speak the school language at home need to be particularly motivated to learn and to collaborate in class, which could be achieved if their language and cultural knowledge were more acknowledged and appreciated. Furthermore, they could inform their fellow students of other ethnic origins about their own culture, giving it certain legitimacy instead of putting it off as a minority culture. This would also contribute to their family background (language, culture, religion, etc.) not being obliterated through the learning of a second language, which would have a particularly dramatic effect for children and youths (Seitz, 2006).

The UN-Special Rapporteur on the right to education, Muñoz, analysed in 2006 if the right to education was guaranteed in Germany. In his report, he asked the German government to rethink the three-tiered school system, as it offers little equal opportunities especially for socially disadvantaged students (and particularly for migrant children in the *Hauptschule*). He doubts that "tracking after primary school, at the age of 10, meets the rights, interests and needs of students. It is too early to decide after fourth grade which school a child should visit, as the complete potential of many students is not yet exhausted and they are not always tracked adequately" (as cited in Steinbach, 2009, p. 30; *own translation*). Therefore, the school system can lead to *de facto* discrimination. If children are sent to special education schools because of their low German skills, their future life chances rarely correspond to their real competencies and/or potential (*ibid*.).

Box 20.4. **On equity and PISA results**

When looking at the PISA results from Peru, for example, we can see that inequality is one of the major sources of low scores (one of the lowest in the world). The poor indigenous children from the rural Sierra are the most disadvantaged group, with social, economical and cultural segregation. The low achievement levels in Peru reaffirm the poor quality of education in the nation as a whole, which at the same time, reinforce social and economical gaps. The consequence of not addressing the problem effectively is that it will reduce opportunity and in turn aggravate social exclusion and disintegration for a major portion of the population. From a human capital perspective, student graduates without the cognitive capacity, skills or knowledge to be competitive in the national and international labour market, including the indirect industrial sectors (for example: scientific research), will not be able to mobilise socially, expand economically or help achieve national development aiming in closing the socio-economic gap. At the same time, more graduates without the required skills to benefit from the job-industry, will become more socially resented and lack motivational goals that transcend plain socio-economic or forced political escalation to get even with the high-class mestizos that do benefit from opportunities. Both consequences of the problem argue in favour of improving the model by establishing accommodating standards of education and education performance that can be held accountable for thorough management principles. This will eventually lead to equitable and operationally-defined sets of skills and knowledge, without the negative effects of cultural and economic variation. In my opinion, this is the proper path to catalyze human potential and allow everyone to participate in the development of the nation.

Alejandro Belmont, Peru

Box 20.4. **On equity and PISA results** *(continued)*

I am really glad to read that the PISA studies lead to the conclusion that inequity is also inefficient. This is something I have been struggling with for a while in the United States system. It's true that inequity in education leads to a cycle of poverty and further inequity. I am not quite sure exactly what would solve this problem though. I worked at a public school that mainly served a group of children who were either homeless or living in public housing. Despite the fact that our school had more funding than other schools and a group of dedicated teachers (many of whom stayed late every day to plan and tutored kids after school with no extra pay) our students struggled with standardised tests. I feel like the key to breaking this cycle is not just in formal education but comprehensive social services. No matter how a child's experience is in the classroom, they are not going to achieve at high levels if they aren't being regularly fed, bathed, and receiving adequate medical and dental care or if they have parents with severe and untreated mental illnesses. There is a lot going on outside the classroom that needs to be addressed as we also work to improve the quality of the classroom experience itself.

Whitney Elliot, United States

Kids with the greatest number of problems tend to get concentrated together, vastly increasing the challenges they and their teachers face. I really struggle with how to address this, since families with means can move to "better" districts, and students with high performance can apply into "better" schools. Short of banning people from moving to other districts, what is a workable solution? One thought is to create mechanisms by which disadvantaged students can be brought into those "better" schools affluent families have fled to. Creating low-income housing in wealthier communities can help this happen, as can residential programmes that bring kids from low-achieving schools to high-achieving ones. Does this help the kids who are left behind? Not so much. Addressing the fact that in the United States, anyway, there are geographically large and populous areas consisting almost entirely of low SES people is the only way to fundamentally address this problem.

Peter Broad, United States

In a French high school where I gave an English workshop, I met a student who initially loved the idea of tracking. At the age of 15 she wanted more than anything to be a restaurant chef, and she was happy that she had the opportunity to do so by switching into a culinary high school. However, after three years of completing coursework to become a chef, she decided that she didn't have a passion for it anymore, and wanted to switch back to a mainstream high school. When she tried, she was told that she would have to start high school over again. When considering having to go through another three years of school alongside students three years her junior, she decided to drop out completely. It may make some sense that three years at culinary school would not readily transfer and equate to the same things covered in three years of a mainstream high school, but shouldn't educators strive for a system that allows students to change their minds and explore new interests rather than a system that hinders such choices? I think this particular student was sent the wrong message: that in life, it is rare and cumbersome to break away from unfavourable circumstances even once we have set our minds to do so.

Lisa Mulvey, United States

Programme for International Student Assessment (PISA)

Like PIRLS, PISA has also shown that the average reading literacy skills of 15-year-olds are related to the socio-economic status of the school they attend (*i.e.* the average socio-economic status of the students attending this school), which influences the quality of the school: the lower the status, the worse the average reading skills (OECD, 2004). It would even seem that the socio-economic composition of the students has more influence on their academic achievement than their individual family background: when competencies and family background are controlled, reading skills of individual students in schools with a mean higher SES are much better (in Germany by 66 points[5]) than in schools with a mean lower SES. On the other hand, the discrepancy in reading skills between students of privileged and underprivileged families who attend the same school with an average SES is much lower. This would confirm that social segregation in school – through strong socio-economic differences between schools – constrains the achievement potentials of many students; even more so, when students are segregated by the education system into different school types, containing schools with a strong disadvantageous homogeneity, as is usually the case in the *Hauptschule* (OECD, 2001).

As stimulation and animation through better students is necessary for the success of weaker students, social heterogeneity would be advantageous for weaker, disadvantaged students. Another supportive argument for this claim is that "if [socially disadvantaged students] are given the opportunity to attend a *Gymnasium*, their knowledge acquisition is just as successful as that of socially privileged students" (Baumert and Köller, 2005; *own translation*). Only during the summer holidays the performance levels of disadvantaged students diminish, while they stay the same or are even improved in privileged students (*ibid.*). PISA has demonstrated that mixing students of different social groups in the same school does not have any negative influences on successful students, but does have a positive impact on the academic achievement of struggling students. This becomes particularly clear when comparing the results of the proficiency levels on the combined reading literacy scale of students in Germany and Finland, where the differences in performance *in* schools are much higher than in Germany, and the differences *between* schools are much lower (OECD, 2001). In Finland all students complete their whole period of schooling together and there are no different school types based on achievement expectations. Proportionally, many more students reach the higher proficiency levels and accordingly many less students only reach lower proficiency levels than in Germany (*ibid.*). Moreover, the strongest students in Finland perform much better than the strongest students in Germany, and even the weakest students in Finland perform much better than the weakest students in Germany, leading to a statistically significant difference in average performance between the two countries, where Finland largely outperforms Germany (*ibid.*). Diefenbach (2007) has also shown that migrant children who attend the *Integrierte Gesamtschule (IGS)* (similar to the United Kingdom comprehensive schools) that combines the three school types and are socially more heterogeneous (especially compared to the *Hauptschule*), often reach higher school leaving levels than in the separate school forms: 4% more often they gain a university entrance diploma, 11% more often a certificate of the *Realschule*, 10% less often a certificate of the *Hauptschule* and 5% less often no certificate at all. Nationwide, this type of school is proportionally attended more often by migrant children than by German children, possibly because the parents of migrants whose children have received a recommendation for the *Hauptschule* or the *Realschule* more often choose the *IGS* as an alternative, because the lower school types to do not correspond to their aspirations. These studies confirm that statements claiming that mixing students with different social background and achievement levels would negatively

affect the performance of children of the elite are not justified, and thus obliterate the "official" reasons of those parents whose children attend the *Gymnasium*, and who are against combining the three school types into one.

PISA has also found that a better access to cultural objects and events strongly improves reading skills. Moreover, cultural capital seems to be more important for better academic achievement than economic capital (OECD, 2001; Bourdieu, 1979). Accordingly, communication between parents and children in the form of discussions about cultural, political and social subjects, as well as common activities, are essential for educational success (*ibid*.). Furthermore, PISA confirms the influence of the parents' educational level for the educational success of their children, as it influences the possible support the family can give concerning homework and other school related issues. Even though PISA has shown that migrant children have a more positive attitude toward school than German children (probably due to stronger motivations and higher aspirations, mediated through their parents; see Roth, Salikutluk and Kogan, 2010) they still achieve lower results on average (OECD, 2009). In reading literacy, German students achieve much better results than migrant children (*ibid*.). About 40% of migrant children – compared to 14% of German children – do not exceed the first reading proficiency level, hindering them from mastering everyday situations, to say nothing of their being integrated into the labour market successfully (*ibid*.).

Box 20.5. **An unfortunate conversation: "Why can't they just learn English?"**

I had an unfortunate conversation with a neighbour one day last winter. You know when you go out to put out the trash or get something from the car and you happen to run into your neighbour with whom you have had a cordial enough relationship until that moment? He asked me what I was up to lately and I told him I was studying language acquisition and literacy so I could work with adolescents who were falling behind because they were still learning English. His reply: "Why can't they just learn English?" My reply (after "why couldn't I just have taken out the trash five minutes later?") was "They are learning English. But they aren't getting a lot of help. They need more help. We need to learn more about what they need so they can succeed." He replied, "My parents came to this country from Poland and they didn't have any help and they succeeded. Why do we have to help these people today?"

Julie Baer, United States

The language spoken at home still has an influence on the educational success of 15-year-olds, even though they have already been attending German schools for at least 9 years. It therefore seems that early language difficulties are hard to overcome for many students, even with regular and constant contact with the German language. This is partly due to the very high proportion of migrant students in primary schools and *Hauptschulen*, that can even rise to over 80% depending on the residential and the catchment area; at *Gymnasien* this proportion never exceeds 50% (National Report on Education, 2006). All in all, much more migrant youth attend schools with a migrant proportion of over 50%. This is particularly the case for migrant students who do not speak German at home, and these schools usually offer German language classes for migrants. Youth with a migration background, who attend schools with migrant proportions of under 25% mainly speak German with their friends and family (*ibid*). If the students (mainly) speak a different language at home as the one used at school, they reach 115 points less on the PISA reading literacy scale (*i.e*. more than one proficiency level less) than German students; if

they (mainly) speak the same language at home as in school, this disparity is reduced to about 60 points: after all 55 points better. Even when controlling the home language the disparities remain enormous (OECD, 2006). It has also been shown that in international comparison, those states with the biggest disparities between migrant and non-migrant students have multi-tiered school systems (*ibid*.).

School leaving certificates

Generally, the chances of obtaining a university entrance diploma are a lot (about three times) higher, if one of the parents (and even higher if both parents) have earned this type of certificate themselves. An advantageous economic situation of the parents also raises the chances of obtaining a university entrance diploma, even when the level of education and the occupational status of parents are controlled (National Report on Education, 2008).

A comparison of empirical data provided by the Federal Statistical Office (2010) confirms that foreign children proportionally obtain lower school leaving certificates than German children: 15% did not obtain any certificate, 40% graduated from the *Hauptschule*, 32% of the *Realschule* and 13% of the *Gymnasium* (*ibid*.; see von Below, 2007).

Professional training

The chances of migrant youth to gain (good) professional training are accordingly a lot lower than those of German youth (see Esser, 2006; Geißler, 2006). After leaving school it is much more difficult for them to obtain an apprenticeship training position in the German dual vocational training system, especially if they have only completed the *Hauptschule*. As in primary school, migrant youth seem to have to achieve much better results in secondary school than German youth in order to obtain a training position (National Report on Education, 2006). Even at the end of the training period (usually after three years) it is much more unlikely for migrant youth to be offered a position in the company that trained them or to find a (good) job on the labour market (Hunkler, 2010). This is mainly due to the often bad school leaving certificates, but sometimes also to statistical discrimination (see Esser, 2006; Hunkler, 2010).

Who makes it to university?

As in Germany the entrance criteria to university is the *Abitur* (university entrance diploma) gained in the *Gymnasium*, many potential students are already eliminated before they even reach adolescence. As explained in the previous sections, it is particularly the privileged German children who attend the *Gymnasium* and obtain this diploma.

The numbers make very clear that a lot less youth with migration background go to university than German youth. Interestingly, youth with migration backgrounds who have obtained the *Abitur*, proportionally go to university more often than those without a migration background. Migrant and German youth whose parents have also gone to university on average study more often. Of those however, who are not from academic families, migrant youth use their opportunity of being able to go to university much more often than German youth. Compared to the German students, a higher proportion of migrant youth come from lower social classes (BMBF, 2010), which probably contributes to the fact that migrants drop out of university more often than Germans due to financial difficulties (*ibid*.). Those migrant children who have obtained the *Abitur* belong to the very few migrants who have achieved this goal, and naturally want to take advantage of this

opportunity, in order to gain maximal upward social mobility (*ibid*.). However, only very few foreign students (*Bildungsinländer* and *Bildungsausländer*) gain doctoral degrees, most of which are *Bildungsausländer* (National Report on the Situation of Migrants, 2010).

Influence of reading literacy and language skills on labour market and income opportunities

Language related reading skills not only affect educational success, but also occupational and income opportunities later in life (Köller, 2005), as well as lifelong learning abilities that can still lead to social mobility later on (OECD, 2001). OECD indicators show that a low school leaving certificate more frequently leads to unemployment, as opposed to university graduation, and thus the risk of becoming unemployed is much higher for unqualified workers than for academics (Köller, 2005) and in Germany migrants are almost twice as often unemployed as Germans (Mansel, 2007).

The language factor also plays a great role in occupational and income opportunities *per se* (*e.g.* through a strong accent), apart from the fact that this factor influences educational achievement, on which job opportunities depend. Not only are language skills necessary for the job search and interviews, but Bleakley and Chin (2004) have also shown that they bring advantages: compared to somebody with weak language skills, good skills (in this study on English in the United States) can raise income by a third and very good skills even by two thirds. Dustmann and Fabbri (2003) have shown similar results for the United Kingdom, where good English skills raise chances to find a job by a fifth and can raise income by up to 20% (Esser, 2006).

Bourdieu's "social reproduction"

In "Les héritiers" (1964) and "La reproduction" (1970) Bourdieu and Passeron have demonstrated in detail how educational systems would like to be seen as institutions that contribute to social mobility, but in reality often help to maintain and even to intensify social inequality. By contributing to the legitimisation and the constant reproduction of the social hierarchy, and to largely hindering social upward mobility, the social structure essentially remains the same, thus supporting the ruling social class while disadvantaging the ruled classes. According to Bourdieu, this whole "system" is based on "symbolic violence", to which the (officially neutral and autonomous) educational system contributes. It regulates the relationships between the social classes, by selecting students who will continue to higher education and gain the highest academic levels. As described above, these unequal educational opportunities are mainly based on the unequal social background of the students. This inequality in educational achievement and quality has a long term impact on the future of the children, as it affects who gains access to which professional position and social prestige.

The social composition of university students in 2007 shows that meanwhile 20% of students are from working class backgrounds; 43% were children of white-collar workers; 22% were children of self-employed parents and 15% were children of civil servants (National Report on Education, 2010). However, the proportion of students from privileged backgrounds has doubled since 1982, while the proportion of students from other backgrounds has diminished further (BMBF, 2010).

Although some migrants who came to Germany as guest workers in the 1950s and 1960s and their descendants have gained social upward mobility, still more than half of

them belong to the working class; in 2000 half of them were unskilled or semiskilled workers, although this was only the case for a fifth of the second generation (Geißler, 2006; see von Below, 2007). Migrants are underrepresented by about 10% in the upper class while being overrepresented in the working class by 10% (Mansel, 2007).

Basically, every educational, professional and academic success goes back to social background, migration background, attending preschool and tracking decisions after primary school. In order to make integration (more) successful, obviously educational reforms are necessary (see von Below, 2007) – but do politics, the economy and society really want this to happen? (see della Chiesa, 2010). It has been shown that a major part of all parents do not want their children to attend a *Hauptschule*, as it is more and more perceived as the "school for the leftovers" ("*Restschule*"; Geißler and Weber-Menges, 2008) that offers no future. Also, education policy seems to finally realise this, as it is creating more and more *IGS* in which at least *Hauptschule* and *Realschule* are combined into one school type. Generally, people agree that the *Hauptschule* needs to be abolished, and better sooner than later.

However, there are people with a contrary opinion, particularly those who plead the maintenance of the current system because of economic criteria (even though this opinion is usually voiced silently or gives other pretexts); according to them, the country cannot cope with any more "overschooled" youth and young adults, since there is a high need for low skilled workers in the manual production sector. For them, a *Hauptschul*-leaving certificate is absolutely sufficient for certain people (or certain classes or groups). After all, the guest workers of the past century, who were hired to do those unskilled tasks that nobody else could do at the time, now need to be replaced by people, who will take over those tasks that nobody else wants to take care of anymore today – so why not their direct descendants: *Hauptschul*-students, especially with migration backgrounds. After all, they have "inherited" low educational opportunites due to the low qualifications of their parents. Back then, guest workers did not need any good German language skills to do their jobs, and thus they were not expected or demanded (Esser, 2006). Therefore, many of them still speak their mother tongue at home, negatively affecting their children's German language skills (*ibid*.). This has particularly led to the fact that the Turkish population has become bound to the underclass, by hindering structural integration (*i.e.* equal educational and occupational opportunities) of Turkish children (*ibid*.), so that the second generation has very low chances of reaching a white-collar working position, even when controlling educational achievement (*ibid*.). The market economy has a short term interest in maintaining the institutional structure of the education system and the existing social stratification, in order to "produce" low qualified workers on the one hand, and to guarantee the rare executive positions to the elite, by eliminating potential rivals of the lower social classes at a young age (Becker and Lauterbach, 2007b). After the economic crisis of 1973 and the following rising unemployment, the middle and upper classes saw to it that the three-tiered school system was conserved, in order to maintain their interests by making access to certain educational levels and jobs impossible for the lower class (Solga and Wagner, 2007).

Dahrendorf (1965) already criticised the German education system for being particularly inequitable (also in international comparison), especially because of its early tracking and its "unkindliness towards workers", and deplored that this problem was not discussed publicly. Moreover, he advocated better information for parents concerning educational possibilities and about what educational qualifications are necessary for which jobs (*e.g.* through an institutionalised "organisation for educational guidance"), and for the right of parents to make educational decisions for their children, that are all too often made by

teachers, due to parents' lacking knowledge. As shown above, these lacks still remain over 40 years later, although they are now discussed in politics. According to Dahrendorf, the question of whether it is desirable or not to raise the proportion of working class children in German universities is not a scientific decision, but a political one (*ibid.*). "For a large part of their students, German universities are still a means of confirmation rather than of acquisition of social status" (*ibid*., pp. 12; *own translation*).

Conclusions

Especially for migrant children, a successful education and following professional training or university degree that are necessary for social upward mobility, are basically only reachable through sufficient German language skills and access to the *Gymnasium*. As these conditions are however almost only given when children are raised in privileged families, this excludes a major part of these migrant children, whose families usually belong to the working class and whose parents only have low cultural capital and accordingly low educational levels and occupations, on which the educational success of children is mainly based. The German education system thus contributes to the reproduction of the social structure, in which most migrants are situated at a lower stratum than the local underclass, leading the children of privileged strata to achieve the best educational and occupational opportunities, while children of unprivileged strata will most likely perform low or unskilled jobs in the following generations and will therefore not gain social mobility. Many of them will even become unemployed or need to live on social welfare, which contributes to the image of the "social benefit scrounger" especially for migrants, who are said to have come to Germany only to profit of the generous social system – but aren't society and politics at least accessory to their situation?

The ethnically disadvantageous German social structure, in which most migrants are situated at a lower stratum than the local underclass, results of the fact that migrant children have the same difficulties in the education system as local children of the underprivileged social classes, with additional language barriers they need to overcome. This is primarily due to the fact that they are often descendants of former guest workers, who were brought to Germany as low skilled workers in the option of sending them back home after a few years, so that long-term migration or integration policies were not even developed (Geißler and Weber-Menges, 2008). However, a permanent ethnic stratification is not compatible with the political, normative and moral posits of equality in democratic societies seeking social equality (Esser, 2006). Moreover, it leads to a loss of productivity and a waste of useful human capital, especially since migrants are momentarily the only growing group in Germany, through which their competencies gain importance for social welfare and productivity (Steinbach, 2009).

According to Esser (2000), social integration (*i.e.* the inclusion of actors into a social context) is possible *only* through assimilation (in the sense of an equal distribution of particular characteristics to these actors*, i.e.* equal opportunities; see Dubet, 2011). Esser defines four processes or dimensions for the assimilation procedure: *a)* a socio-*structural* one: placement (structural assimilation), *i.e.* equal opportunities in the education system, on the job market and in obtaining social positions; and three socio-*cultural* ones: *b)* "culturation" (cognitive assimilation), *i.e.* the acquisition of necessary knowledge and competencies for successful action and interaction within the host society, especially language skills; *c)* interaction (social assimilation), *i.e.* inter-ethnical social contacts, relationships and marriages; and as the final goal *d)* identification (emotional assimilation), *i.e.* the identification with the host society through which one feels part of this society

– ethnical segregation certainly hinders this process. Esser comes to the conclusion that structural and cognitive (especially language) assimilation influence each other and together form the condition for social and emotional assimilation – the last phase of complete assimilation. As for Esser socio-structural assimilation (equal opportunities) is essential for social integration, but can only be reached through cognitive (especially language) assimilation, while social integration in the form of ethnocultural pluralisation (without at least cognitive and structural assimilation) is impossible ("incompatibility theorem"). Therefore, ethnocultural pluralisation necessarily leads to ethnic stratification, because due to the lack of cognitive and structural assimilation, equal opportunities cannot be reached – a multicultural society with ethnical equality is impossible from his point of view (see Geißler, 2005).

It is this presumption that Geißler contradicts with his concept of "intercultural integration", which is based on the Canadian concept of "unity-within-diversity" and is a "humane compromise between assimilation and segregation". The diversity lies in the right to socio-cultural difference, *i.e.* the (public) maintenance of cultural traditions, socio-cultural equality

Box 20.6. **A monolingual country of immigrants?**

In a country of immigrants like the United States, language learning is often interchangeable with English language instruction. Many immigrants are English language learners and, for many, mastery of English is a necessity for achieving upward mobility in the United States. Such enormous pressure to effectively and efficiently learn English is met with mediocre language support in schools. It is without question that immigrant students need proficient English to enter college and to gain employment, yet with English programmes that inadequately prepare students for consequential standardised tests, students are left with barred access to higher education, and in some cases, the completion of secondary education. The real crime here is the emphasis placed on the passing of such assessments. Bilingual immigrants who speak fluent Spanish and Portuguese, for example, will not be valued for their language abilities but may be in danger of not completing high school in the United States due to their inability to pass the tenth grade standardised test.

On the other end of the spectrum is the relationship that United States public schools have with "foreign language" instruction. Just as students who come to the United States speaking multiple languages are not valued, the instruction of non-native languages to English speakers is also not valued. Perhaps the remnants of our isolationist policies, current policy has little interest in promoting the learning of NNL in our schools. In discussing bilingualism, I mentioned in a forum post that language instruction is hugely varied – from immersion to sheltered instruction to pull out language classes for English language learners to attempts at bilingual education. Unfortunately, it seems that the goal of all these programmes is not the value of language learning or the benefits of more knowledge. The United States might be one of the only countries where it is possible to graduate from high school, or even from college, without proficiency in a language other than English.

Isn't it ironic that the United States places all its educational assessment on the passing of English standardised tests and has absolutely no value for non-native language learning while the rest of the world continues to understand and foster the importance of language acquisition? This predicament becomes intertwined with the representation of language learning in the United States and until there is an overhaul in attitudes, and subsequently in policy, such representations will become entangled with the immediate contexts of every American student who has the potential to become a non-native language learner.

Nora Maginn, United States

and mutual respect and tolerance. The unity restricts the liberty to diversity a little and is anchored in the respect of the constitution, laws, fundamental values, and common values and norms (among other things language skills), in order to be able to function appropriately in the host society. "Ghettoisation" should be avoided, and all minorities should foremost see themselves as part of the host society, and only then as part of a specific ethnic group (Geißler, 2005). According to Geißler (*ibid.*), in Germany the three forms of integration – assimilation, intercultural integration and segmentation – coexist, thus refuting Esser's incompatibility theorem. Moreover, migrants as well as the host society would need to stop seeing each other as indivisible groups, but rather as individuals, in order to alleviate effects of the concept of "we and the others" (see Todorov, 1989).

If we presume that for the integration of migrants at least their placement on the job market and in public institutions is necessary (Esser, 2000), which is only possible through successful educational achievement, which for its part depends on competencies in the language of the host country (Esser, 2006), the educational system would need to be reformed urgently, as *e.g.* the OECD suggests. According to Esser, individualisation contributes to assimilation and thus to social integration, and should therefore be politically fostered (Esser, 2000); this individualisation begins in the early years of childhood, by socialising children in pre-scholarly institutions, who are thus unbound from their family and community to some extent; as said, this is particularly important for migrant children who grow up in environments that are strongly marked by language and cultural patterns of the country of origin and lower educational opportunities. Furthermore, in adulthood an individualisation – in the sense of unbinding oneself of one's milieu of origin, of ethnically segregated residential areas, stereotypical areas of occupation and social classes – through longer educational paths and more self determination, is useful to dissolve the image of a homogenous out-group, by which the in-group or the host society feels exploited or even threatened. Already a strong concentration of migrant children in the *Hauptschule* can lead to the creation of stereotypes (Esser, 2006). Moreover, poor grades of many migrant children at school segregate them from their German fellow students, thus reinforcing prejudices or a potential negative image that can be transposed to out of school (Seitz, 2006). The success of people with a migration background is important for social cohesion (see *ibid.*) and is reinforced even more through adult life.

In a nutshell, one can say that the social reproduction contributes to a relatively (but maybe only temporarily) stable social structure, which in Germany is rather disadvantageous for ethnic minorities at the moment. To remedy this, at least socio-structural assimilation is necessary, whereas emotional assimilation or identification as the last step to complete assimilation seems a lot less essential. A minimum of socio-cultural assimilation however seems necessary, in order to settle in and integrate in a foreign country, and to feel less foreign oneself. However, assimilation should not go so far as to completely dissolving in the host society (Moser, 2007), leading to giving up a complete cultural, religious and ethnic identity. After all, other states, such as Canada, have long proven that the most different ethnic groups can live together harmoniously and equally.

The intercultural integration that Geißler suggests could be a preliminary step to complete assimilation, which usually takes several generations in order to be completed – if at all – and is certainly (psychologically) easier to accept for migrants, than to give up their cultures and traditions from one day to the next; moreover, it would contribute to these additional language and cultural competencies of migrants being valued as resources (Geißler, 2005). Intercultural integration can therefore be seen as a desirable ideal, but one has to realise that this necessitates an "active acceptance" in the form of a strong political, economic and social will, which as such hardly seems to exist in Germany at the moment. After all, since the 1960s no integration

policy has been developed that would eliminate ethnical inequality and stratification. It is about time that ethnocultural plurality is recognised as a cultural, social, demographic and economic enrichment and strength, and ethnic equal opportunities are realised, instead of seeing this kind of plurality as a threat to the existing social structure.

Box 20.7. **Between extinction and hope: A case for reclaiming the endangered indigenous languages and cultures of Bangladesh**

The children of the indigenous communities of the Chittagong Hill Tracts (CHT), Bangladesh, are among the most illiterate. 65% of Hill children drop out before completing their elementary education and 19% drop out after completion (UNDP, 2009). This alarming dropout rate is not in any way the result of a lack of ability, but blatant ethnic, cultural and linguistic discrimination against the Hill people.

The CHT lies in the remote mountains of southeastern Bangladesh, bordering India and Myanmar. An estimated 650 000 people from thirteen indigenous groups, less than one percent of the country's population, call this place home. The Hill people differ from the Bengali majority in ethnicity, culture, religion and language. Since the 1970s, there have been systematic human rights violations committed by Bangladeshi security forces and armed settlers against the indigenous people of CHT. Hill people have been murdered, crippled, raped, tortured, imprisoned and deprived of their homes, places of worship and resources (Amnesty International, 2010). While tens of thousands of indigenous people fled and became refugees in India, Bangladesh carried out a secret transmigration program, which settled over 400 000 Bengalis in CHT. Government-sponsored Bengali mass-migration not only made the indigenous people a minority in their own land, but also intensified the process of political and economic exploitation (Chakma, 2010), along with cultural and environmental destruction.

Even today, the CHT remains a militarised zone, with a third of the Bangladesh army deployed there. Indigenous people continue to experience serious human rights violations, with the majority of such atrocities being attributed to the extensive presence of the military (UN, 2011). Moreover, in 2011 the Bangladeshi government passed a bill stating that there were no indigenous people in Bangladesh, only minorities. A government that denies the existence of an entire demographic is unlikely to address the issues and concerns of that demographic.

Along with this political marginalisation, militarisation and oppression, CHT children are disadvantaged by an education system that does not recognise their language or culture. In Bangladesh, the education curriculum is rigidly centralised (Barua, 2007) and follows a single national curriculum in Bangla, the majority language. Most CHT children do not speak Bangla. As a result, they struggle to understand the language of instruction. Moreover, the content is often culturally inappropriate for them. This situation sets up CHT children for failure, leading to the high dropout rate (McInerney, 1995).

Preserving languages is an essential part of protecting customs, traditions and cultural heritages. The Hill people have sought to maintain their identity in the midst of the onslaught of Bengali domination by reviving the alphabets of various languages on the brink of extinction, which hold the wisdom of their ancestors, and carry cultural, social and spiritual significance. Only a Hill person who has lived under Bengali hegemony can understand the true significance of these alphabets: non-violent defiance towards the dominance of Bengali

Box 20.7. **Between extinction and hope: A case for reclaiming the endangered indigenous languages and cultures of Bangladesh** *(continued)*

language and culture. UNESCO (2001) asserts that protecting endangered languages is an ethical imperative inseparable from respect for human dignity. It is our collective responsibility to protect the languages of the Hill people and make their right to education a reality, so that they are empowered to educate themselves, preserve their cultural heritage and serve their own communities.

Maung Nyeu – indigenous Marma from the Chittagong Hill Tracts, Bangladesh

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Notes

1. Sociolect: the specific form of a given language spoken by a particular social group.
2. Completion of the *Gymnasium* (Grades 5 to 12 or 13) grants access to university studies; the *Realschule* (Grades 5 to 10) prepares students for trade, technical and administrative professions; the *Hauptschule* (Grades 5 to 9) prepares practically oriented students for craft professions.
3. On a scale from 350 to 600 points; 50 points represent one competency level.
4. In Germany primary school grades reach from 1 (the highest) to 6 (the lowest). To obtain a recommendation for the *Gymnasium* students (in principle) need to reach an average in German and maths of at least 2.5; for a recommendation for the *Realschule* at least 3.0; below that they get a recommendation for the *Hauptschule*. Furthermore, especially in the middle field, attitudes towards learning, general behaviour and previous achievements in other classes are taken into consideration (see Kristen, 2002).
5. On a scale of 800 possible points (OECD, 2001), 72.7 points represent one reading literacy proficiency level (OECD, 2006).

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Chapter 21

How the Mexican education system contributes to emigration

By E.B. O'Donnell *

As national borders become ever more porous and the world becomes a more tightly interconnected place thanks to new technology, ease of transportation, and increasingly global markets, domestic education policy should strive to prepare the next generation as members of a global society (see Hinton, this volume). According to data from the United States Census bureau, the number of international migrants in the world may double by 2050 (Süssmuth, 2007). As a result of this staggering increase in people living in countries in which they were not born, many questions arise about where people migrate, for what purpose, and what role the country of origin plays. How does the Mexican education system prepare (or not prepare) its citizens for a role in the global marketplace? Does Mexico create a class of low-skill workers for the benefit of the United States? What implications for the future can be drawn from the Mexican example?

* Harvard University School of Education graduate; international education consultant, Boston, Massachusetts

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

As national borders become ever more porous and the world becomes a more tightly interconnected place thanks to new technology, ease of transportation, and increasingly global markets, domestic education policy should strive to adequately prepare the next generation as members of a global society (see Hinton, this volume). Although there may always be policies that are tainted by xenophobia, including the English-only movement in the United States (US English, 2010) or concerns of "ethnic balance" in Latvia (Woolfson, 2009), demographic trends in many developed countries indicate that nations may come to rely heavily on foreign-born workers. According to data from the United States Census bureau and the International Organisation for Migration, international migrants in the world may double to 6% by 2050 (Süssmuth, 2007), up from an estimated 3.1 % today (IOM, 2010). As a result of this increase, immigration policies may need to be reformed. In some parts of Western Europe, for example, birth rates are below the replacement rate. Increasing numbers of workers from foreign countries will be needed to support the aging post-World War II boom generation (Suarez-Orozco, 2007). Where will these workers come from? How will they have been prepared (or not prepared) for their roles in the global marketplace? What can countries and their education systems do to give their students the tools needed to be successful under these new conditions? What are the implications of these trends?

Much has been written about immigrants in education: about access, inclusion, language policy, and funding (OECD, 2006). Educationists understandably focus on the students they actually have in their classrooms, which includes the children of immigrants. But, little research or thought has been devoted to the educations of those who may someday emigrate – the future lives of current students. This topic is both sensitive and thorny, since it may require governments and systems of education to look critically at the students who succeed, the students who fail, and what opportunities they are provided with domestically.

Both emigrant as well as immigrant countries should take into consideration target markets and values when shaping education policy in the 21st century. Movement of people, ideas, and goods across borders is inevitable, and this phenomenon has its supporters and detractors. Whether it is through increasing non-native language instruction, emphasising communication and analytical skills, or creating more economic opportunity in the home country – the curriculum, standards, and priorities of domestic education should be mindful of where the students will end up, as well as who will be accessing the system.

This chapter focuses on the case of Mexico and will be structured as follows: first, the current migration patterns of Mexico are examined, as well as some of the reasons for migration. The next section will include a brief overview of the state of Mexican education, with an emphasis on those aspects of the education system that are contributing, exacerbating, or hindering the migratory trends. Following that section will be a review of literature on skills that may become more valuable in the coming decades. Preliminary recommendations will be made regarding improving education policy regarding in light of the new skill sets and the migration trends described. This cursory overview of country-specific data sets the scene for the final section, which concludes the chapter with some preliminary experimental thought on what the future may bring.

Throughout the chapter, a few fictional cases are included that are intended as anecdotal support, not as fact. All of the stories are for illustrative purposes and the characters depicted are all entirely figments of the author's imagination. It is not the author's intention to perpetuate stereotypes, but for the purposes of this thought experiment to instead use generalisations to explore different possibilities, scenarios, and dilemmas.

Mexican migration trends

The case of Mexico is interesting for various reasons. The Mexico-United States border is the longest in the world between a developing and developed nation (Black, Natali and Skinner, 2005) and this creates interesting dynamic in terms of migration tendencies (for a discussion of migration in other contexts, see Cho; Christoph, both this volume). Furthermore, Mexico is not only a powerful emigrant country, but also draws immigrants from other parts of the Americas, which adds further nuance to the implications of education policy. Mexico's proximity to the United States and to Canada plays an important role in the migrations trends of southern North America and Central America (Harman, 2005). The strong economic pull of the world's biggest economy,[1] the United States (at least for now) (World Bank, 2008), creates a dynamic that has important implications for Mexican education policy.

Among 184 countries, Mexico had the highest net migration[2] in 2005 (Nationmaster, 2005). According to United States census information, in 2000 there were more than 9 million Mexican-born people living in the United States (US Census Bureau, 2001). According to another source, there were 28 million Mexicans living in the United States in 2005, 11 million of whom were born in Mexico (Delgado-Wise and Guarnizo, 2007). Furthermore, between 1991 and 2001, the number of Mexican-born people living in Canada increased by 93% – more rapidly than any other group by far except for Venezuela, which grew slightly more quickly, but with vastly fewer total immigrants (Mueller, 2005). For the purposes of this chapter, however, the relationship between Mexico and the United States will be the focus, since it is one of the migratory trends on which the most research has been conducted (Black, Natali and Skinner, 2005).

The legacy of the Mexican possession of many parts of the southwestern United States adds an interesting layer to the dynamic migratory trends between the two countries. Black, Natali and Skinner (2005), in their article about migration and inequality, describe three distinct waves of Mexican immigration to the United States: the first wave occurred in the early twentieth century, while the American economy boomed and the Mexican economy struggled after the Mexican revolution of 1910 (Black, Natali and Skinner, 2005; Sinke, 2005). This period ended at the onset of the Great Depression in the United States (Black, Natali and Skinner, 2005). The second wave of Mexican immigrants began in the 1940s after a series of droughts in Mexico, combined with a labour shortage in the United States, resulted in a dramatic shift in the labour market. This trend ended in the early 1960s when one of the primary temporary employment programmes aimed at recruiting migrant workers, the *Bracero* programme, ended (*ibid.*; Heisler, 2008). The final wave that Black, Natali and Skinner (2005) describe began as the last one ended and continues today as agriculture in Mexico becomes increasingly mechanised and growing United States cities require greater and greater supplies of low-skill labour.

However, other studies frame the current trend differently: they add a fourth wave, the post-North American Free Trade Agreement (NAFTA) phase (Délano, 2009; Flores-Macías, 2008; Harman, 2005; McCarty, 2007). Since NAFTA was enacted in 1994, there has

not only been increased trade across the Mexican-American border, and also increased movement of people (Flores-Macías, 2008). Instead of the tidal wave of increased exports that NAFTA was supposed to bring to Mexico, it has instead brought about an increase in the exportation of inexpensive, low-skill labour. On top of that, NAFTA has also resulted in an explosion of foreign-owned factories that use imported parts, or *maquiladoras*, in Mexico as well, and "even though the physical location of the jobs is domestic [this has lead to] a sort of disembodied export of the Mexican workforce" (Delgado-Wise and Guarnizo, 2007). Despite half-hearted attempts by transnational corporations to promote economic expansion in Mexico, local labourers are still earning very low wages to the benefit of mostly American-owned companies (Bigelow, 2007).

Although in almost all cases, the individual economic benefits of immigration from Mexico to the United States are high, there is evidence that this dynamic has an effect on the Mexican economy, society, and education system. Remittances have been considered positive factors for development since they are, in essence cash, transfers from the developed to the developing world. However, evidence shows that rather than benefitting families in the long term, they often end up encouraging consumptive patterns that perpetuate the economic disparities that caused the migration in the first place (Newland, 2003).

Box 21.1. **Jorge, part I**

A Mexican man, Jorge, emigrates to Texas in order to better support his family back in Guanajuato. He gets a job on a landscape crew in suburban Dallas. Because he does not have a bank account, Jorge must visit a check-cashing store which charges a 6% fee so that he can use his wages. Each week, he sends 40% of his cash back to his family *via* Western Union, which also charges a fee. When Jorge's wife picks up the transfer, she pays a fee again. On special occasions and holidays, on top of the money he sends to his wife, he sends his children Nike athletic shoes, Hershey chocolate bars, and Gap t-shirts, all of which are made in American-owned *maquiladoras* using imported materials and cheap Mexican labour, and all of which were purchased in the United States. Within their community in Guanajuato, Jorge's children are envied for their American goods. The children of that family and of the community desire more of these products, and as a result, consumption patterns shift and remittances are increasingly used for luxury goods and not for items that may create greater benefits to the society as a whole (Firth, 2005).

Furthermore, although remittances can be used for housing, healthcare, as well as education, research shows that they are rarely used to create new investments, jobs, or other sustainable economic activities (Newland, 2003). Housing and healthcare are undeniable basic needs, which should be met before making other sorts of investments. Education, furthermore, is an important tool for human capital development. Even if remittances are not used directly to create jobs, since they are being used to educate emigrants' families back home, they could be powerful tools for development. Unfortunately, research shows that while it may be true that the children left behind by an emigrant parent may have higher educational attainment than other Mexican children, 12% of Mexico's population with university degrees reside in the United States, and 30% of all of Mexico's Ph.D.s do so as well (*ibid*.). Compounding this terrible loss of skilled manpower is the fact that higher education in Mexico, like in many developing countries, is virtually free to those who qualify (*ibid*.). This essentially means that Mexico is paying a huge cost to train many people that will benefit the United States.

Box 21.2. **Jorge, part II**

Jorge writes to his wife, telling her to use some of the money he sends from his job in the United States to keep his children in school. He hopes that with an education, his children will have better job opportunities than he had, and will therefore not be forced to live in another country in order to support their families. The man's wife takes the money and buys books and uniforms for their children, contributes to the "teachers' fund" and gives gifts to the principal at the supposedly "fee-free" school to ensure that her children are allowed to attend. The children are lucky to have parents who value education. They grow up and receive secondary school diplomas. Because of their good education, they are admitted into the prestigious Universidad Nacional Autónoma de Mexico (UNAM) in Mexico City. Since higher education is heavily subsidised by the state, the cost of university is not prohibitive, which is good since their father retired in the United States and their mother remarried. Both children study computer programming, since information technology is a growing field. After graduation, one child moves to the Dallas area to work for Dell computer company and to be near his father. The other child gets a job in Canada, marries a Mexico-born Canadian and has three children. Only their unemployed, uneducated mother is left in Guanajuato (Harman, 2005; Levitt, 2004).

What has contributed to these migration trends? In what ways has the education system of Mexico played a role? Does the education system contribute to the supply of *low-skill* workers available for the global market (knowingly or unknowingly)? Does the education system contribute to the supply of *skilled* workers available to the global market (knowingly or unknowingly)? The next section explores these points.

Education in Mexico: Helping or hindering emigration?

Mexico's education policy is of particular interest because Mexico has been able to reach many important educational milestones for low-income countries: high literacy rates (98%), virtually universal primary enrolment (97%-98%), and high secondary school graduation rates (70%-71%) (UNICEF, 2009). Today, among the international development community, there is an emphasis on achieving these targets. The Education for All movement, agreed to by most nations of the world and supported by the World Bank, UNESCO, and UNICEF, calls for universal primary education, gender parity, halving adult illiteracy, and more, all by 2015. Furthermore, one of the Millennium Development Goals, an initiative from the United Nations, also includes the provision of universal primary education to all children. These global movements provide a powerful incentive for low-income and middle-income countries like Mexico to use resources to achieve the goals at the expense of other projects and programmes, like job creating programmes, perhaps in the energy[3] or tourism sectors. Furthermore, the case of Mexico provides some preliminary evidence that emphasising access and low-skill attainment (like basic literacy), while an important and necessary step, may be perpetuating global disparities between rich countries and poor countries by creating a supply of cheap labour.

Schools of quality?

Even though Mexico is fulfilling many of these world education goals, the country is failing one on important count: even if it is providing education to many, the quality of education is poor. Mexico has consistently scored among the lowest performing countries on international assessments including the Programme for International Student

Assessment (PISA). Not only does Mexico score far below the OECD average, but it also scores lower than other developing countries with even few resources (OECD, 2007). In addition, the variation in the scores of Mexican students shows that the educations that different children receive are not equal (*ibid*.). This disparity most likely is mimicked by the migration trends of low-skilled and skilled Mexican workers to better paying jobs. Either way, whether skilled or not, it is usually the lucky ones that are able to go abroad. Sadly, what is lucky for the individual and his or her family, is not so lucky for the society as a whole.

Although many Mexican children are becoming literate, this is a very low standard on which to judge the quality of education. Moreover, if literacy is the only skill that a worker has to offer, then that worker will have difficulty in receiving anything but the lowest paying jobs in today's economy. As the agriculture industry in Mexico and elsewhere becomes more and more mechanised, what was once a viable career option for a man or woman with a high school diploma or less, is now an industry that requires many more engineers and other skilled workers.

Mexico's scores on the PISA reveal the truth: Mexican students may be spending many years in school, but they are not learning as much as children in other countries learn (*ibid*.). Could it be that some Mexican schools are issuing diplomas simply to signal to employers that the candidate is literate and has a very basic set of skills? Could the emphasis on universal access be creating a cheap labour mill?

Girls' education

The adult female literacy rate in the developing world is estimated to be at around 66%. The health, economic, and educational benefits of educating girls is undeniable: when girls have high educational attainment, they are more likely than their uneducated counterparts to delay motherhood, access neonatal care, and their children are more likely to be enrolled and successful in school (Herz and Sperling, 2004; LeVine, 2007). Unfortunately, the reverse is true of girls who do not stay in school: they begin having children very young; they have more children overall; they do not know how to provide adequate care and nutrition those children; and they are less able to use family resources to promote education among their children (World Bank, 2010).

In Mexico, the picture is not so bleak. In 2007, the adult female literacy rate was 96% and the female enrolment ratio as a percentage of males was 99%. However, there is a noticeable difference between male and female achievement on the 2006 PISA assessment. In mathematics, boys scored on average nine points higher than girls. Yet, in reading skills, the difference is even larger but it is the girls who outperformed the boys: girls scored thirty points higher than boys, on average.

Even with the higher educational outcomes of girls, however, there are not enough jobs. According to one estimate, in 2005, 35%-45% of all Mexicans entering the United States illegally were women (Alvarez and Broder, 2006). Perhaps there are other things that the school could be teaching the girls, such as engineering and other marketable skills that would prevent them from having to leave their country to find work. How does the high achievement of girls in school counteract with Mexican male-dominant *machismo* culture? How do these phenomena contribute to women's migratory trends?

Approximately 25% of all government expenditures in Mexico are for education compared with only 15% in the United States (UIS, 2009). Yet, these funds are not distributed evenly. While primary and secondary education account for 69% of the federal

Box 21.3. **Ana**

Ana lives in the Sonora desert, in a small town called Ladrillera, not far from Hermosillo. When Ana was in third grade, her mother gave birth to her sixth child. Due to complications with the birth, Ana's mother was no longer able to do the family chores. As the oldest daughter, it became Ana's responsibility to cook for the family, wash the clothes, clean the house, and take care of the younger children who were not in school yet. Ana tried to keep going to classes, at least a few days a week. But, after a while, she was too tired and her teacher kept scolding her for not knowing her lessons. So, she stopped going to school.

When Ana was seventeen, a young man she knew who was working as a truck driver asked her to marry him. She finally would be able to escape being the primary caretaker of her brothers and sisters. Shortly after the wedding, Ana got pregnant. Her first child died as an infant of dehydration. When he got diarrhea, she did not know what to do. But Ana had five more healthy children over the next several years. Her husband's job paid well, but not enough to support their large family. He decided that she needed to get a job to help support the family. Since there were few jobs in Ladrillera, Ana's husband hired a coyote* to get her to Arizona. In Arizona, Ana begins to work as a domestic for a family in Scottsdale. She sends money to her husband every week, but does not know what he uses it for. Because she lives in the United States illegally, Ana is unable to return to Mexico to visit her children, who end up dropping out of school. The boys join gangs, and her daughters marry young.

Are resources being wasted?

* "In border terminology a 'coyote' is the shadowy figure who guides illegal immigrants, usually for a hefty price, past immigration authorities and into the United States" (Kammer, 2009).

education budget (*ibid.*), many schools, particularly those serving the rural poor, are vastly lacking in basic resources such as textbooks, computers, and teaching staff (McLaughlin, 2002). One might argue that students from these schools are the primary candidates for emigration for better low-skill jobs in the United States.

On the other hand, as previously noted, not only are low-skilled Mexicans finding better employment opportunities abroad, but so is a considerable percentage of highly educated Mexicans. Since higher education is highly subsidised by the federal government, and since so many university-educated Mexicans emigrate to the United States and other countries, this phenomenon essentially results in a transfer of resources (all that was put in by the state to the worker's education) from a poorer country to a richer one (Newland, 2003). The effects of "brain drain" on Mexican society further exacerbate these trends. If there are no well-paying jobs available to skilled workers in Mexico, they will emigrate. But, if all highly educated people leave, then there are few qualified people left to start businesses and other ventures that may create employment for their compatriots. This vicious circle is perpetuated by the educational policies that decision-makers pursue in Mexico.

What can be done to prepare students for jobs today?

Because of the mechanisation and computerisation of many industries that once used unskilled or low-skill labour, many economists and educationists note that new skills and competencies are required for employment (Hugonnier, 2007). Many jobs that once required only a high school diploma are now being filled by computers and other machines. In many

parts of the world, only those who are incredibly fortunate are able to continue school until the end of secondary school, and an even smaller fraction receive a university diploma. What skills will they all need in order to be successful in the global labour market?

In the United States, the Partnership for 21st Century Skills presents a framework of what many thinkers believe will be needed in the coming decades in terms of education skills (Partnership for 21st Century Skills, 2009). The framework has several components: life and career skills, innovation and learning skills, and information, media and technology skills. According to the framework, all of those competencies must be supported by an underlying achievement in core subject areas and what they call "21st Century Themes." The Partnership argues that that workers will need to be able to think creatively and innovatively, use the wide variety of information that is at the world's fingertips thanks to the internet, and communicate clearly those ideas and facts in their chosen career.

Much in the same way, economists Levy and Murnane discuss the various and myriad ways that computers have changed human skill demands in the labour market, and how they have compounded the effects of globalisation (Levy and Murnane, 2005). They discuss the increase in the number of service sector, sales, and managerial jobs since those occupations require skills for which computers are not effective. The skills that Levy and Murnane (*ibid*.) suggest are as follows: expert thinking, complex communication, and ability to complete non-routine manual tasks. They suggest that these skills be taught in schools not as additional subjects, but integrated into all of the existing subjects (*ibid*.). What this amounts to is the need for a pedagogical revolution.

Moreover, in complement with complex communication skills, workers need to have adequate language skills (see Rodriguez-Chamussy, Lopez-Calva and Miyamoto, this volume). Today, English is the *lingua franca* of global commerce. Students who study English have an advantage when they look for work abroad. In the future, however, it may be that English is replaced by another language, perhaps Mandarin Chinese, since that country's economic growth is threatening to overtake the United States' hegemony within the next thirty years. Despite being the official language of more than 40 countries, knowing Spanish is not enough in today's rapidly globalising world: knowing a language of economic power is a key to success today and will be in the next century as well (Lewis, 2009).

In Mexico, these new competencies should be incorporated into the curriculum. The laudable achievement of near-universal primary education and literacy rates should be complemented with schools that teach the skills and knowledge that will allow Mexican

Box 21.4. **Marta**

Marta is a fifth grade teacher in Durango. She has been trained at the best school of education in Mexico. She knows that in order for her students to be successful later in life, they must have strong communication, analytic, and innovative skills. So, every day she gives her students a different problem to solve. Most of these problems involve both maths and science, and also sometimes require a short history lesson in preparation. Students first discuss the problem in small groups and brainstorm solutions. They must negotiate with one another to come up with a workable solution. Next, they work alone to write individual reports about the problem, the solution, and the implications of the solution. The problems concern real issues around the world, and include some background on the people and the places that are affected by the problem. Marta hopes that assignments like these will prepare her students to be good members of a global society, and to prepare them to get good jobs.

students to make fair, informed choices about their future employment. This should be done with the hopes that these educational reforms will also be accompanied by a further push to create employment opportunities, for both low and high-skilled workers within Mexico.

Conclusions

In this chapter, I have discussed some of the most salient issues concerning Mexican emigration to the United States. I have attempted to connect these issues with educational policies that are in place in Mexico that may exacerbate or contribute to the migration trends. One of the benefits of a study like this is that it allows space to consider the greater implications of educational decisions, and generates knowledge that can be used for future planning to achieve different outcomes. These issues are not only important for Mexico and its relationship with the United States and other countries, but throughout the world (see Cho; Lizárraga; Tarozzi; Worden, all this volume). In 2005, over 191 million people were living in a country other than the one they were born in (United Nations, no date). These people not only moved from the developing world to the developed, but from the developed to the developing. This increasing mobility of people around the world creates a new global paradigm with many new possibilities. From the information generated in order to write this chapter, I have considered two interesting and differing extreme future scenarios. Depending on the direction of current trends, either scenario may occur.

Under the first scenario, there could be an exploitative system of supply countries and demand countries in the global labour market, where some countries have little or no domestic employment of their own (like Mexico), their only commodity and/or export is people. Other countries (like the United States), in contrast, will be the production sites, control centres, and management hubs, but with only a small or non-existent native-born workforce. This scenario basically creates a neo-colonialist world order, where oil and diamonds are not taken from underdeveloped countries, but people. With more careful attention to domestic and international policies, including education, this may be averted.

Under a second scenario, there could be an integrative equity model, where the current migratory trends, instead of creating greater dichotomies, actually lead to a more equitable world order. The increasingly integrated and interconnected web of people, increased cultural understanding and prominence of universal rights movements, will force global society to become more fair and equal. This is certainly a more positive model for the future. But, without an increased awareness of the negative effects of even some of the most altruistic global policy movements, this will never be the case.

Finally, more research should be conducted on the issue of emigration and education. Many studies have been conducted on how to ensure that immigrants succeed (OECD, 2006), but not enough on the ways that education, poor or otherwise, contributes to emigration. This chapter is intended to shed light on just a few issues and many more related issues deserve careful attention.

Box 21.5. **We rock**

Of all the questionable things that George Bush did during his tenure in office, building a fence between America and Mexico may belong at the top of the list. The massive political and financial efforts of trying to keep people out of this country are remarkable. This fence is useful in serving as a metaphor, however, in framing Americanisation, the globalisation of American ideals. Our boastful and self-aggrandising behaviour has resonated all over the world, through our message we have emphasised the American dream, and the great lengths we will go to, to protect it. Once again with the 2008 election, we have taken centre stage. In the presidential debates, both candidates speak to the greatness of America. During the first debate, Democratic candidate Barack Obama stated that we are "the greatest country in the world." And where Republican candidate John McCain, has been slightly more verbose in his delivery, his message is still the same. He truly believes that every other country pales in comparison saying, "…we're the best exporters. We're the best importers…we're the best innovators, we're the best producers…" and he probably would have continued had the moderator not interrupted to move on. At least the candidates fundamentally agree on something: We rock. We are the cool kid in school; everyone wants to be like us.

From a strictly economic standpoint, "globalisation merely is a transparent euphemism for Americanisation, the global Diaspora of American-style capitalism and, with it, the spread of its materialistic values" (Thomson, 2008, p. 72), although the effects of globalisation are manifested through multiple veins of society, and not just economically. I agree wholeheartedly with the author when he states that globalisation is a euphemism for Americanisation; simply globalisation is Americanisation, the worldwide imposition of American culture, practices, and beliefs. Also, I would argue that accompanying the spread of "materialistic values" is an individualist social structure and mentality. But where I agree with the author's definition, it describes largely, the view of globalisation from an economist's lens; equally important social, cultural and linguistic values are excluded.

My perspective on globalisation is a bit more inclusive, and looks at defining it ideally, realistically and pragmatically, because sadly the differences in definition are rather extreme. Ideally, globalisation is a collaboration and synthesis of languages, cultures and societal ideals that serves as the heartbeat of the international community, as mutually shared, respected and implemented principles. Realistically, however, the process of globalisation is much more selfish and country-dominated. Pragmatically, it is the widespread dominance and imposition of American culture, ideals and norms, and the simultaneous death of cultural and linguistic diversity, as well as a socially constructed societal framework.

Through our quest of global domination, we have acquired a following; international interest in pursuing the American dream, and in doing so, we have made the concept of this dream appear accessible. It is very premeditated and conniving really, how much we dangle this utopian ideal in front of other countries like a carrot on a string. Quite genius actually, because I can think of no better way to make people want something, than to show them something unobtainable. So, Americanisation becomes our metaphorical fence.

So far, I have been a bit cynical about the positive side of Americanisation; it can undoubtedly bring about positive change, but because of personal experiences abroad my interest lies mainly in the simultaneous asphyxiation of linguistic and cultural diversity. As a Westerner, and more specifically an American, I became vividly observant of the juxtaposition of the American value system on the Chinese people, and the conflicts and misinterpretations that arose as a result. My experiences in China permitted me to see the very impact of Americanisation, both linguistically and culturally, and witness firsthand China's efforts to get over the fence.

To look at globalisation through a linguistic lens, is quite telling. The very fact that I was recruited to be an English teacher in China is an indication of the pursuit of the American dream, and the idyllic quality associated with obtaining it. In my schools in Haining, mastery of English was, and I imagine still is, viewed as a key component of success, a way out. Before actually travelling abroad, the programme had given us weekly lessons on functional Mandarin to help alleviate some of our anxieties of the linguistic transition, and had maintained that our language studies would continue at our teaching cites.

Box 21.5. **We rock** *(continued)*

At my first school, however, the administration refused to provide language lessons. They argued that it was not as important for us to learn Mandarin, as it was for us to serve as proper examples of Standard English. Additionally, they were surprised at our genuine desire to learn their language. This argument was a major sore spot for all of us. In our rebuttal, we argued that where we had been recruited to teach English, we had accepted our assignments as a unique opportunity to learn about another culture, and be exposed to language and practice that was so foreign to many of us. Ultimately we won; Mandarin lessons started by the end of the week. Through this experience I began to internalise a sad and deeper understanding of the slow suffocation of linguistic diversity; it was no longer seen as a strength to be different.

Culturally, Americanisation was apparent in the social practices and norms, but it also manifested overwhelmingly through culinary practices and methods. In reference to culinary diversity, Americanisation awkwardly straddles the fence. Food is a major component of a country's cultural identity, but again, rather than a hybrid of different influences, it seemed more like a hostile American takeover. Aside from the planned field trips where we ate regional delicacies, and participated in elaborate tea ceremonies, our own explorations with our Chinese counterparts always led us to KFC or another Americanised fast food hybrid. Our Chinese peers did not understand our lack of enthusiasm for fried chicken, cheeseburgers and fries, and we became frustrated at the force of which our cultural norms were being thrust upon Chinese tradition.

I grew to appreciate and enjoy the regional food, but there were countless occasions where observing food preparation practices completely suppressed my appetite. While walking through a market in Beijing, a friend and I watched a woman kill a live fish on the dirty street that had previously been busy with foot, bike and car traffic. A similar incident in a restaurant involved a chef sneezing into his hands, and continuing unfazed with his cooking responsibilities. As a Westerner I would have appreciated globalisation from a modernisation perspective, specifically in implementing the advocacy of more hygienic kitchen practices to ensure minimal environmental contamination. Here, Americanisation could be used to enhance a Chinese cultural tradition that future generations could utilise to establish a cultural identity. Instead, it was being used to perpetuate the mentality that different was inferior.

Presently, no country has become a mirror image of America because of globalisation, and I do not necessarily think that every country is headed in that direction. I do feel that because of Americanisation the world is heading is toward a progressively more individualist shift in thinking in the value systems of what is important, and diversity, all forms of diversity, are fading into the shadows. Bush's fence is just the physical representation of the self-inflated sense of importance Americans have had for years. And under the guise of international outreach, we are able to trounce on any border we want, to search caves, check for weapons, build a Taco Bell or generally spread our elitist attitude, while simultaneously dangling the prospect of possibility of the American dream. In developing countries especially, as enticing as America makes it out to be, what other choice is there, but to accept our "help" so that when countries are allowed over the fence they are met with a hand and not a rifle? Because according to John McCain in the second 2008 presidential debate, "…the fact is, America is the greatest force for good in the history of the world." And when that cool kid comes up to you and wants to be your friend, it would be absolutely foolish to say no.

Jessica Lucas, United States

Box 21.6. **(Illegal?) immigrants on the Internet**

A Google search for "illegal immigrants" brought up the articles "Three Illegal Immigrants Charged Following Chase", "An Open Letter to Illegal Mexican Immigrants" and "1B 'Virtual Fence' to Keep Mexican Immigrants and Smugglers out of the United States Scrapped for being too Expensive". A Google search using Google Mexico for the same topic brought up "Republicanos piden no olvidar a Hispanos" (Republicans ask to not forget the Hispanics), "Republicanos tratan de llegar a la comunicadad Hispana en Florida" (Republicans try to go to Hispanic community in Florida), and "Buscan republicanos cambiar retorica antiinmigrante" (Republicans trying to find ways to change anti-immigrant rhetoric). It is clear from this search that the same topic is being viewed by completely different lenses in various communities. It leads one to wonder, then, who can be believed? Who is the ultimate authority on this subject? How can these topics be viewed objectively when, it appears, that the "truth" may be subjective?

In terms of the topic of illegal immigration, and specifically, illegal immigration in the United States it is hard to say who can or cannot be believed. As a bicultural Mexican in the United States, I find myself being contradicted with what I do agree with and do not agree with in the news about illegal immigration. For example, Fox News (this might already produce a visceral response from some) appears to lean more towards the anti-immigrant side. Univision, on the other hand, appears to push for a comprehensive immigration reform, which would provide more benefits for the Hispanic community. My instinct tells me to side with the Univision side; however, a small voice within me asks me to look at the complete picture to find ways to compromise between both sides of the argument. I do not want to appear as though I have turned my back on my Hispanic community if I agree with some media outlets, but I also do not want to appear as though I am uninformed because I refuse to look at the whole picture.

In the exploration of deciding who is right and who is wrong in this debate of illegal immigration, it is also important to consider the role of the economy in the total picture. The economy has a major influence on the way the media influences ethics, politics, policies, and practices. Therefore, it is important to not only look at the topic of illegal immigration through different media outlets, but also to look at who exactly is writing and who they are citing to connect it back to the message they are portraying to the public.

There is not a clear cut answer to solve the issue of how immigrants, or anything for that matter, are portrayed in the media. Perhaps the only thing I have discovered is that money talks, and it can buy opinions. Therefore, we need to continue to be sceptical consumers and investigate all sides of a situation in order to make an informed and intelligent decision.

Beatriz Valdez, Mexico-United States

Notes

1. Methodology: Gross National Product in 2008.
2. Net migration is the net total of migrants – the total number of immigrants less the annual number of emigrants, including both citizens and non-citizens.
3. Mexico has more oil than Dubai (Kurtzman, 2007).

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Chapter 22

Intercultural or multicultural education in Europe and the United States[1]

By Massimiliano Tarozzi *

In recent decades, Europe has developed responses to the increasing presence of immigrant students in schools. In particular, "Intercultural Education" is now considered by the European Union as the official approach to be used for the integration of immigrant students and minority groups into their new culture. However, despite the attempt of the EU to define common policies and practices, each European Country has developed its own approach. In this chapter, the different approaches attempting to define policies and practices will be outlined. In particular "Assimilationism," and "Differential exclusion" will be addressed as forebears of the Intercultural model. Moreover, there is a significant gap between the EU "official" educational model for national policies. Another gap is between the official education policies and what teachers and schools actually practise. Finally, pros and cons of the mainstream European intercultural approach will be discussed and compared with the model prevailing in North America.

* University of Trento, Italy

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

I visited New York last year. The very first thing I wanted to do was to take a ferryboat from Battery Park in Manhattan to see two symbols, two founding myths of the United States: the Statue of Liberty and Ellis Island. While the Statue of Liberty embodies the founding principles of this Country, above all liberty, but also independence and human rights, the Ellis Island federal immigration station, represents its roots, the source of future generations of Americans. Nowadays it can reasonably be considered a sacred site, a place to honour one's own ancestors and to exalt the myth of the birth of a Nation, as demonstrated by the museum which celebrates the immigration and the American Immigrant Wall of Honor surrounding the island. Few international tourists visited Ellis Island (they prefer to continue the tour to see the more world-famous Statue of Liberty), but there were many affected Americans visiting the ancient immigration station, seeking for the origins of their family. Over 100 million Americans can trace their ancestry to the immigrants who first arrived in America through the island before dispersing all over the country. But also for a European, in particular for an Italian, it was moving to tread the soil where nearly 5 million of my compatriots passed through in only 50 years (1880-1930).

On account of the intensity and the ferocity with which Europe and Italy deal with the issue of immigration today, a place where immigration is glorified as a founding myth certainly struck me as proof of a huge difference. Then I discovered that Americans too have an ambivalent attitude toward immigration. As M. and C. Suarez-Orozco observed "immigrants are loved but only looking backward" (Suarez-Orozco, Suarez-Orozco and Todorova, 2008, p. 359).

Today immigration is publicly seen throughout Europe as a menace, related to fears, to crime, to diseases, to terrorism, to the worst face of Islam (see Cho, Christoph, O'Donnell, all this volume). Unfortunately, this is sadly true in particular for my country where xenophobic posters stand out in the streets on the eve of the voting. Xenophobic political parties across Europe are dangerously achieving widespread success using these fears and portraying immigration as a hostile invasion, whereas progressive parties are very careful not to take too liberal positions about an issue that can shift millions of votes.

School and public education is one of the public spheres where a fundamental challenge to immigrant integration arises. Everywhere, across Europe, governments assign to schools the work to accomplish that social goal, which other parts of the society ignore. Moreover, schools are required to rethink their organisational structures and their curriculum to face an increasing number of immigrant students.

In this chapter I intend to address the issue of the school integration of foreign students, by comparing the pedagogical premises of various public policies prevailing in different European countries. Secondly, on the basis of research data, I will explore the gap existing between public policies and practices occurring day by day in schools. From these analyses pros and cons of the mainstream European intercultural model will be highlighted and subsequently compared with the multicultural model, prevailing in North America.

Data and figures

I would start by presenting a general overview of the situation of students from migrant background in European schools, portraying their remarkable growth year by year, and some data about school achievement.

According to the PISA 2006 data,[2] within EU countries, immigrants make up at least 10% of the school population at age 15. In some countries (such as Spain, Ireland or Italy), that percentage has increased three or four times since 2000. In Italy it has multiplied by ten in the last ten years (Ministero Pubblica Istruzione, 2008).

This remarkable increase of immigrant pupils in Italian schools in the last two decades is a matter of national concern. The public school system has new challenges to face and new problems to solve. But we have a short memory. Ironically, Italy has been one of the leading European sources of emigration for more than a century. Currently, there are 4 million Italian citizens living abroad and about 60 million people of Italian origin outside the borders of Italy.

Another, less explored in Europe but extremely relevant, question is the immigrants' academic achievements. International surveys points out that, despite the official policy of inclusion and education for all expressed in public education policies, for students from migration background underachievement and drop-outs are today unsolved problems in the majority of the European countries (MIUR, 2005; Commission of the European Communities, 2008; PIRLS, 2006).

Intercultural education as official policy at EU level

In the last two decades, Europe has developed its various responses to the increasing presence of immigrant students in schools. Although it is almost impossible to paint a uniform portrait of the European approach, given the huge difference between 27 European countries, I will attempt to discuss some of the policies that have been developed throughout the continent.

According to a consistent set of directives, recommendations and guidelines coming from the European Commission and many other supranational institutions and organisations,[3] Intercultural Education is nowadays considered by EU as the official approach to be used in school for the integration of immigrant students and ethnic minority groups. In addition, introducing new generations to the idea of European integration has been strongly promoted by the EU. A focus on cultural diversity and Intercultural Education is present in the educational policies of most member states of EU (Eurydice, 2004). An EU report shows that only Iceland and Bulgaria do not mention IE in their education laws and guidelines.

Italy has provided systematic responses for dealing with students with migrant backgrounds in school later than other countries, which is why it could profit from the experience of others and, above all, from the educational direction by the Council of Europe. Consequently, Italy is perhaps the country that has formally adopted the intercultural model as a national policy more completely than other European country. This commitment toward Intercultural Education has resulted in coherent school policies along the years, which have designed a consistent framework addressing Intercultural Education.

But, what is Intercultural Education? I would define it as an approach aimed at improving and facilitating cultural relationships, starting by recognising diversity, and then promoting dialogue and exchange. Its key concept is cultural mediation, seeking to

negotiate among cultures' viewpoints, assumptions, values, beliefs. According to the Italian legislation "To choose the intercultural standpoint means not to limit [schooling] to a mere strategy for immigrant pupils' integration, nor to a compensatory special measure. It means, on the contrary, to assume the *diversity as a paradigm of the school identity itself*, as an opportunity to open up the entire system to all differences (origin, gender, social level, school history)" (MPI, 2007, pp. 8-9).

Here is what the law states both at National and European level. We will see, however, that everywhere in Europe, and in particular in Italy, Intercultural Education has been received and practised in school as a formal label, vague and ambiguous, based on a equally vague and formal recognition of the difference.

Two gaps

Although the general consent surrounding the intercultural approach both as public policy and as school practice, there are two deep gaps revealing the conventional value of this approach and undermining substantially its educative effectiveness and its political coherence. The first significant gap is between EU institutions approach and national policies. Despite the attempts of many European Institutions to define and to promote a common policy and shared practices, each European country has developed its own approach. The second gap can be found between the official education policies and what really happens within the classrooms. Here the Intercultural Education approach does not seem to have caught on indeed. I will address the first, by briefly comparing public policies and school models, and the second, by referring to some research data.

First gap: EU vs. *national policies*

Among several European countries, differences in the national application of European directives and non-binding recommendations immediately appear. This is obvious since, across Europe there are different migration flows and several political cultures, which both encourage different measures to deal with migrant pupils and ethnic minority groups. That is why alternative models can be found in the practices of certain European countries. By using the term "model" I refer to an "educational model", which I define as a systematic frame of reference, politically constructed, able to conceptually organise goals, methods on the basis of (possibly) explicit assumptions.

I will summarise different models prevailing in different European countries during recent years:

Assimilation France	1960s-80s	**Segregation Germany**
Multiculturalism UK/ Nordic Countries	1970s-80s	
	1990s-present	**Interculturalism Italy – EU**

	1960s	1970s	1980s	1990s	2000s
Assimilationist education	France				
Differential exclusion		Germany			
Multicultural education		UK, Nordic countries			
Intercultural education				Italy, EU	

Each of these diagrams is, necessarily, a form of simplification of complex situations. Being well aware of it, with this table I am primarily trying to highlight distinctive elements of the intercultural model, by contrasting it with alternative models.

The development from the assimilation and segregation models to the next step, has to do with a fundamental turn: the choice of an integrated instead of separated model. Some countries, where school system is traditionally more rooted in solidarity than in meritocracy, like France or Italy, had historically a pedagogical attention to the integration of diverse pupils. In this case, choosing integration is a precise political and pedagogical option rooted in a long and noble political tradition, which consider the school as the main socialisation agency within the state. Examples of this choice were the integration of disabled pupils within the normal classroom, or the integration of internal migrant students like in Italy the southern workers' children in the schools of the richer and more productive north. The integration vs. separation divide could also be reflected in the inter- *vs.* multicultural divide, where multiculturalism, unlike interculturalism, does not assign the same value to the school as a socialisation agency.

However, across Europe the terms "Intercultural Education" and "multicultural education" are used with similar meanings in different scholarly discourses. Namely, while multicultural prevails in some countries (mostly the United Kingdom, but also the Netherlands and Nordic countries), intercultural is spread over in the continental Europe, in the overall European policies and, curiously, in francophone Canada. But, in Europe these terms are used as synonyms, both as umbrella-terms subsuming a number of approaches and directions.

Assimilation and separation (or differential exclusion) models are two different facets of homologation. Both of them are approaches which do not recognise any value to the difference and do not assign any importance to collective identities, and in particular to the cultural identity. I will briefly explain these two approaches by referring to France and Germany, which I chose, respectively, as examples of assimilation and segregation. Although their models have considerably changed over the years however, as we will see, it is possible to trace a specific national tradition, related to their history, their colonial past, their political culture, their immigration situation and the presence of ethnic minority groups within their borders.

Assimilation

In France, beginning from the Post-Napoleon epoch onwards, society assigns to the school the mandate to build a shared feeling of national cohesion and to build a civic national identity (Lemaire, 2009). Moreover, the secularity tradition – *i.e.* the non-religious or lay feature of the public institutions, which is called *laïcité* – which is typical of school and other French public institutions considerably contributed to reinforce a republican model based on French values and beliefs. Within this model there is little or no space for communitarian identity and cultural belonging (Perotti, 2003; INRP, 2007). Based on that, it is evident that the key word of the policies towards immigrants in schools is integration. Public school plays a crucial role in promoting integration. In creating citizens, French language plays a major role as a tool for integration and it is considered an absolute priority within the school system.

This model can be called assimilation because it requires newcomers to abandon or to cancel their culture of origin and to absorb that of the host country. Beyond the good intentions of the idea of integration, assimilation is based on two, often tacit, assumptions: on the one hand, cultural difference is seen as a deficit, something that should be overcome

in order to access to integration processes. Therefore, it proposes a "compensatory" approach, based mostly on learning the language of the host country, as a means to access the national culture, in which France is deemed as a universal system, unique and indivisible. On the other hand, culture, in particular the dominant one, is seen not as a culture among the others, but as a universal. There is, here, an ethnocentric presupposition, according to which republican culture is the expression of a universal rationality and of ethical values rooted in the human rights. Hence, it follows that the school is aimed at allowing individuals to access this rationality and these universal values, liberating them from the ties of belonging to groups.

It must be observed that also in France the debate is very harsh and in the last 30 years the traditional republican model, universalist and assimilationist, has been passionately criticised and in some sense overcome since the 1970s, when the intercultural approach had been conceptualised and practised by scholars (Abdallah-Pretceille, 1996).

Segregation – differential exclusion

In the 1970s in Germany, the main approach used to deal with the education of the immigrant workers' children was called "instruction for foreigners" (*Ausländerpädagogik*) (Portera, 2008). This approach set up specific intervention strategies addressed exclusively to foreign students and it required the establishment of "separate" paths only for them. The reasoning behind this choice was that the migration projects of foreign workers were supposed to be only temporary and so their perspective would be to return to their native countries as soon as possible. So maintaining their native languages in German school was considered a preparation for return. Separate schools or separate classes would provide training essentially focused on learning basic notions required to temporary immigrants for living in the host country. The core curriculum was, consequently, improving German as a second language.

Soon, however, many criticisms were raised about this model, which soon showed its practical and political limits. Some who were supposed to be temporary migrants, in fact would settle, as usually happens in the migratory process, and therefore their educational needs radically changed. Moreover, and most important, ethnocentric and discriminatory assumptions supporting this educational model were denounced. Strong internal criticisms and the pressure of international institutions, claimed for a radical change of the typically German model of separate classes. As a consequence, the theoretical model of the education for foreigners has been, *de facto*, overcome by the end of 1990s (Luchtenberg, 2009), with the introduction of mixed classes and the adoption of an intercultural paradigm. Nevertheless, some traces of this original view still persist, even in the today's intercultural context, as Germany still adopts temporary separate measures, like providing separate assistance for immigrant children outside mainstream classes as a transitional support for less than a year (Eurydice, 2004).

Second gap: Intercultural "official" model and school practices

Educational research and teachers' experiences tell another story. They reveal that there is a wide gap between the intercultural model in school practice and the official educational policy as well as the scholarly debate which advocates this approach. Although teachers should have an intercultural model to organise their pedagogy dealing with immigrant pupils, they seem not to have a clear, shared frame of reference about how to promote integration and foster intercultural activities. Hence, this gap between what the

law requires and what teachers and schools actually practice leads to what I refer to as the "*ghost model"* of Intercultural Education.

In 2005-06 I carried out qualitative research among teachers and principals within the Northern Italian province of Trento and published it as a book, entitled "The meaning of interculture" (Tarozzi, 2006). I was the principal investigator of a group including teacher-researchers. Our goal was not to investigate classroom activities *per se*, but to locate within them how teachers interpret intercultural practice.

According to sources, there is enough evidence to indicate that, despite efforts, funding and resources allocated to it, Intercultural Education is still ineffective (Sleeter and Grant, 1999) and that it does not pervade the normal routines of schools. There are many reasons for this: *a)* Intercultural Education is not systematically included in teacher education programmes, *b)* there is a big effort in teaching the host language, and above all *c)* the main goal of school systems is selective rather than inclusive. At the same time, the history of legislative acts tells us that starting in the early 1990s, after a brief assimilationist interlude, the Intercultural Education model was established and still is enforced, formally confirmed by every single government, both conservative and progressive, in the last quarter century. This widespread consensus is bizarre, considering the harsh conflicts that usually characterise political debate about immigration and public policies related to it. The explanation that emerged from our research was that there is a large gap between the practice and their meaning. Practices may be coherent with public policies, but meanings are impregnated with visions rooted in lived experience.

This research is a grounded theory within a phenomenological framework aiming at exploring the meaning that practitioners give to the ambiguous notion of "Intercultural Education" (and the actions that they associate with it). Our research questions were: *a)* What models do teachers have for dealing with immigrants in schools? *b)* What does the term "intercultural" mean to teachers? *c)* What practices do they associate with it? Data were collected mainly through in-depth interviews with 41 teachers and principals (from 12 urban and rural schools in the area of Trentino). Other sources of data were observations, documents, and focus groups with participants as evaluation workshops.

From this research, an interpretive theory emerged showing that despite general formal consensus around the name of a precise integration model, teachers seem not to have a shared frame of reference, which can lead their practices toward real Intercultural Education. But since they actually put into practice many Intercultural Education activities, they act *as if* they had one. However, their "model" is *not* properly defined, because it is not able to conceptually organise goals, methods, activities and assessments on the basis of explicit assumptions. Yet, since it organises the practices and gives them a meaning, it functions as a ghost model, one that works *as if* it were so.

Teachers and principals engage in a lot of activities, without a (theoretical, political or even pragmatic) framework which gives them meaning. So there is a conflict between practices and meanings. Every time there is a gap between practice and meaning, there are two possible consequences: *a)* integralism, dogmatism or *b)* indifference, sceptical relativism. In both cases the primary consequence is that it becomes impossible to consider Intercultural Education a radical approach. What remains is an ambiguous, muddled approach which generates in its practitioners a sense of frustration, bewilderment, and isolation.

Critique of intercultural education

From the previous comparisons among European public policies and from the research about school practices, some shortcomings of the Intercultural approach emerge. As a ghost model, from a practical point of view it cannot establish anything but superficial, ingenuous and exotic practices; from the public standpoint, there is a scarcity of attention to social justice. From a practical point of view, Intercultural Education has been criticised for its theoretical poverty. Being a ghost model, it is unable to establish coherent and sound practices. Too often Intercultural Education is broken into episodic and sporadic "intercultural hours", disconnected from any project or educational planning, dramatically superficial and flattened into a stereotypical aspect of a culture. The main impulse for this comes from its exotic curiosity rather than real purposes of assuming the difference itself as a "paradigm of the school identity itself" (MPI, 2007). Multi-ethnic food parties, henna tattoos, hurried presentations on Islam, etc. are typical examples of this limitation. These superficial school activities are called in France *la pédagogie du cous-cous* and in the United Kingdom the "3 S education" (*Saris, Samosas and Steel band*) [Indian clothes and food and Caribbean percussion instruments]. Improvisation, banalisation and stereotypes are the unavoidable consequences of such activities. These ineffective micro-projects fail to achieve their radical goals like restructuring school curricula, ameliorating the relational climate, opening discussion of instructional euro centrism, exposing forms of exclusion, and making students aware of the way in which domination functions.

From the policy point of view, I pointed out a limited concept of equality. This is maybe the major shortcoming of Intercultural Education, as it emerged from my analysis of public policies. In this context *cultural equality* means "equal evaluation", and is therefore relativistic, whereas *social equality*, meaning "equal opportunities", also takes into account the idea of justice and, more concretely, of the unequal distribution of power and resources. In fact, some British scholars criticise Intercultural Education for paying too much attention to cultural relationships, to the risk of excluding of all the other questions affecting immigrants in schools (Brandt, 1986; Mullard, 1984).

Intercultural Education fulfils its scope when the equal value and equal dignity of every culture is recognised at least theoretically, when teachers teach that no culture is superior to another. But there is another equality to be accomplished within a democratic society: the one that guarantees to all the cultures the same rights. In other words, a concept of justice as equity. For these reasons some scholars have come to the conclusion that the intercultural model is, by its own nature, inapplicable to reality (Donati, 2008); ideally it tends to cultural harmony, but abstractly and is not convertible into real (political) practices or social action. Is the intercultural a ghost model because it is not yet mature, not sufficiently theoretically elaborated and reinforced by praxis? Or is it a constitutive limitation of the model itself which is per se inapplicable and consists only of an ideal direction?

The question is open-ended, and has no unique answer. However, a comparison with the United States can help both sides to find non-definitive solutions, which work on the practical plane.

Mutual contributions among the United States and EU

I do not have the space, here, to adequately compare multicultural education, prevailing in North America, with Intercultural, mainstreaming in Europe. However, I would like to conclude my chapter with some highlights, coming from this comparison, between two different scholarly discourses. There are of course deep historical, cultural and theoretical

differences between the two contexts in dealing with cultural difference and the social and educational responses to it. While the intercultural model is highly problematic, as we have seen, the multicultural model has also been widely criticised. It has had the undeniable merit of posing the category of diversity from the margins to the mainstream of the social and political interpretation of the contemporary society. But it has offered univocal response to manifold changes; it has raised basic questions, to which has been unable to offer adequate and convincing responses. In conclusion, I'd like to stress that strong points of America's approach can nicely respond to the European weak points. And *vice versa*. There are two lessons that America can teach us, and two lessons that can be learned from our European experience.

First lesson from the United States: Education is politics

In the United States, multicultural education has had from the very beginning an eminently political character. It was born in the 1970s, stimulated by the civil rights movement (and in Canada by the debate about diverse citizenship of cultural minorities). There is a wide awareness among professionals and laymen that schooling has to do with political decisions that are never neutral (Nieto, 1996). In this sense Multicultural Education cannot be understood in a social and political vacuum. In fact, no educational philosophy is worthwhile unless it focuses on raising the achievement of all and giving students an opportunity to become full citizens.

Diversity in the United States is a matter of fact. There are different ways to respond to this situation, but all of them have to do with social inequality. In the United States diversity of race, gender, culture, disability and sexual preference make sense as a claim to fill the gap of inequality. Here education can play a major role to promote equality of rights and opportunities, starting from equal academic achievement. Both from a radical perspective based on critical theory, and from a liberal-democratic one, following Dewey, public education is always considered the "great equaliser", which is supposed to remove the barriers of class and to provide all students with an equal education (Dewey, 1916).

In Europe, Intercultural Education is a predominantly technical approach. It is a strategy of schooling, a teaching method, or at most an educative horizon, always related more to practice rather than to political action. It is a perspective which operates only on the surface of phenomena and leaves untouched the profound structure of social dynamics that cultural confrontation implies and which is rich in consequences on the educational plane. Therein lies one of its main limitations. Intercultural Education faces social and political issues which neither begin nor end within the classroom.

First lesson to the United States: Immigration and culture

In the EU, Intercultural Education has been a response to the recent issue of immigration and not a model for the integration of linguistic or cultural minorities. Immigration is considered a key issue both at European level and by every national state, which requires appropriate responses from the education.

There are 191 million immigrants throughout the world. This status represents better than others the contradictions and conundrums related to diversity and its recognition. The migrant is the most realistically emblematic condition of today's planetary economy and culture. But the United States seems not to understand this very well, since it keeps tackling it as a local problem. In Europe and in the United States recent immigration is a burning planetary question. By 2005, there were over 35 million immigrants living in the

United States, 12.5% of United States population (Census 2006), and some estimate that by 2040, a third of children will be growing up in an immigrant household. (Suarez-Orozco, Suarez-Orozco and Todorova, 2008).

This phenomenon is due to the global economy, and it is not an autonomous process without any relation to other international processes. It is also due to the economic involvement of the rich countries in the global economy and not only to the poor socio-economic conditions of the developing countries (Sassen, 1998). In this sense, measures to repel immigrants at the border and to block or deport illegal immigrants are completely useless. Bush's plan to build a 700-mile fence along the border with Mexico, the United States' second most important commercial partner, is highly questionable.

We need a more sophisticated approach. The EU is not a good example of coherent and unitary policies for immigration, but on the educational plane, Intercultural Education is based on the acceptance of newcomers.[4] It operates in an emergency, not to guarantee the rights to stable communities. This priority has limitations but it has also given rise to a huge debate and school innovations about topics like the insertion of students during the year, bilingualism and the teaching of a second language (L2). One's native language is certainly a civil rights issue, but it assumes new meanings within the European framework, where, for the same demographic situation, plurilingualism is a widely promoted asset. Within multilingual Europe there is a widespread assumption that in a global society, monolingualism is a dangerous anachronism and bilingualism (see Worden, this volume), as a form to guarantee the same rights to the non-English speakers, is only a limited response.

Second lesson from United States: Social justice education

In the United States, diversity and diversity recognition make sense only within a social justice framework. Multicultural education is a mean to deal with social justice issues. It is social justice education (Nieto, 1996). To recognise the equal dignity of cultures is not enough. Equality must be recognised within a framework of social justice. According to the European sociologist Wieviorka, there is no difference without inferiorisation and dominion and, conversely, domination is a concept which cannot be employed with individuals, but only with collective categories (Wieviorka, 2001). Therefore, multicultural education not only aspires to accepting and respecting cultures, but it aims at empowering students, and it cannot be defined without specific attention to academic achievement for all.

In Europe only recently (and only after the 2006 PISA test) we begin to combine diversity and school achievement. As I said earlier, the adoption of a limited concept of equality is one of the main shortcomings of the Intercultural Education practice. The European approach should pay more attention to social justice, to socio-economic factors which impact school achievement (see Christoph, this volume). America is teaching Europe that diversity and justice are not necessarily incompatible, but can be thought of together.

Second lesson to United States: Hybridisation or métissage

The prevailing education approach in Europe stresses intentionally the prefix "inter-" to outline the special attention paid to the relationship, the exchange, the dialogue among cultures, as well as their mixing, the "fusion of horizons" to quote Gadamer. On the contrary, American multiculturalism has stiffened the cultures. As provocatively denounced by Bourdieu, the debate on diversity has been monopolised by the North American approach (Bourdieu and Vaquant, 1999), for this reason it disregards phenomena of hybridisation, mixture, Creolisation typical of the European debate.[5]

Cultural anthropology, post-modern thinking and post-colonial approaches produced new visions which stress the mixing rather than the collective difference. Collective difference surely offers its members instruments to claim cultural rights and to take social action on their basis, but they are necessarily based on an absolutised concept of identity. If "race" (for human beings) is a biological and genetic lie, cultural anthropology tells us that ethnic identity is an anthropological mystification (Fabietti, 1996). Cultures never exist in their pure state, nor can they ever bounded or objectively labelled. Ethnic identities are always "mestizos". Metissage, which allows also the production and not only the reproduction of the difference, cannot find any political or juridical expression. Multiculturalism does. It offers political responses to recognition demands. But in doing so it ends up petrifying differences.

On the educational plane, as in the artistic and creative ones, it is possible to evaluate the hybrid dimensions of individuals as members of a group without losing subjectivity or the membership to a collective difference. Learning has always to do with combination and mixture. However, the focus on diversity or on mixture do not designs two conflicting moral or political philosophies. We do not have to chose, nor to affirm the primacy of the one over the other, but we should understand what belongs to every single logic, without confusing the planes and spheres in which it is possible to use the one or the other.

A hundred years ago, immigrants from Italy arriving on Ellis Island had minimum education, but they reached middle class status, thanks to Fordist economic development. What would happen today to the new-coming immigrants if they dropped out school? They are condemned to poverty and marginalisation. Economy today cannot guarantee justice and equal opportunities. This is definitely a task for a fairer education (see Christoph, this volume).

Box 22.1. **Linguistic equation vs. cultural equation**

In mathematics, 1 + 1 equals 2 (1 + 1 = 2). When there is an apple on the table, and we add one more apple, the apples on the table become 2.

In languages, 1 + 1 also equals 2 (1 + 1 = 2). When a person speaks one language, and she or he acquires one more language, the languages s/he speaks become 2.

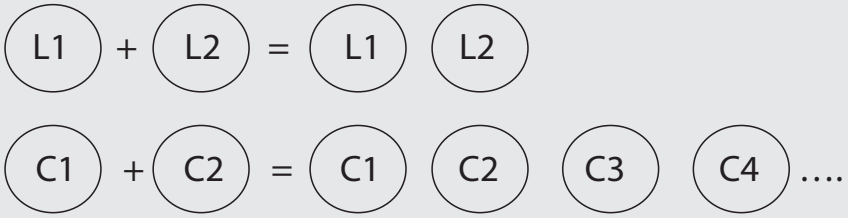
Now, how about culture? Do 1 + 1 still equal 2? Keeping the mathematical and linguistic equation of 1 + 1 = 2 in mind, let us imagine people who immigrated to foreign countries when they were children. They speak the mother tongue when they first came to the host country, which means that they speak "one" language. Then, they learned the second language, the native language of the host country after they settled down. Now, they speak "two" languages. Until here, the equation, 1 + 1 = 2 has no problem.

However, what about the cultures? Before they came to the host country, they have "one" culture (based on region). After they came to the host country, do they get to have "two" cultures? My answer is definitely "No." They have "more than" 2 cultures. One might be their native culture and the second might be the host country's culture. But is that all? No, there should be at least one more, some compound form of those two cultures. Usually we call it "immigrants' culture" in Korea.

Let us narrow down the scope more in-depth into the Korean-American. The Korean-Americans obviously have a different kind of culture of their own compared to general local Koreans. But at the same time, they also understand and possess the Korean and American culture respectively. And even in Korean Americans, depending on which foreign country they immigrated to, the immigrants' culture should be vary. Thus, in culture, the equation for 1 + 1 = 2 does not make sense. It should be the inequation, 1 + 1 > 2 (Figure 22.1).

Box 22.1. **Linguistic equation vs. cultural equation** *(continued)*

Figure 22.1. **Difference between language and culture equations**

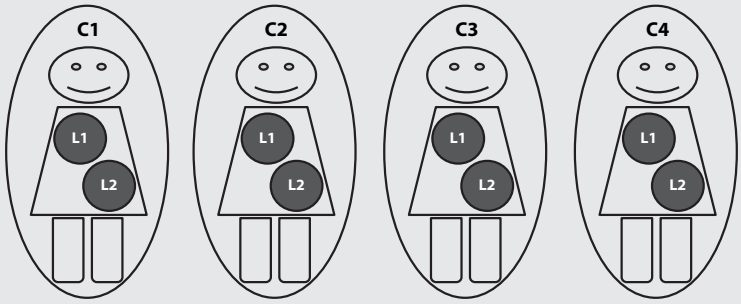


Specifically, in Korea, there is a district where Korean-Americans visit very often but the local Koreans do not. In that district, songs played in restaurants or the way how people dress is totally different. It is somewhat "exotic" compared to where local Koreans' often visiting places. Such "exotic" culture is "beyond 2" of the equation 1 + 1 = 2. I will call such formula a "cultural (in)equation", contrasting to those mathematical and linguistic equations. In cultural equation, 1 + 1 does not equal 2.

What makes me confused here is the discrepancy between the linguistic equation and the cultural equation. This is because language and culture are critically inter-related each other. But despite of such high correlation between language and culture, the equations are obviously in discord. As I said before, the word "bilingual" means to speak two languages, but the word "bicultural" does not mean to have only two cultures. In other words, the person has not only the Korean and American culture separately but also the third culture, which is a new culture resulting from the combination of Korean and American culture. And there should be fourth or fifth culture as a result of combining two cultures.

Now, I want to expand one more radical argument about the relationship between culture and language. Generally, it is regarded that language and culture have equal status, but I argue culture is more complex and has much stronger impact than language. Radically speaking, languages belong to people, people belong to culture. Specifically, languages could be inside a person and the person utilises and dominates languages, on the other hand, cultures could be outside a person and the person is affected by cultures. This is also related to the different equation of culture and language that I have mentioned above. As Figure 22.2 shows, languages are finitely fixed (like fixed 2 languages with L1 and L2), on the other hand, cultures have more varieties (like C1, C2, C3, C4, etc.), a person who has 2 languages can belong to more than 2 cultures because of the difference of equations.

Figure 22.2. **Relationship between language and culture**



There is no prior research to be able to prove my argument. But if additional research develops to investigate this argument of the unequal relationship between culture and language in the future, I hope that "learning languages in a globalising world" would have more abundant and various elements to reflect on.

Sumi Kim, Korea

Notes

1. The present chapter is part of a larger research project, supported by a Fulbright research grant in 2009. A slightly different version of this paper has been presented at Harvard Graduate School of Education (27 October 2009).
2. PISA (Programme for International Student Assessment) is a survey co-ordinated by OECD on school performance of 15-year-old students.
3. Council of Europe (2003) joint declaration on "Intercultural Eeducation in the new European context"; Eurydice report (2004), "Intercultural education and EU members state education policies"; European Commission (2008), Green Paper, "Migration and mobility: challenges and opportunities for EU education systems"; "European year of intercultural dialogue" (2008).
4. By the way, there is no translation for one of the key words of Intercultural Education: *accoglienza*, *accueil*. "Acceptance" has a quite a different meaning and does not encompass the idea of solidarity.
5. Once again there is no English word for *métissage* with a positive connotation.

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Part V

Learning Languages, Means and Ends

Chapter 23

Cosmopolitan education: Building on a biological inclination for care in a globalised world

By Christina Hinton *

Cultural evolution has vastly outpaced biological evolution. A baby born into this situation would flounder if it were not for brain plasticity, and schooling. Babies are born with biological predispositions, and they build on these as they learn from the culture around them. With schools, children can learn vast amounts of cultural knowledge in just a matter of years. This is how biological inclinations for language and numbers have been dramatically extended to create literacy and mathematics. In our globally interdependent world, we need to extend our biological inclination for care in an analogous way. Our brains evolved for a world where we lived in small clans and only needed to care for the people in these clans. Now, we live in an interconnected world in which our actions have ripples in a broader global matrix. We need to extend our biologically based inclination for care to peoples in all corners of the world. Schools can play a key role in nurturing this cosmopolitan ethic of care.

* Harvard University Graduate School of Education

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Introduction

Contemporary poet Saul Williams (1999, p. 29) captures the schizophrenia of living in an interdependent world without a global worldview:

I must re member
and gather the scattered continents
of a self once whole
… they plant flags
and boundary my destiny
… I need a passport
just to simply reach the rest of me

As a Haitian-American with only United States citizenship, Williams literally needs a passport to reach his Haitian family, culture, and heritage. In our contemporary world, many of us feel this splintered identity to an extent. The intimate moments that make up our daily lives are inextricably bound up in a larger global narrative. As I write these words, I am streaming the Uruguay *vs.* Ghana World Cup match and sharing a Chinese bubble tea with Lasse, who is Danish. In this seamless global reality, confining our identity to a nation can make us feel alienated from aspects of our self. The cosmopolitan view that all humans are members of a shared global community resonates with our modern experience.

The word cosmopolitanism is derived from the Greek words for "citizen" and "cosmos," and reflects the philosophical idea that all humans are part of a shared global society (Appiah, 2006; Diogenes; Hierocles; Schattle, 2008). The question of whether we will be citizens[1] of the universe still rests comfortably in philosophy or science fiction, but our interconnectedness on a global level is more tangible today than at any other point in history. Countries are increasingly merging economies, blending cultures, and exchanging views, leading to an unprecedented global interdependence. When society is undergoing profound change, education should reorient to meet changing societal needs (Dewey, 1916; Gardner, 2006; Suárez-Orozco and Qin-Hillard, 2004; UNESCO, 1996a, 1996b). Schools of the 21st century should nurture a cosmopolitan ethic of care.

However, this task is challenging because our brains evolved for a world where we lived in small clans and only needed to care for the people close to us. Now, cultural evolution has vastly outpaced biological evolution. We live in a complex, interconnected global society where our lives are enmeshed with billions of people who we will never meet. In this modern reality, our daily actions have ripples in a broader global matrix. We therefore need to care for people in all corners of the earth, from Australians on the shores of Bondi Beach to Zimbabweans on the banks of the Zambezi River. How can educators help students make the leap from their biological inclination for care to a cosmopolitan ethic of care?

Biological and cultural evolution

Babies are born with evolutionarily endowed biological predispositions, and they build on these basic inclinations as they learn from the culture around them (Dehaene, 1997, 2009; Hinton, Miyamoto and della Chiesa, 2008; Ridley, 2003; Shonkoff and Phillips, 2000). The brain is fundamentally plastic, and culture is a vital ingredient in its development (Gardner, 2004; Squire and Kandel, 1999). As babies, children, and adolescents interact with people and ideas in their culture, these experiences shape the architecture of the developing brain.[2] Since cultures have evolved over many generations, brain development can be said to "stand on the shoulders" of our entire cultural history (Tomasello, 1999). Schools play a key role in this process of extending our biological predispositions because they enable children to rapidly learn vast amounts of cultural knowledge. This is how an evolutionary endowed basic number sense has been extended to calculus, a blueprint for the Sydney Opera house, and international trade.

Infants seem a docile blank slate. Indeed, one of the most revered developmental psychologists, Piaget (1952), believed that infants were born virtually void of knowledge and discovered the world through fumbling sensory exploration. However, recent research reveals that the infant brain is equipped with many rudimentary capacities, including a number sense (Dehaene, 1997; Ferigenson, Dehaene and Spelke, 2004; Wynn, 1998), a language instinct (Chomsky, 1957, 2005; Pinker, 1994), intuitions about the physical world (Baillargeon and DeVos, 1991; Spelke, 1991), psychological constructs (Gelman, Durgin and Kaufman, 1995; Onishi and Baillargeon, 2005), and empathy (Bloom, in press; Hauser, 2006). These biological inclinations help babies construct an understanding of the world around them.

For example, the infant brain is equipped with a number sense that enables them to interpret the world numerically (Dehaene, 1997; Ferigenson, Dehaene and Spelke, 2004; Starkey, Spelke and Gelman, 1990; Wynn, 1998). Babies have a concept of "one," "two," and "three," and they can precisely discriminate these quantities from one another and from larger quantities (Ferigenson, Dehaene and Spelke, 2004). They can also approximately discriminate larger numbers from one another (*ibid.*). There is even evidence that babies can perform very basic arithmetic. When one object is placed behind a screen followed by a second object, babies expect to see two objects when the screen is removed, suggesting that they know that one plus one should equal two (Wynn, 1992). Contrary to the conception of the infant as a fumbling blank slate, this research suggests that babies are engaged in purposeful organisation of the world.

Babies build on their biological predispositions with knowledge from the surrounding culture. The brain is made up of assemblies of neurons,[3] and connections among neurons are shaped in response to experience (Squire and Kandel, 1999). The rudimentary capacities that infants exhibit are underpinned by brain structures that have evolved for these capacities. In the case of the number sense, the inferior parietal area is a likely neural substrate (Dehaene, 1997). Equipped with these initial predispositions, babies learn in a sea of cultural understandings that have accumulated over many generations (Smagorinsky, 2001; Tomasello, 1999). As they learn this cultural knowledge, the brain structures underlying initial basic capacities connect with neurons in other areas to form coordinated networks. These complex networks underlie the advanced cultural knowledge of modern humans.

For example, literacy emerges from networks of brain structures underlying the language instinct and other structures recruited based on the surrounding culture. Just as with the number sense, there are brain structures that are evolutionarily designed for

language, such as Broca's area and Wernicke's area (Pinker, 1994). These structures play a fundamental role in reading across cultures, but the areas that they connect with to create literacy depend on the properties of each culture's language(s), which have evolved over many generations (Hinton and Fischer, 2010a; OECD, 2002, 2007). For example, brain imaging studies reveal that Chinese native readers engage areas of the brain associated with spatial information processing that are not recruited in alphabetic readers (Tan *et al*., 2003). These areas likely come into play because of the spatial complexity of Chinese ideograms, the origins of which date back at least to the oracle bone inscriptions of 1200-1050 B.C. (Boltz, 1986). These spatial brain areas are engaged even when Chinese native readers read in English, indicating that the brain circuitry involved in reading develops differently in Chinese native readers than in those who learned to read in alphabetic languages. Similarly, reading in different alphabetic languages relies on partially distinct circuitry as well (Jobard, Crivello and Tzourio-Maxoyer, 2003; Paulesu *et al*., 2001). These differences seem to be linked to variations in letter-to-sound correspondence, or orthographic structure (Goswami and Ziegler, 2005).

Complex abilities are created as the brain's evolutionary predispositions are enriched by the cultural knowledge that has evolved over human history. In the modern world, schools are central to this process because they enable children and adolescents to learn vast amounts of cultural knowledge in just a matter of years. Schools play a key role in the rapid evolution of mathematics, literacy, and other academic abilities, and they can play an important role in the evolution of care as well. Schools can help students extend their biological inclination to care for those close to them to a cosmopolitan ethic of care.

A biological inclination for care

When we think of morality, the insights of Aristotle, Hume or Kant might jump to mind but not likely that of an average baby. Yet, recent research suggests that if infants could talk, they would have moral insights to contribute. Babies seem to characterise using the basic dimension caring/harmful. They group helping someone achieve a goal with a caring caress, while they group preventing someone from achieving a goal with a harmful smack (Premack and Premack, 1997).

Moreover, research suggests that babies use these categories to anticipate others' behaviour and choose their own behaviour. In a landmark experiment (Hamlin, Wynn and Bloom, 2007), babies first watch a character trying to climb up a hill. Then, on alternating trials, they see a character help the climber up the hill and another character hinder him/her. After watching these interactions, babies expect the climber to approach the helpful character and avoid the character who hindered him/her. In addition, babies themselves overwhelmingly prefer to interact with the helpful character and steer clear of the hindering one. Babies also prefer a character that helps another trying to open a box to a character that slams it shut (Hamlin and Wynn, in press). Likewise, they prefer a character that plays in a reciprocal game of catch to a character that runs away with the ball instead of throwing it back (*ibid*.). Babies as young as three-months-old showed these preferences (Hamlin, Wynn and Bloom, in press). Moreover, when researchers ask babies to give one of the characters a treat, they choose to give it to the helpful one, while when they are asked to take a treat, they take it from the hindering one (Hamlin *et al*., in press). This result suggests that babies believe that acting in a caring way toward others should be rewarded and acting in a harmful way should be penalised.

How do babies make these basic moral evaluations? These intuitions may rest on an evolutionarily endowed empathy (Hoffman, 2001). In the first few hours of life, newborns cry in response to hearing others cry (Eisenberg, Losoya and Spinrad, 2003). Very young infants also mimic the actions of others (*ibid*.). These behaviours suggest that infants are tuned into others, sharing feelings and actions. From the start of life, humans naturally "take up" the experiences and feelings of others to understand them (Hauser, 2006; Immordino-Yang, 2008; Immordino-Yang, 2008; Oberman and Ramachandran, 2007; Rolbin and della Chiesa, 2010). Moreover, babies can act on this understanding in caring ways. When babies see others in distress or pain, they try to sooth them (Zahn-Waxler *et al*., 1992). When they see an adult struggling to grab an object beyond reach, they hand the object to them (Warneken and Tomasello, 2006, 2009; Wynn, 2009). In this way, empathetic feelings can guide babies toward caring actions.

Neuroscientists are beginning to explore the neurological substrate of this empathy. The mirror neuron system seems to play a central role (Frith and Frith, 2006; Hauser, 2006; Iacoboni, 2008). The mirror neuron system, which is scattered throughout many key areas of the brain, internalises the experiences and emotions of others in our own brain (Immordino-Yang, 2008; Oberman and Ramachandran, 2007). For example, when one person watches another person reach for an object, the same brain areas are engaged, albeit to a lesser degree, as when they reach for an object themselves (Rizzolatti and Craighero, 2004). This may explain babies' propensity to help another person get an object beyond reach. Others' experiences and emotions are rooted in patterns of electrochemical signalling among neurons, and the mirror neuron system prompts a twin signalling among neurons in our own brain. When we watch actors kiss in a movie, the pattern of neurons firing in our brain is similar to that when we kiss our lovers, and when see a ball smack a soccer player in the stomach, our mirror neuron system makes us cringe. Together, this research suggests that babies seem to be born with a basic empathy that involves internalising others' experiences and feelings, and underlies an inclination to care for others.

Yet, this biological inclination for care has a fundamental flaw – it is partial to those who are like us. From birth, infants prefer the sound of the language they heard spoken while they were in the womb to another language (Mehler *et al*., 1998; Moon, Cooper and Fifer, 1993). Three-month-old infants prefer members of their own ethnicity to those of a different ethnicity (Kelly *et al*., 2005; Bar-Haim *et al*., 2006). Moreover, babies are more likely to mimic those who they perceive to be more like them (McKee, 2006). Considered in light of a model where an inclination to care is based on internalisation of others' experiences and emotions via mimicry, this is a cause for alarm.

However, since the brain is fundamentally adaptable, this predisposition for dividing the world into "us" and "them" is malleable (Spelke and Kinzler, 2007). For example, infants' preference for members of their own ethnicity is moderated by exposure to other people from other races (Bar-Haim *et al*., 2006). Similarly, biased attitudes toward members of other groups can be curbed by inter-group interaction (della Chiesa, 2010; Pettigrew and Tropp, 2006). This research suggests that early immersion in a multicultural context could help diminish the sparks of preference for those like us before they enflame into prejudice, conflict, or war (see Christoph, this volume).

Box 23.1. **The "ripple effect"**

I try to subscribe to what I call the ripple effect. I am sure that it has been explained in a thousand ways, but I came to it on my own (as much as one can) on a day when I have never felt so small and helpless. I was standing on an island called Kojani off the coast of Pemba (one of the islands making up Zanzibar) and was faced with a community of thousands of people living in a tiny area with one central watering hole. This was the only source of freshwater on the island and it was used for everything. The extreme poverty and stories of frequent disease outbreaks were so far removed from my usual reality it was hard to picture the rest of the world continuing on. Suddenly, I felt insignificant. I had an image in my mind of a camera that had been focused on me living my life, slowly zooming out to capture where I stood at that moment, then zooming further out to show the islands, the continent, and the world. I think it was at that moment that I realised in the overall scheme of things, I am simply a speck on the radar, perhaps unnoticed. When the image vanished I realised that doing nothing was not an option for me and that despite not being able to help everyone all at once, perhaps if I can help myself and those around me, it might just propel the people I do help to help others and so forth. The ripple effect was born.

Come to find out decentralisation theory is something that has been studied for years. One man in particular, Mitchel Resnick (1996), has been using computer simulations to try to explain behaviours in ant colonies, among other things, by showing that if each ant operates under a certain set of rules, large and complex overarching patterns develop. So, what are the "rules" we need to teach our children in order to create a population that is concerned about the neighbours living on their street, but also their neighbours living across the ocean? How exactly do we teach compassion? If we could get people to each hold their lives and the decisions they make to a more global standard all of our actions and the way we lead our lives could add up to something quite amazing (like peace and a sustainable human population).

Lori Patriacca, United States

A cosmopolitan ethic of care

We have already made significant progress in extending our evolutionarily endowed capacity for care. In forager hunter societies, our care was contained to our clans. With the rise of hydraulic agricultural civilisations, script was invented, which allowed us to cross boundaries of time and space, and we began to extend our care beyond our clans (Tarcher, 2010). For example, we began to care about people in shared religious groups (Roncalli, 1963). With the 19th century industrial revolution, we expanded markets to larger areas and created nation-states, and our care widened to encompass members of our country (Tarcher, 2010). In the modern globalised world, we need to continue to extend our care to a cosmopolitan ethic of care.

Cosmopolitanism involves recognising common histories and interdependence among peoples, and identifying as a member of a global society. Cultures build on one another such that, in the deepest sense, culture is shared among all of us (Appiah, 2006; UNESCO, 1954). We often assume that nations own certain aspects of culture, but this viewpoint is short-sighted. What does it mean for literature, art, or film to belong to a nation? Much of what is now considered Norway's cultural patrimony was produced before the modern Norwegian state existed. Moreover, virtually all art and artifacts are influenced by ideas from other parts of the world. Of course, nations cannot be reduced to imaginary boundaries drawn on a map; they do hold meaningful pockets of culture. However, the intermeshed histories of peoples from around the world bind us in a more fundamental way than political boundaries.

In this global society, we each have multiple, overlapping identities, including loyalties to nation, region, and globe (della Chiesa, 1989; Ong, 1999). The modern world renders the notion of singular civic identities untenable (Banks, 2004; Held, 1995; Kymlicka, 1995). Is a Somali immigrant living in Sweden with EU citizenship Somali, Swedish, or European? Is a native-born Tibetan Chinese? Is a secular citizen of the Islamic Republic of Iran Iranian or Persian? Although we have many loyalties, they carry different weights. It is natural that we often feel a stronger kinship with family and friends than with strangers we have never met.

This natural bond with those close to us is the foundation for a cosmopolitan ethic of care. As we learn about other cultures, we will uncover commonalities among foreigners and our community of family and friends (della Chiesa, 2010). With our shared biology and cultural history, many similar arts, customs, concepts, and values have evolved across human cultures. In his anthropological research on human universals, Brown (1991) found that virtually all cultures have forms of art, music, and dance, and practise the rituals of marriage and funerals. In addition, he found that we all carve up meaning using the concepts of past/present/future, parent/child, and caring/harmful. He even found many values to be universal, such as courtesy, reciprocity, hospitality, and care. In fact, we probably share more values than it seems at first glance since familiar values are often thickly enmeshed in unfamiliar customs and arrangements (Walzer, 1994).

Though settling on universal values is incredibly difficult and our attempts are likely to be plagued by unconscious ethnocentrism, it is far better to take a stand than to succumb to a moral relativism that endangers basic human rights (UNESCO, 1995, 1996a, 1996b). The United Nation's (UN) Universal Declaration of Human Rights (1948) and the Declaration of the Rights of the Child (1959) provide a sturdy platform. These rights-based frameworks are based on people's basic needs, securities, and freedoms (Nassbaum, 1995). People have undeniable needs – health, food, shelter, and education – that must be met. They need be protected from unnecessary harm, unwarranted imprisonment, and discrimination. They should also have certain freedoms, such as forming a family, accessing ideas, moving place, expressing opinions, and participating in forming the laws and customs of their society.

Each member of the global society shares responsibility for upholding these basic human rights (Osler and Vincent, 2002; UNESCO, 1995), and needs to be educated to deal with the complexity that task involves. Supporting human rights abroad can begin with defending them in each of our own countries. As people protested for freedom in Beijing's Tiananmen Square, they waved banners, signs, and flags with the words, "We Shall Overcome," a phrase plucked from the African-American freedom movement. The fight to uphold freedom in America had become an inspiration for those abroad. We should also take direct action to support human rights in other countries. However, this requires critical thinking as well as engagement. We should learn about the complexity of problems facing those whose human rights are not met. Donating money to vaccinate infants in a developing country is not sufficient if they will still grow up in a country with poor nutrition, unfit drinking water, and inadequate health care – a continuum of care is necessary to support healthy development (UNICEF, 2009).

Though cosmopolitans are committed to upholding basic human rights, they also understand that caring for others does not mean imposing values on them. Caring for people involves listening to them and responding to their expressed needs (Noddings, 2003, 2005). If we arrogantly insist that we know what is best for others better than they know themselves, our efforts will be ineffective at best, and potentially very dangerous (Berlin, 1969). For example, locals in the Central African Republic resisted an NGO's plan

to install chimneys in their houses because of a folk tale stating, "when the moon shines through the roof, children die" (B. della Chiesa, personal communication, 2008). The NGO installed the chimneys despite their protest, maintaining that exposure to smoke has negative consequences on children's health. After the installation of the chimneys, child mortality skyrocketed. After a while, the locals figured out how to stuff their chimneys, and child mortality fell to previous levels. It turned out that the smoke in the kitchen was protecting children from mosquito bites, and therefore from malaria. We should never simply impose ideas on others. We should support others in the quest for universal human rights by listening to their needs, educating them about human rights, and engaging in genuine dialogue (Noddings, 2005).

A cosmopolitan ethic of care requires a respectful disposition and pluralistic thinking. Cosmopolitans are curious about other cultures and eager to learn from a diversity of customs, conventions, and philosophies. They understand that our knowledge is provisional and culturally biased, and diverse cultural perspectives enrich our understanding (McIntosh, 2005; Merryfield, 2002; Ridley, 2009; UNESCO, 1995). In addition, they have cross-cultural conflict resolution skills that recognise other cultural perspectives as valid and seek to find peaceful solutions (Carlsson-Paige and Lantieri, 2005; Levin, 2003; Noddings, 1995; Reardon, 1999).

The role of schools

Schools of the 21st century should encourage students to think deeply about their identity, place in the world, and responsibility to a global society. Learning about other cultures will help students clarify their values and enrich their identities (see della Chiesa, Chapter 25, this volume; OECD, 2010). As della Chiesa (2010) expresses, "until taken out of it, a fish does not know what water is" (p. 1). As students explore other ways of life, it sheds light on aspects of their self that would otherwise be unnoticed because they are common among people in their culture (see Christoph, both this volume) them. Students can learn about other cultures through experiential learning and intercultural exchange. For example, students can learn through videoconference or email with students in other countries, conversations with international visitors, travel abroad, participation in global social justice movements, or exploration of cross-cultural arts (Gibson, Rimmington and Landwehr-Brown, 2008; Greene, 1969; OECD, 2010; Suarez-Orozco and Sattin-Bajaj, 2010; Wilson, 1993).

Schools can teach a cultural historical perspective that recognises peoples' entwined histories and shared cultural heritage (Gardner and Ross, 2003; Thompson, 2009). Schools can also teach students concrete skills that are necessary for a cosmopolitan ethic of care, including critical thinking, perspective taking, multiple languages, pluralistic thinking, and cross-cultural conflict resolution skills (see della Chiesa, Chapter 25, this volume; Gardner, 2006; Carlsson-Paige and Lantieri, 2005; Jones, 2004; Johnson and Johnson, 1996; Mansilla and Gardner, 2007; Suarez-Orozco and Sattin-Bajaj, 2010). Finally, schools could encourage students to share responsibility for upholding basic human rights. Toward this end, they can adopt a democratic school culture that encourages students to take responsibility for their school community and broader society (Dewey, 1916; UNESCO, 1996a, 1996b). Teachers can serve as cosmopolitan role models and involve students in global activities (Noddings, 2005). This type of education will help students understand global issues, care for distant strangers, and embrace membership in a global community.

Box 23.2. **The Ross School**

Researchers at Harvard Graduate School of Education (HGSE) are exploring cosmopolitan education at the Ross School, a research school in New York founded by Courtney Sale Ross (Hinton and Fischer, 2010b). The Ross School is designed to nurture a global worldview (Suarez-Orozco and Sattin-Bajaj, 2010). Its spiral cultural history curriculum interweaves language arts, mathematics, science, and arts in a rich tapestry of global historical events (Gardner and Ross, 2003). From the study of evolution in the primary school to the study of La Convivencia* in the upper school, the curriculum develops students' global understanding and situates them in the context of world history. Its unique school culture reinforces this global understanding at many levels – with a culturally diverse school cafeteria menu, art and artifacts from around the world lining classroom walls, and a wellness programme that balances Eastern and Western traditions. As a result, Ross School students develop a deep appreciation for other cultures and traditions, a sophisticated understanding of interconnectivity among peoples, and an identity as members of a global society (Hinton, in press).

Christina Hinton, United States

**La Convivencia* is a period in Spanish history (711-1492) when Jews, Muslims, and Catholics lived together in peace.

Conclusions

In our contemporary world, students' lives are part of a larger global narrative. School should therefore nurture care for peoples in all corners of the world. Babies are born with a capacity for empathy that could be extended to all humans. Yet, we grow up in a world divided by political, ethnic, religious, and economic tensions. As McIntosh (2005) asserts, "Early cultural conditioning trained each of us as children to shut off awareness of certain groups, voices, abilities, and inclinations … Continents we might have known were closed off or subordinated within us. The domains of personality that remain can and do fill the conceptual space like colonising powers" (p. 34). Schools need to play a leadership role in preventing this conditioning. They should ground students in a cosmopolitan ethic of care that recognises connections among themselves and an elderly man on the Tokyo subway, a young Palestinian girl in the West Bank, distant ancestors from Mesopotamia, and a baby that will be born in Namibia many generations from now. Students may find peace in understanding that each of us is not only an isolated person, but also an integral part of the vast wholeness of humanity.[4]

Box 23.3. **What about students who are not motivated to explore other cultures?**

It is my opinion that Hinton's chapter on cosmopolitan education is limited in its scope of understanding the complex problem that exists in our schools, as institutions that can foster a sense of other cultures and a place for students to "extend their biological inclination to care for those close to them to a cosmopolitan ethic of care ." I say this because I believe that her suggestion of learning and exploring other cultures by means of intercultural exchange programmes, experiential learning and travel abroad as solutions to bridge the cultural divide between and "us" and "other's" mentalities seems short-sighted. There is an assumption being made that the student has a genuine interest to do these things, is open-minded enough and intrinsically self-motivated (with the help of education) to initiate explorations into other cultures and languages. Hinton overlooks a much more common mind-set that is found throughout the American ethnocentric classroom, that of the student who is not intrinsically motivated to explore other cultures, is close-minded and adverse to the idea that understanding other cultures is a beneficial endeavour that can broaden thinking and challenge ideas and values. This closed mindset makes up a much larger segment of the students in our schools. The more critical question here is: how do we reach these students? These are the students that challenge us as educators – who, for multiple reasons, do not necessarily believe that being exposed to other cultures can benefit them individually – or our larger society. As Hinton points out, we are wired to care more about individuals that look like us than others and it seems this fact sets the stage for a monocultural mindset. Knowing this, we need to work even harder to address the biology head-on.

Plasticity in the brain is key and we need to look at structuring early environments that can intervene at these early stages in development. As well, the role of the mirror neuron is a vital one in fostering a caring and empathic individual through experiences that are emotionally charged. Reaching students through affective learning may help to stimulate these mirror neurons into making meaningful connections to other cultures. This alone will not be enough, however. How do educators actually change the tide once it is heading a certain direction? Understanding where a student is on the continuum of cultural awareness and attempting to move a student further along this continuum involves recognising the complex process of conceptual change. Change in mindset would need to include accepting the belief that a monocultural identity was insufficient on some level(s) and visualising a more diverse internal setting that encompassed other ways of living and operating. These are the initial stages of conceptual change (Strike and Posner, 1985). All of this thinking carries risks associated with personal vulnerability and exposure to unknowns. In the end, it is all about fear.

In short, reaching students is a complicated process of understanding where students are on the continuum, honouring their current beliefs and recognising their fears. Striving to engage them in meaningful ways that value who they are, without judging them, is important. As educators, modelling the open-mindedness that fosters multicultural awareness is a step toward helping students assuage their fears of the unknown. Additionally, exposing students in small incremental and less threatening ways may help to de-mystify other cultures and reduce fears toward the "other." An example of this might be to have informal multicultural themed lunch gatherings that include foods of other cultures and encourage sharing of personal stories, likes and dislikes around popular culture and fun ice breaker activities. Ideas like these may help to break down the notion of strangeness and foster a healthy curiosity of others. In the end, it is essential to meet these students where they are, identify avenues of change and support the change in ways that are personally meaningful and non-threatening. All of this takes time, but the goal is to move students toward an autonomous desire to explore the world on their own and gain a positive outlook toward other cultures by seeing foreigners, not as foreign but as potential friends.

Harriet Richards, United States

Box 23.4. **On cosmopolitanism, culture and peace**

Christina Hinton looks for a way to create a global society, one in which our differences are better understood and one in which we as a global community and global citizens take care of one another.

Building on a neuroscientific finding that people care more easily for those who are familiar to them, she suggests that "early immersion in a multicultural context could help diminish the sparks of preference for those like us before they enflame into prejudice, conflict or war". Although this suggestion may be effective and powerful in many contexts, I think it's important to note that some peoples/cultures may not want to immerse themselves or their children in multicultural settings because they want to preserve their own culture (with its doxa intact). Their aim may not be negative but rather a preservation of the wisdom, knowledge and beauty of their culture.

Multicultural settings especially at young ages can be culturally diluted environments. All cultures may be taught and studied without immersion in or dedication to any specific one. What can result from such educational settings is a perpetuation of the pluralistic ideology but not of culture beyond that (this by the way is not related to ethnic diversity, but to cultural diversity; in such settings, no culture can be taught in a fully integrated fashion – this may be especially true with the culture or study of religion).

This fact presents a problem. If some feel that a cosmopolitan education will undermine their own culture, what solutions do we have for these communities to create understanding and care between peoples?

I would suggest that children taught values and actions of tolerance and kindness will continue to act in this fashion even to those who they may deem as different. Banking on neuroscience: since synaptic changes parallel behavioural changes (Kandel), I would posit that with many actions of kindness, honesty, community work, etc. children would build into their brain (character!) the qualities that they (we) need to be able to care for one another – regardless of race, ethnicity or religion.

Saks (2002) in speaking about ethics writes that we learn from the particular to the universal. His claim is that by giving, although it may be to those closest to us (by either culture or proximity), we build in ourselves the qualities we need to be kind to all people. In fact, by practising these behaviours perhaps we are producing the neural networks of care that can sustain these behaviours and qualities.

Cosmopolitan education may be the beginning of a great solution in many contexts. For some though, this solution may have unintended consequences that would deem the suggestion (or parts of it) unviable. Looking at other ways to create understanding may be beneficial. In fact, alongside cosmopolitan education we may also want to consider to what extent we teach our children to care, to be givers, to be responsible, to be community leaders.

Sharone Waldman, Israel – United States

Notes

1. The word citizen refers to a national or regional membership that bears certain rights and responsibilities set by a government. Since we do not have a global government or enforceable international laws, it does not make sense to talk about global citizenship (B. della Chiesa, personal communication, 2009). Therefore, this chapter will use the language of educating for membership in a global community, rather than educating for global citizenship.
2. In fact, experience shapes architecture of our brain throughout the lifespan.
3. Neurons are cells specialised for transmitting information in the brain.
4. This can admittedly be considered "a rather optimistic view on the situation, as in quite a few European countries the discussion on migration is rather defensive, exactly because migration flows have been increasing (*e.g.* in the United Kingdom and in Italy), when at the same time economic problems have increased, too" (Harald Wilkoszewski, personal communication with Bruno della Chiesa).

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Chapter 24

Music as an underutilised and underappreciated tool for language learning

By Jessica Grant *

In our globalising era, it is crucially important for the economic success of nations and the personal success of individuals to be able to communicate with our fellow human beings (see Rodriguez-Chamussy, Lopez-Calva and Miyamoto, this volume). Effective non-native language instruction is an increasingly high priority. This chapter examines the possibility that exposure to and instruction in music could aid in this endeavour. We will first investigate the relationship between music and language from a neuroscientific perspective. We will then discuss the possible applications of this relationship in non-native language acquisition. We will also explore the potential for music to increase "cultural competence," i.e. *an awareness of and appreciation for other cultures. Finally, we consider the implications these conclusions have for education policy, and the future of music in schools.*

* Harvard University School of Education graduate; Spanish teacher, St. Mary's School, Medford, Oregon

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

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Music as a tool for teaching languages and enhancing learning

I have always thought that music is an effective and enjoyable augmentation to non-native language classroom instruction. But is there any empirical evidence to support this intuition? What we know about brain function is still dwarfed by what we do not know. However, many exciting advances have been made within the last few decades that have added tremendously to the amount that we do know. Some of the primary methods for studying the brain are EEG (electroencephalogram), PET (positron emission tomography), and fMRI (functional magnetic resonance imaging). EEG measures the electrical activity resulting from the firing of neurons in the brain. An ERP (event related potential) is what is measured in the brain as a result of changes in the mental state involving memory, attention, perception, or expectation, among other things. These are measured via EEG. PET measures which areas of the brain are involved in certain processes and tasks by mapping the consumption of glucose, the fuel that cells run on. The more glucose being used, the more active that region. fMRI measures blood flow in the brain in associated with neural activity. Similar to glucose consumption, increased blood flow to a certain area indicates increased activity.

How are music and language related in the brain?

Identical twins? Or complete strangers?

The similarities between language and music have lead many scientists to believe that they share an evolutionary heritage. Others, however, point to significant differences between the two, and maintain that they are independent of each other. Modern technological advances give us many new and exciting ways to study the brain. As one might expect, there is evidence to both support and refute the claim that music and language are fundamentally linked in our neural circuitry. However, these results are not irreconcilable. Most studies (*e.g.* Besson and Schon, 2003; Jentschke, 2005), agree that in some categories, music and language rely on separate neural systems, while in other categories the systems are indeed shared.

What do we mean by "categories"? Music and language are too complex to be considered in their entireties. We must break them down into their respective components in order to analyse and compare them. Music consists of melody (notes, pitches, and intervals), harmony (chords), and tempo/rhythm. The components of language are phonemes (sounds, studied by phonetics and phonology), words as combinations of sounds (morphophonology), words as meanings (semantics), and grammar (syntax). These categories are not all encompassing of the intricacies of either music or language, but they serve a useful purpose for formulating, conducting, and analysing scientific experiments.

What's in a name? That which we call a note, by any other name would sound as sweet…

To test the relationship between semantics (meaning) and melody (sounds), Besson and Schon (2003) made use of a previous discovery, wherein a certain ERP signature was detected when individuals heard an unexpected word at the end of a sentence (*e.g.* "the

refrigerator was too heavy to smile"). Grammatically, the sentence is correct, but the final word does not make sense in the context that preceded it. Besson and Schon (*ibid*.) set out to discover if a similar ERP signature would occur when participants heard an unexpected note in a melody. If so, it would be a positive indicator that the brain analyses language and music the same way. In this case, the ERP signature was markedly different, leading them to conclude that different neural systems are responsible for processing word meaning and melody. This would make sense, since while melodies may invoke certain feelings (Krumhansl and Agres, 2008), they do not carry specific meanings as words do.

Rules, rules, rules…

But what about the more structural aspects of music and language? Both have systems of rules that govern how smaller units are put together. In music, harmony dictates how notes are arranged with respect to one another. In language, we have grammar and syntax that perform essentially the same function. Patel, Gibson and Ratner (1998) investigated the relationship between these elements. They found that violations of both harmony and syntax resulted in equivalent ERPs, suggesting that the brain processes these aspects of music and language in the same way, perhaps even using the same neural circuitry.

Timing is everything

Finally, in terms of the temporal aspect of music and language (music has rhythm, but languages, too, exhibit unique cadences), Besson and Schon (2003) observed the brain's responses to violations of timing. For this experiment, the occurrence of a note or word was delayed slightly beyond when it was expected. Once again, similar brain areas were activated when presented with temporal violations in either music or language.

Box 24.1. **Music and languages as early as possible?**

In Morocco I had the interesting experience of teaching English to Berber students, using Arabic to translate words and ideas. Arabic was a second language, in this case, for both teacher and student. So I was speaking my second language, trying to teach them my first language (which was a third language for them), using their second language. Whew!

After I had gained enough proficiency in Arabic I discovered something very interesting. My best English students were the ones who seemed to also speak the most sophisticated Arabic. There seemed to be a correlation between the ease with which they could acquire a 2nd and 3rd language. Unfortunately my knowledge of Berber is too limited to make any generalisations, but I would not have been surprised to find that those same students possessed larger vocabularies and greater grammatical dexterity in their 1st language.

I think a useful parallel (with some basis in cognitive development, no doubt) could be found with musicians. Often a child who begins playing an instrument at an early age finds it easier to pick up and play other instruments with relative ease. An understanding of how instruments work becomes almost second nature, allowing the musician to switch easily between instruments even if they require certain particular skills to be able to play.

R. L., United States

So what? Implications for language learning

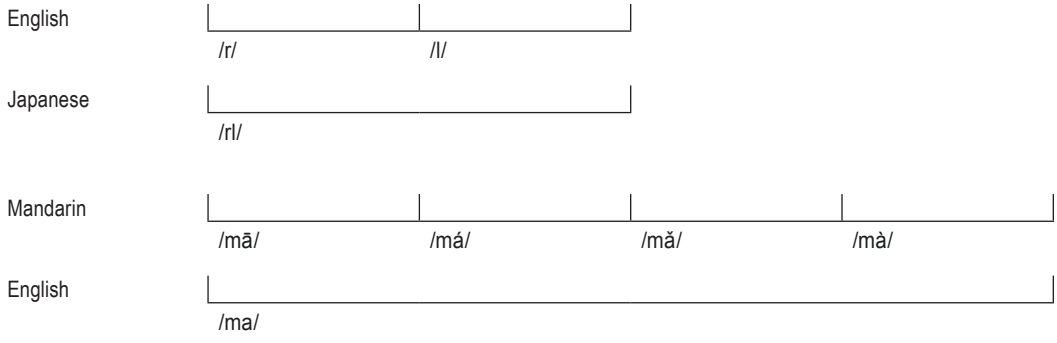
The growing body of evidence suggests that music can be a valuable tool for non-native language acquisition, by virtue of the neural processing systems they share as well as other indirect, but no less significant effects. With the exception of semantics (*i.e.* middle C doesn't "mean" anything), music is essentially its own language. Even if not conscious of it, a student's exposure to the structure and "grammar" of music enhances his or her ability to process linguistic syntax (Jentschke, Koelsch and Friederici, 2005). Their brains have learned *how to learn* another language, which is the most valuable lesson of all.

"Taste classifies, and it classifies the classifier" (P. Bourdieu)

One of the most direct ways that music can have a direct impact on second language learning is based on the concept of categorical perception. Categorical perception means that we perceive language in discrete categories rather than on a continuum. There is a similar phenomenon with colour – even though the visible spectrum of light is on a continuum, there are also distinct categories of colours: red, blue, green, etc. It is easier to distinguish between categories than within – for example, to differentiate between yellow and blue than two shades of yellow. The same is true of languages and being able to distinguish between sounds on the analogous auditory continuum. The main difference is that while visual categories are more hard-wired in our brains, auditory categories are based much more on experience. We learn to hear the sounds that are pertinent to our native language.

One notorious example features the English phonemes /r/ and /l/. In English, they are separate and distinct. In Japanese, however, there is only one comparable phoneme that is more of a blend of the two. Iverson *et al*. (2003) demonstrated in a series of tests that native Japanese speakers could not differentiate between /ra/ and /la/ as the English speakers could. Thus, even though the two groups were receiving the same auditory input, they heard different things, because of this phenomenon of categorical perception. Another example (and one that is often a source of humour, in my experience) goes in the other direction – Mandarin is a tonal language, and therefore /mā/ /má/ /mǎ/ and /mà/ are each distinct phonemes and carry distinct meanings. The typical English speaker, however, has a hard time differentiating these tones, since in English, we just have /ma/.

Table 24.1. **Phoneme comparisons: English-Japanese and English-Mandarin**



The effects of musical training

Do you hear what I hear?

In order to understand more fully some of the potential benefits that exposure to music and musical training can have for learning languages, it is logical to examine some of the ways that musical training has been demonstrated to affect behaviour and neurobiology. Smith *et al*. (1994) tested categorical perception with relation to music intervals. The results concluded that musicians displayed accurate categorical perception with regards to interval size, whereas non-musicians showed no evidence of such. This supports the notion that musical training can sharpen the brain's ability to perceive more subtle differences in sounds.

The idea is that musical training could aid in language learning by helping a student to accurately perceive phonemes in non-native languages that do not exist in his/her mother tongue. Behavioural studies show promising results. One study linked higher musical aptitude and more successful non-native language pronunciation in children (Milovanov, 2004). And even in adults, musical abilities were predictive of success with both the reception and production of non-native language phonology (Slevc, 2006).

And of course, there are the lyrics themselves. One student explains:

> My favourite way to learn a new language is by listening to (pop) music in my target language. Because you're enjoying music, your brain is relaxing and subconsciously acclimating to the language. Then later, when you're learning some new verb construction or whatever, you'll realise "hey, I remember hearing that in such-and-such song!" (Maria).

We will discuss the importance of enjoyment and motivation as key components of successful learning in a subsequent section. The following comment is a perfect example of the latter:

> I learned English through music – as a teenager, I loved English-speaking singer/songwriters like Suzanne Vega or Paul Simon, and I desperately wanted to know what they were singing about. So I sat down and tried to write down the lyrics. I made lots of funny mistakes, but I learned so much, and I can still recall many of the first words I learned back then (Birge Amondson).

I, myself, can personally attest to the benefits of listening to music in a non-native language. It provides exceptional incentive to learn new words, enhances pronunciation, and also helps with our next topic: cultural competence.

> In Paris they simply stared when I spoke to them in French; I never did succeed in making those idiots understand their own language. (Mark Twain)

Beyond learning the syntax and phonology of a second (or third… or fourth…) language, exposure to different kinds of music can help a student to become not only linguistically fluent, but culturally competent. As globalisation continues, it is becoming increasingly important to not only be able to speak to someone, but to understand his or her point of view. One United States Congressman remarked that America's success in the global economic and scientific fields, among others, will be, "dependent on our knowledge of other languages and cultures," (Holt, 2008, emphasis added). As varied as musical styles are around the world, yet there are common elements that enable communication to occur without words. One study showed that individuals listening to songs in languages that they did not speak were still able to identify, for the most part, which songs were

sad, tense, joyful, lullabies, etc. (Mithen, 2006). An American student, who is exposed regularly to music from China, India, Colombia, Italy, Russia, and various other regions and countries, could learn to discern the commonalities and appreciate the differences. What an invaluable paradigm he or she will then have for mankind as a whole: that even though there are differences, there are also the fundamental aspects of our humanity that transcend languages and cultures.

You take the high road, and I'll take the low road…

There are also indirect ways that music can positively influence a student's learning of a non-native language, and learning in general. Many students, especially in secondary school, do not enjoy many if not most of their classes. It is fairly intuitive, but there is empirical evidence to show that things like high stress, anxiety, and even confusion, low motivation, and boredom all negatively affect a student's ability to learn (Christianson, 1992). Further studies demonstrated that students learn better when learning activities are enjoyable and relevant to their lives, interests, and experiences (Puca and Schmalt, 1999). Music is fun and enjoyable, and thus can be a valuable augmentation to any curriculum.

There is also support for this position at the level of brain chemistry. It is known that the neurotransmitter dopamine is released in response to positive and enjoyable experiences, such as music; it is even released in response to the anticipation of enjoyable experiences (Brembs *et al*., 2002). Dopamine is also associated with attention, memory, learning, and executive function (Willis, 2007).

Policies and attitudes: Time for a change

I imagine there are few people who would claim that more music in schools is a negative thing. However, the problem lies in the fact that it is not a priority in our society. For some reason, many modern cultures have come to view music (and the arts in general) as something superfluous; nice, but not crucial. Music is not looked down upon, but it in no way commands the same academic respect as maths, science, and literacy. In past centuries, this would have been unheard of; music was considered an integral and important element of a person's proper education. I don't know what changed our attitude, but now when money or time is in short supply, music is one of the first things to go.

No child left behind: Leaving music behind

Though the problem of funding for music education already existed, the No Child Left Behind act of 2002 only exacerbated the problem. The search for statistics regarding average government spending on music and the arts was unfruitful, but this might be the result of the United States Department of Education's website being difficult to navigate, counterintuitive, and generally uninformative. Then again, it is a product of the government, so I don't know what I was expecting. I did, however, find this: "Under No Child Left Behind, states and school districts have unprecedented flexibility in how they use federal education funds," (*www.ed.gov*, December 2009). However, most school districts are finding that in trying to meet the demands of NCLB with respect to standardised tests of math and reading, there is little time or money left over for any other subjects.

Why school?

But why must music education happen in schools? Aside from the specific benefits for language learning, and the increased enjoyment of school students would gain, there is the achievement gap to consider. If music education is relegated to the realm of extracurricular activity (as is the case already in many areas), only the students of higher SES are able to afford it. The cost of private lessons, equipment, and transportation are not feasible for lower SES students and their families. Without musical instruction and exposure, these students miss out on all the benefits we have just described. The achievement gap is perpetuated, and even widened as a result.

Conclusions

Perhaps one day, the entire population of earth will speak a single common language. Until then, it is vitally important to be linguistically fluent and culturally competent in more than just our native tongue (see della Chiesa, Chapter 25, this volume). Because of overlapping processing systems in the brain for music and language, and its aesthetic and motivational qualities, the former can be a tool for acquiring the latter that is both fun and functional. Ultimately, however, education policies regarding the priority of music and music education in schools will not change until and unless our attitudes towards music change (see Welch, this volume). As long as society considers music to be non-essential, music classes will continue to be cut in the face of diminishing budgets and time constraints. When we give music the same credence as any other subject, we will then be able to harness its full potential as a powerful tool for improving language learning as well as cultural competence. It is our duty and our privilege to do everything we can to enable the rising generation to not only speak to others in another language, but to truly *communicate* with others in our increasingly global community.

> "Things alter for the worse spontaneously, if they be not altered for the better designedly." (Francis Bacon)

Box 24.2. **Music, language, and "silent connections" in the brain**

Thinking about "silent connections" in the brain, the first thing that came to mind was music, for two different reasons. First of all, as a violinist, I recently had to stop using my bow arm for nearly five months after I broke my clavicle … which is like death as a musician, basically. When I started playing again, I was so worried and stressed out that it was difficult and frustrating to play, except when I was messing around and playing for fun, without any pressure on myself. The pieces I was playing both cases were usually of comparable level; the instant I relaxed and let it "flow", my silent connections (along with muscle memory) took over and I was able to play without wanting to smash my violin against a wall.

The second thing it reminded me of was "earworms". Why is it that everyone has at some point experienced getting a piece of music "stuck" in their heads? It seems to me a pretty unique phenomena – I don't usually get phrases from books or math problems or NN language vocabulary replaying in my head over and over … but music seems to have that "stickiness" in our brains. What is going on in our brains, or in our "silent connections" that causes this? And can we exploit it for educational purposes?

Jessica Welch, United States

Box 24.3. **Non-native language learning with songs**

Nicole, a 5-year old girl from Cleveland, Ohio, is watching Dora the Explorer on Nickelodeon. Today's episode, based on Dora's first day of school, contains songs and phrases in English and Spanish. After listening to one of the songs where everyone sings, "*Vamos a la escuela*," Nicole starts singing "*Vamos a la escuela*." Because Dora and the other characters repeat this phrase in English and Spanish, Nicole understands what this phrase means. In Buenos Aires, Argentina, 5-year-old Marcelo is watching the same episode via satellite cable. He repeats a few words in English such as "map," "river," "school," and phrases such as "Good morning" and "We did it." At the other side of the world, in Stockholm, Sweden, a group of secondary school students are watching and analysing the news on Deutsche Welle via satellite cable as part of a project for their German class. They record the news broadcast and repeat it a few times before talking about the main points covered in the news. As they start discussing the events they saw, they start uttering words and phrases in German. Close to the equatorial line, in Guayaquil, Ecuador, a high school English as a Foreign Language (EFL) teacher is writing on the board the lyrics to "It's a Beautiful Day" by U2. The teacher has prepared a class activity using the song to enhance listening comprehension skills.

The previous vignette illustrates examples on how music is being used by children, teenagers and adults to learn and teach NN languages around the world. Many teachers cite the following benefits for using it in their NNLL classrooms: vocabulary development, improvement in listening skills, cultural awareness, and virtual immersion opportunities.

Denisse Romero, Ecuador – United States

Box 24.4. **Maths, English and Chinese**

The language that we speak is directly related to processing time in mathematics. Try to memorise a list of numbers in twenty seconds. Memory span in China is about nine digits while it averages only seven in English. The Cantonese dialect of the Chinese grants residents of Hong Kong with an average of about 10 digits. This may be attributed to the difference in the length of the number words (Dehaene, 1997). Digit span is a culture- and training-dependent value. The lexicon, grammar, and number formation rules vary widely among cultures. In one study, Kevin Miller and his colleagues asked matched groups of American and Chinese children to recite the counting sequence. The linguistic difference caused American children to lag as much as one year behind their Chinese peers. They were paced equally when counting up to 12, but when the American children reached 13 and 14, they stumbled.

Nancy Schoolcraft, United States

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Chapter 25

"Expansion of our own being": Language learning, cultural belonging and global awareness

By Bruno della Chiesa*

For consideration by the education community, here are a few hairy questions and a provocative hypothesis regarding the relationships between acquisition of languages, consciousness of cultures, and development of ethics in human beings. Starting from the basic idea according to which "a fish does not know what water is," I postulate, using the mathematical metaphor of the "tesseract," that mastery of several languages is not only essential to developing cultural sensitivity, but also a key to (partial) access to global awareness. Such goals, if considered desirable at policy level, may be further enhanced by designing new approaches to language education by revisiting history and by taking into consideration recent discoveries about the learning brain. This might open research avenues for a number of disciplines; if sound neuroscientific work, included in transdisciplinary efforts, proves the hypothesis right, then we may hope to take one small step toward more cross-cultural acceptance and respect: yet another "giant leap for mankind"?

* Harvard University Graduate School of Education; OECD Centre for Educational Research and Development (CERI)

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Introduction

> *For us, we are all very different; our languages are very different, and our societies are very different. But if we could extract ourselves from our point of view and sort of look down at human life the way a biologist looks at other organisms, I think we could see it a different way. Imagine an extra-human observer looking at us. Such an extra-human observer would be struck precisely by the uniformity of human languages, by the very slight variation from one language to another, and by the remarkable respects in which all languages are the same* (Noam Chomsky, personal communication on 3 January 2011, confirming a quotation [in Osiatynski, 1984]).

Tlatoani literally means "the one who talks" in Nahuatl. But the word is now more often known as the title once used by the *Mexica* (generally called "*Aztecs*", except maybe… in Mexico) to refer to their leaders – kings or emperors. So, for that pre-Hispanic culture, the leader was "the one who speaks": what a strikingly economical linguistic tool to capture the intimate relationship between language (speaking) on the one hand and power (leading) on the other! This is just a quick reminder supposed to bluntly introduce the reader to the profoundly political nature of language, of course. Beyond, the present chapter will also regularly tap into the history of the *Conquista* (the first colonisation of America by Europe), as it provides a textbook example of many aspects of the questions discussed in this volume.

Is teaching/learning non-native languages really that important?

While I completely agree with Howard Gardner (2009) that "education is a contentious and value-laden profession," (p. 69) I would go further than that and assert that not only do "outsiders often fail to recognise this fact" *(*ibid.*)*: insiders are generally not very keen on recognising it either. NNL education is just as contentious and value-laden as any other discipline, if not more, and yes, "those who deem education to be value-free are either naïve or duplicitous," as Gardner puts it *(*ibid.*)*. Moreover, we know only too well that in spite of having "almost everyone involved in the scientific study of languages argu[ing] that we should teach foreign languages to young children," *(*ibid.*)* this assertion is frequently objected to. Arguments against the early teaching/learning of languages are, as far as I can see, of two different (but not necessarily incompatible) natures: one is based on a utilitarian approach of learning (this is Gardner's stance on this particular point) and the other features quite systematically political stances, more or less cleverly disguised under technical terms.

According to Gardner *(*ibid.*)*, "like it or not, as a preparation for one's future life, it is much more important to teach foreign languages in Switzerland or Hungary than it is to teach [them] in Spain or the United States." Interestingly enough, Gardner does not feel the need to justify such a position, but treats it as if it were self-explanatory. But it is not. Hence, we have to hypothesise about why these four countries were chosen as examples. Having heard and tried to analyse the same prejudice many times, almost exclusively in former or present colonial powers (maybe a consequence -or, worse, a justification- of what has sometimes provocatively been labelled as "linguistic imperialism"), I can

suggest the following: Switzerland is a multilingual country, and so Swiss citizens have had to learn the idioms of other linguistic groups within the Confederation for the sake of cohesion. Hungary, like Switzerland, is comparatively a rather small country but whose language, unlike some of Switzerland's, is not widely known beyond its borders. Therefore, Hungarian citizens have to learn other languages in order to be able to communicate with the outside world. Spain however, due to its colonial history, has a language (Castilian) widely spoken outside of its own boundaries (see Belmont, this volume), especially but not exclusively in Latin America. The United States have the current *lingua franca*, English (or "Globish"), so why would they bother with other languages anyway? One can find a myriad of reservations about such assumptions: some Swiss citizens manage to live within Switzerland while speaking only one official language of the country (in fact, generally Swiss French-speaking people master English better than, say, German or Italian, and most Swiss German-speaking people master English better than French or Italian, to say nothing of Romansh). Spain is far from being linguistically homogenous, and NNL teaching/learning is taken very seriously over there: finding a Spaniard who speaks at least one non-Hispanic language reasonably well is not very difficult in my experience, and not many Spaniards would concur with the idea that it is unimportant to teach foreign languages in Spain. Furthermore, teaching languages is not considered more important in Hungary than it is in the majority of European countries.

This leaves us with the specific case of the United States, or to be more complete, with the case of the Anglo-Saxon world (in spite of subtle differences on this front among the English-speaking countries). The *lingua franca* argument could possibly make sense if and only if one considers NNL learning in a mere (and rather narrow) utilitarian perspective at short term. But considering the pace at which perceptions and practices with regard to languages and cultures are changing under the influence of globalisation, native English speakers could well make up the vast majority of exclusively monolingual people in the world within a few decades. What would be the consequences of this sort of situation, even at a utilitarian level? Among other questions, might this specificity not ultimately be a comparative disadvantage, both individually and collectively, even in economic perspectives?

But the main point for education is elsewhere. Obviously, "any addition to the curriculum necessarily entails a loss" (Gardner, 2009, p. 69), but asking whether languages are "so important that they should replace time in reading and writing in one's native language, training in handling social conflict, or exposure to the arts" *(*ibid.*)* seems to rest on an underestimation of some important aspects of the situation. Indeed, why would we assume that NNL education necessarily means less "exposure to the arts"? One could argue exactly the opposite. Time spent on acquiring one or several other languages could be very helpful also in terms of reading and writing in one's native language (see below, the metalinguistic argument implicitly made by Goethe almost two centuries ago). Above all, exposure to various languages might indeed represent one of the most powerful tools in any "training in handling [various forms of] conflict," as I hope the hypothesis represented by the "tesseract" below indicates. In other words, while Gardner's view on the fact that "education is driven by fundamental questions of value on which nearly all citizens have strong and often inconsistent opinions" *(*ibid.*)* is not to be challenged, this does not mean that all opinions are equally well informed, and, above all, that the goals Gardner identifies for education (preparation for citizenship – see Hinton, this volume; preparation for the workplace – see Rodriguez-Chamussy, Lopez-Calva and Miyamoto, this volume; mastery of the great traditions of the past – see Belmont, this volume; training for the unknown future – see Kenzhekhanuly, this volume; and a focus on academics, the arts, or athletics) are necessarily "rival" goals. Why should these goals necessarily become rivals? For the sake of

time? Some people are defenders and critics of language learning and teaching at the same time, but widely acknowledge that, if implemented consistently and above all with genuine commitment, the long-standing rivals mentioned here could become allies.

"Those who do not know other languages know nothing of their own" (Goethe)[1]

Why publish such a powerful aphorism posthumously? One can imagine that Goethe had tested this thought with several people, noticed the violent reactions it often triggers, and understood its extremely political nature. Notoriously a prudent man when it came to power games, and having measured the controversial character of such a thought, Goethe could have preferred to have its subversive potential wait until after his death to see the light of day (*Mehr Licht*!). Or maybe it was just a coincidence. Who knows? Anyway, I would like to invite you to try for yourself: Whether you adhere to the idea or not, just throw the quotation in the middle of a conversation with friends or colleagues, or during a talk you give. You will see the people around you immediately split into two camps: those who nod, generally in silence (they understand the meaning of the thought and fully agree – or at least tend to fully agree) and those who furiously deny the sentence any sort of sense: These are monolinguals. In fact, I know of no more effective way to spot monolinguals within any given audience. The problem with this, obviously, is that monolinguals, who are certainly not under the impression that they don't know anything about their own language, feel dispossessed, if not despised, by the implicit judgment underlying Goethe's aphorism, which implies not only that a distance to the language object is needed in order to develop metalinguistic awareness, but moreover that such a distance can only be attained through the acquisition of other languages.

Such a view could indeed be considered an overstatement, a sort of caricature designed for didactic purposes. However, there is a grain of truth about it; until taken out of it, a fish does not know what water is. As I hope to show in the pages to come, what is true of water for a fish is also true of the mother tongue and of the native culture for a human being (except that out of his/her linguistic and cultural waters, a human being generally does not die).

Consider the Bahamas Natives encountered by Columbus on 12 October 1492. Because they had never heard any language but their own, they believed the Spaniards could not speak; strangely enough though, the Spaniards, who were supposed to be aware of the multiplicity

Box 25.1. **A fish out of water**

How can we know our own culture (or language) without learning about others? How can we be cognizant of our doxa until we step out of the water? Heraclitus said: "No man steps in the same river twice, for it is not the same river and he is not the same man". This is what happens when the fish, now acutely aware of the environment he had grown up in, returns to the water. Due to his experience the water is no longer the same, and neither is he. How to transfer the experience of a fish out of water into classrooms? How to teach global competence? For a teacher of global competence, the goal should not be to become an expert on all cultures, but rather to become an observer. Most importantly, a lesson on culture leaves room for self-discovery – both discovery on one's own and discover about one's self. Last summer I returned from several years in Shanghai and moved to Boston, a city only thirty minutes from the town I had grown up in. And yet, as Heraclitus wisely predicted, it is no longer the same and, thankfully, neither am I.

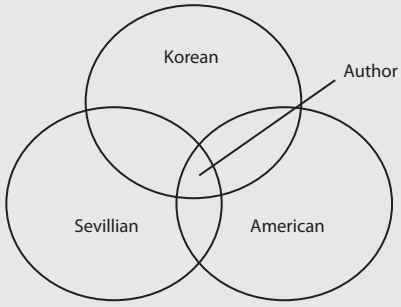
Nora Maginn, United Sates

Box 25.2. **"Soy Brenera"**

I am a Seoulian and a quite Americanised Brenera who now lives in Boston, Massachusetts. This one sentence brings about so many contradictions in itself, and I cannot even begin to explain all the implications that I mean by this sentence. Instead, let me sum it up in a clearer form: I am a native speaker of Korean, I speak English without noticeable "foreign" accent and my Spanish takes on a dialect form of Castellan from Seville in Spain.

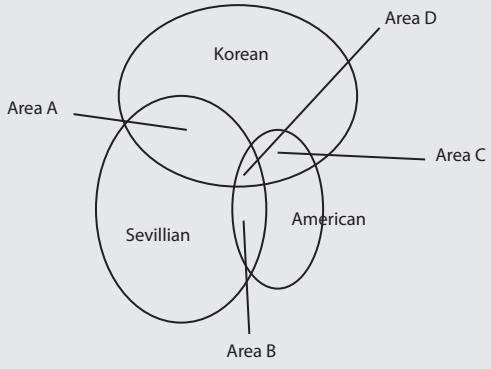
Do you always only categorise people according to the languages they speak, or do you also consider the cultural groups they may belong to? Let us turn back to the very first sentence. When you initially read the description of me, what criteria did you use to categorise who I am? Differentiating the three languages that I speak will not be too difficult; however, it is likely that you will be faced with the dilemma of separating the cultural groups. I have presented you with at least three distinct cultural groups – South Korean, American and Spaniard, put more specifically, Seoulian, Bostonian and Sevillian. Would you argue that I am a South Korean, no matter how strong the foreign cultural influence, or would you decide to accept the influence of each culture and draw three circles, each circle representing a culture, and then simply point to the overlapped part, as in Figure 25.1? Would you be confident enough to argue that this overlapped area precisely represents the author?

Figure 25.1. **An equal combination of the three cultures**



In a way, it does seem to be logical; after all, if you mix a cup of lemon juice with wine and Sprite, you get Sangria. The combination may still retain some tastes of each drink, but it would be most precise to label it as a mixture, little bits of everything – it is neither lemon juice, nor Sprite, nor wine. However, here then is my second question: in Figure 25.1, what would happen if the circle sizes were different from one another, as in Figure 25.2?

Figure 25.2. **An unequal combination of three cultures**



Kayoung Kim, Korea

of languages (especially Columbus himself, whose mother tongue was certainly not Spanish), also believed the Natives could not speak. Why, one could ask, should a fish know what water is anyway? It is a good question, which illustrates one of the major issues at stake here. A fish indeed does not need to know what water is. But, metaphorical purposes aside, human beings are not fish. And, unless one adheres to the Ingsoc's slogan "ignorance is strength" (Orwell, 1949), a beautiful African proverb applies here: "Not to know is bad. Not to want to know is worse."

Languages shape worldviews…

Anyone who has learned at least a bit of another language is familiar with the idea that not everything is perfectly translatable and indeed that many words are not translatable at all, or only after encountering many difficulties. This is an efficient way to illustrate how differently the world is actually categorised, and the thought constrained, by language. Consider for instance abstractions, and singularly political concepts: the US notion of "State" can neither be translated into French by *État* nor into German by *Bundesland*, even if most dictionaries would probably offer such glib solutions. The reason is simple: there is no such thing as "states" (American sense) in France, a traditionally centralist country with no experience of federalism (and, in fact, most French people have a rather strange idea of what "federalism" actually means, as the debates preceding the 1992 referendum on the Maastricht Treaty have shown; see della Chiesa, 1993); one could think that in Germany, where federalism is a daily reality and is well understood by a vast majority of the population, things would be easier, at least in understanding the conceptual American "state", but it is just the opposite: the problem is even more complex, because German *Bundesländer* are not American "States." Using familiar words to translate alien notions usually leads to endless confusions, especially because once we have heard a familiar word, we tend to believe that we've "got it", when we in fact, have not. Even simpler terms referring to concrete objects, such as "bread," are not so easy to translate: *pain* in French and *Brot* in German, the official translations of "bread" *de facto* cover very different realities... It is of different signifier/signified relationships we are talking about here, not only different connotations (della Chiesa, 1989), as would be the case for example with the words "revolution" (English), *revolución* (Spanish), *révolution* (French), or *Revolution* (German), which are very similar to one another but which evoke very different representations (and associations, or "shared cultural charges". A few last examples, just for kicks: when one considers the absence of a one-word translation for "shallow" into French (*peu profond*, *i.e.* "not deep," is needed to render "shallow") as a philological accident, the facts that there

Box 25.3. **Untranslatable?**

Of all things to remember about my childhood in Vietnam, I remember this so clearly. I am around four years old. My family and I are sitting on the floor eating dinner and my dad is about to feed me a piece of bitter melon. Before he feeds it to me, he warns me that it is "dang" (Vietnamese for "bitter"). I eat it and understand what he means. The taste and the word become inseparable. So much so that when my college friend visited me and noticed the strange, wrinkly vegetable hanging in our backyard, I had difficulty explaining what it was in English. "Bitter", technically the synonym of "dang", didn't seem accurate to me. "Bitter" didn't describe my experience with this vegetable – "dang" did.

Dinh Xuan Phan, Vietnam-United States

is no English word for *laïcité* and no French word for "accountability" certainly seems to indicate a deeper meaning...

Confronted with these phenomena, language learners quickly discover the relativity of the labels they use and are thus able to develop the metalinguistic (and, further, meta-cultural) awareness that I believe should be one of the main goals of education, especially in our age of unprecedented globalisation.

At this point, I would like to attract the reader's attention to a key stance of Karl Kraus, arguably the most prominent (some would even say the only genuine) German language satirist of the last century. Witnessing first-hand the last decades of the Austro-Hungarian Empire, the disaster of World War I, and then the rise of Nazism, Kraus detects in his contemporaries' decaying use of language a symbol and a cause of their rotten treatment of the world (particularly journalists, whom he contemptuously designates as "Journaille", even if – or because – he was one himself), thus establishing a direct relationship between language, thought, and ethics (Bouveresse, 2001). "Language is the mother of thought, not its handmaiden"[2] (Kraus, 1899–1936, quotation from a 1912 issue of *Die Fackel*, his newspaper). Many of his extreme positions were at the time harshly criticised and made him scores of enemies, but did not prevent him from paving the way for George Orwell: The creation, in his famous *Nineteen Eighty Four* (1949), of "Newspeak", remains one of the most striking allegories literature has produced so far about the relationships discussed. For both writers, political chaos was connected with the decay of language, and the author of "Politics and the English Language" (1946) even argued that "one can probably bring about some improvement by starting at the verbal end" because "if thought corrupts language, language can also corrupt thought."

The agenda I am suggesting here (diametrically opposed to the one explicitly set out in Ingsoc's Newspeak in *Nineteen Eighty Four*) consists of using the light shed by people like Kraus and Orwell to popularise the complex but direct relationships that develop between language, thought, ethics, and politics, in the hope of expanding our worldview rather than reducing it. Even if Orwell cautiously adds in the appendix ("The Principles of Newspeak") to his novel that the goal aimed at by Newspeak would be attainable "at least so far as thought is dependent on words," it is clear to the reader that in the author's mind, the principle of linguistic relativity (sometimes referred to as "Sapir-Whorf hypothesis", and, often by its adversaries, as "linguistic determinism") is valid: one cannot think what one cannot (at least more or less) express in words, and thus our language shapes our "*think"* (Newspeak for "thought") as well as our behaviour, while language itself is shaped first and foremost by culture (Whorf, 1956).

The Sapir-Whorf hypothesis has been challenged by many and for many decades, and still will be: it is possible (albeit difficult) to argue that thought can exist independently of language. I tend to concur with Noam Chomsky that no final answer to this question can be scientifically established, and that therefore the debate will have to remain within the realm of philosophy. Whatever one's opinion on the matter, an intriguing phenomenon is the recent (explicit or not) resurfacing of "Sapir-Whorfian approaches", which one could date back in most cases to the years that followed the collapse of communism in Eastern Europe. This could suggest that some intellectuals were at that time suddenly and anew made aware of the power of language in propaganda, particularly in non-dictatorial regimes. A few distinguished linguists and political thinkers had not only long before diagnosed but also vehemently denounced the crucial function of the mass media to "manufacture consent" (Chomsky and Hermann, 1988) by creating "necessary illusions" (Chomsky, 1989; title borrowed from Lippmann's *Public Opinion*, 1922). Slowly but surely, the newly legitimated power of the media in linguistic matters instil orthodox views in the mind of

the public, especially by the use of a form of "Newspeak" which Bourdieu described as impoverished in order to maintain symbolic domination (Bourdieu, 1995), and *in fine* all forms of domination, by keeping citizens believing in a given "doxa" (*i.e.* maintaining what a specific society takes for granted or, in other words, entertaining the confusion between what is "natural" and what is "cultural"; Bourdieu, 1979), which only too often entails rejection of "others," as one can witness in the mass media on a daily basis (della Chiesa, 1993, 2010a). Plato already opposed doxa and knowledge: Not identifying the surrounding doxa as such is living in ignorance – and, arguably, in a state of absolute domination, all the more agreed to because it is not recognised as such. Hence, a crucial question is to be raised, maybe the most important one here: Do we really want to give our children (future generations of adults) the means to question and challenge the doxa they live in? Do we really wish to have to deal with populations that, having sharpened their capacities for critical views on something as hard as the doxa, would inevitably become more discerning? (Dubet, 2014; Stein et al., 2011).

Box 25.4. **Ethnocentric universalism**

Which came first, the thought or the word? If it's the word, then how can we explain intelligence in any other language other than our own? Is potential knowledge endangered when cultures/languages are illegitimated by the dominant culture/language? Can the "tesseract" idea (infra) be enough to bridge the difference of which came first and paving the way for better acceptance of culture and enhance communication?

I was struck by the quote (*supra*) by Karl Kraus, "Language is the mother of thought, not its handmaiden." This in turn reminded of an oft told quote by Khalil Gibran: "All our words are but crumbs that fall from the feast of the mind". I understand ethnocentric universalism as a lens through which we see and interpret the world, limiting or expanding recognition of things around us. For example, the day I discovered that a certain shade of blue is called "periwinkle", I was able to define it as something I liked without having to show it to someone. But prior to learning that word I knew and recognised that colour. In my personal journey of both expanding my mastery of my mother tongue as well as learning new languages, I find a closer adherence to the statement made by Gibran than to Kraus' view. Recognition of thoughts is ever present for me, even as I write this reflection seeking the words with which to relay them. The thoughts are only defined by words, and there are too few words to define the thoughts.

However, I do concur that learning new words can help with the expansion of understanding; perhaps in learning new languages I might be provided with different dimensions through which I think about things, much like learning the word "periwinkle".

The Huron Indian who visited France and stated that his preferred language was neither English nor French further demonstrates the ethnocentric universalism we are subjected to. As an educator and agent for "international development" I have found that this field works under the assumption that knowledge is to be given, not brought forth or cultivated from those with whom one is working.

It seems that we make assumptions based on our individual ethnocentric universalism in everyday interactions, dealing with foreigners, educating our youth and "uplifting" developing countries to higher socio-economic standards. Knowledge exists in others despite their competencies in our own language and culture. As a fish that has experienced what it is like to be out of water, I think my sensitivity to others in similar situations is greater. But to assume this is the natural response would be irresponsible, as sometimes it only further entrenches an individual's perception that their culture and language are the only way to move forward.

Gretchen Wagner, United States

Although it is impossible to measure the degree and the variety of ways in which languages influence human thought, many examples clearly illustrate that languages do indeed have influence on thoughts. What this implies for global education is that, although studying about the world in one's native language is meaningful at least on an intellectual level, it alone cannot provide the experience of seeing, thinking, and feeling as people who speak other languages do. Becoming bilingual enables a person to relate on subtle levels of perception, cognition, and emotion to people who live within a different linguistic system. Carrying that reasoning forward, becoming multilingual may support the development of multidimensional, meta-level linguistic, and cultural competences; the basis of what may be called a truly global awareness, a way to cosmopolitanism (see Hinton, this volume).

A tesseract against the tyranny of doxa and intolerance: Toward "global awareness"?

What is involved in language education and what successful NNL learning implies is the acquisition of knowledge ("know-what", or *savoir*), know-how (*savoir faire*), and interpersonal skills (*savoir être;* literally meaning "know-how-to-be", or, maybe more accurately, "know-how-to-behave"; see della Chiesa, 2010b, 2010d). This has a considerable impact on individuals by virtue of defining (redefining, even) their cultural identity, or, better, cultural identities. One of the direct consequences of access to plurilinguality is access to an advanced form of pluriculturality, or at least the birth of an awareness of pluriculturality, with all it implies in terms of worldview(s). Perceptions of one's self, one's identity, and one's culture are influenced by successful language learning because it also raises self-consciousness and cultural consciousness (to begin with, discovering the existence of one's doxa and all that it implies). Beyond the gain in cultural consciousness, becoming at least partly plurilingual and pluricultural may foster a form of global awareness. This idea is captured below by crossing various theories (and using different disciplinary resources and a range of methods of analysis), including Bourdieu's sociological/ethnological notion of "habitus" and Chomsky's concept of "universal grammar," to give birth to a representation of the process, using as a model the geometrical metaphor of the "tesseract". According to Chomsky, humans have an innate linguistic ability to learn language, enabling them to form grammatically correct sentences by applying learned rules ("generative grammar"). Moreover, we tend to ignore the fact that in many ways languages have more similarities than differences ("universal grammar"), just as we often ignore similarities between cultures, as we usually focus on the differences. Raising global awareness, at an individual level as well as at societal levels, might well represent a key to a better (reception of) globalisation, thus contributing to a better world. If such a goal seems desirable, if the very idea of educating children, future citizens, towards a more cosmopolitan worldview is not rejected, then the search for the linguistic and cultural tesseracts can begin.

Parallelisms between geometry, learning, language, and culture will hopefully help clarify the nature of the hypothesis and, even more importantly, of what is at stake here. In (Euclidian) geometry, "dimension 0" is a point. We'll call the equivalent in learning, the basic unit, "information" (know-what): pieces of information form a cloud of isolated dots, of elements with no apparent connection to one another, thus being hardly intelligible (this is mostly what our mass media, particularly television, deliver on a daily basis; see Bourdieu, 1995). When it comes to language, such basic units would be first found in the realm of phonology and phonetics: "phonemes" (language sounds), and their approximate (especially in "shallow" languages) written counterparts, "graphemes" (letters in alphabetic languages). And, in any given culture, "dimension 0" corresponds to "facts" (or "perceptions"), which can be stored in memory, even though when considered in isolation – and thus not making any conceptual sense – such facts are probably difficult to memorise.

Dimension 1 in geometry consists of a line, which in itself is a succession of points. By combining bits of information in order to transform them into a pattern, one "transforms information into knowledge, that is, one understands" (della Chiesa in OECD, 2007, p. 73). At the language level, the combination of phonemes gives birth to morphemes (words), following the morphological and morphophonological rules of a specific language, which then leads to semantics. At the culture level, combining facts allows the identification of patterns (Gärdenfors, 2007) or representations derived from a meaningful combination of one's perceptions.

One step higher, Dimension 2: in geometry, a plane, exemplified by a square. By combination of knowledge elements and addition of practice/training, skills emerge. In language, while respecting semantic and syntactic rules, combining morphemes allows the emergence of sentences (understood as abstractions). With a given set of cultural rules, combining patterns and adding practice, "behaviours" emerge; these are abstract constructs, just like "sentences" at the language level. Maybe these "abstract behaviours" could in fact be matched with the behaviourist model of stimuli-responses, since it can basically be viewed as imitating and replicating.

However, we live in a three dimensional (3D) space. Our minds only create dimensions 0, 1 and 2 in an analytical, heuristic effort. With the next step, we deal with reality – or at least with the way we perceive it: A cube serves as an example for the 3D space. A creative combination of knowledge and skills gives birth to "know-how": a set of capacities needed for problem solving. A generative, or creative, and contextualised combination of language units allows utterances:[3] this is the result of the creative process that follows what Chomsky (1957) named "transformational" or "generative" grammar, what behaviourists had so dramatically overlooked. Bourdieu (1979) calls "habitus" the generative grammar of our cultural behaviours: Internalised rules allow us to generate behaviours adequate in a specific cultural context.

At this stage, we could theoretically stop. But I suggest we go at least one step higher, to reach a fourth dimension. The most famous four-dimensional (4D) object in geometry is called a "tesseract"[4] (even if human eyes cannot actually *see* a 4D object). To give an intuitive idea of what a tesseract is, one could say that a tesseract is to a cube what a cube is to a square (for a more detailed and brilliant demonstration of the tesseract concept, see Carl Sagan's 1980 video: Interestingly enough, Sagan grounds his explanation on a brief account of Edwin Abbott's *Flatland* (1884/2010), a "multidimensional" novella meant as a satire of Victorian time and society, in which the author lived. The 4D notion in learning would be metacognition (which empowers the subject to better access the desired, or at least desirable, self-awareness and global awareness), and I hypothesise that tesseracts of the same kind also exist at language and culture levels. By combining various languages (perhaps with a minimum of three languages, like a global positioning system device, more commonly known under its acronym GPS, which needs three satellites to calculate a given position by triangulation), one gains better access to metalinguistic awareness and potentially starts to get a glimpse of a supra-linguistic grammar, in recognising not only the differences, but the invariants (universals) in all human languages. The same holds true for culture: By combining various cultures, one can get partial but better access to meta-cultural awareness and to a potential supra-cultural habitus.

It is not finished yet. Once an access to supra-linguistic grammar and/or supra-cultural habitus has been opened through a triangulation in languages and culture, one reaches the realms of philosophy of language and/or philosophy of culture (dimension *n*). Universals start to take shape, which allow plurilingual/pluricultural people to recognise, beyond the

Box 25.5. **Is achieving a tesseract-ive state of lingual/cultural savoir être something for the privileged?**

In this chapter describing the tesseract model of language, culture, and ethics, della Chiesa suggests that multilingual/multicultural individuals have the potential to develop savoir être – a sense of metalinguistic and metacultural awareness that leads to supralinguistic grammar and a supracultural habitus. In this sense, the individual becomes an über-culturalist: "Universals start to take shape, which allow [one] to recognise the commonalities among languages and cultures and finally, the commonalities among human beings". In her article on "cosmopolitanism," Hinton (this volume) backs della Chiesa up, suggesting that "[c]osmopolitanism [a metacultural status accompanied by multilinguism] involves recognising common histories and interdependence among peoples, and identifying as a member of a global society". While the supralinguistic, supracultural, cosmopolitan is a notable ideal, achieving such a status is fraught with issues of class and privilege.

NNL education in the schools (most any schools) has its limitations. While someone may be able to develop technical linguistic competencies in one or more NNLs through in-school learning, in order to truly absorb the culture of an-"other," it is necessary to have firsthand experience living within that culture for an extended period of time. My question is – who has the time and resources to live fully in so many different cultural environments?

In order to achieve "savoir être", the lingual/cultural equivalent of the tesseract, della Chiesa suggests an individual learn at least three languages: "like a global positioning system device needs three satellites to calculate a given position by triangulation". One satellite is expensive. Three – all the more so. It would therefore seem that it would only be the most privileged amongst us who would be able to afford to launch a triad of lingual/cultural satellites into transcultural orbit in order to achieve a fourth dimensional state of cultural understanding.

I'm being cheeky here – but I am also being quite serious. There is a general tone that suggests that the supralingual, supracultural state of tesseract-ive savoir-être is the apex of human experience. As much as this is portrayed as an ideal, it is also a way of othering: multilinguals, good; monolinguals, less good (aka: bad). My argument is that, if supralingual grammar and supracultural habitus are best attained through the mastery of three or more languages learned, and languages are best learned through long-term cultural embeddedness, then what is really being advocated for here is a lifestyle that allows one to spend extended periods of time living in multiple cultures/countries. To many that probably sounds like a typical cosmopolitan lifestyle – cosmopolitan in the jet-setter-cocktail-glass sense of the word.

The truth is, for most middle-class and poor families, the opportunity to live abroad (multiple times) is not an option. Sure, there are instances where military families travel a lot, or where war, political unrest, or lack of opportunity force families to migrate from one country to another, but for the most part, living in multiple cultures is linked to having the privilege and economic capital to do so.

Humanitarian aid expeditions are included in this category of privilege. Learning an NNL while building a school in Africa or advocating for human rights in China are indeed worthy causes that certainly equip one with the "fish-out-of-water" capacity to become more metalinguistically and metaculturally aware – but they must be acknowledged as privileged experiences. Every month one spends volunteering overseas, working below minimum wage for an NGO, or simply ramblin' round "like a rolling stone" (all things I've admittedly done myself – much to the benefit of my ever-growing personal sense of "savoir être"!), he or she is spending another month not earning a wage like his/her less privileged, likely monolingual, counterparts.

So while, indeed, achieving a tesseract-ive state of lingual/cultural savoir-être is an ideal, rather than other the monolinguals amongst us, it is important to not only acknowledge our cultural privilege, but also to advocate for a means to share the wealth.

Edward Clapp, United States

differences, not only the commonalities among languages and cultures but, finally, the commonalities among human beings. With this, at least a representation of a potential infra-linguistic grammar becomes possible: This beautiful construct has been labelled "universal grammar," a concept that originated in the work of 13th century speculative grammarians (followers of Roger Bacon) and has evolved ever since, particularly in the 20th century with the works of Edward Sapir, Noam Chomsky, and Richard Montague. This concept has only recently been related to "second language acquisition" (White, 2003). Albeit still controversial, the idea of inferring such abstract generalisations based on linguistic universals remains in my view a promising research avenue for the education field, because this "abstraction" could well be much more concrete than originally expected: If the concept of "universal grammar" leads to an awareness and a better understanding of supra- and infra-linguistic grammars, the latter, a neuronal priming for language, could be closely related to a form of "neuronal language" (the chemical-electrical way used by neuronal networks to communicate, encode information, transform it into knowledge, acquire skills, develop know-how, and finally reach metacognition), something the field of educational neuroscience should not disregard. Possibly even more controversially, the same could hold true for a potential "universal habitus," a form of neuronal priming for culture in human brains. This, in the geometrical metaphor summarised in the matrix in Figure 25.3,[5] would be dimension -1 (minus one), as it represents the universal potential for learning (synaptic plasticity) in each human being, thus empowered to, among other things, develop and acquire competencies in (one or several) languages and in (one or several) cultures. There is hope that an international team will discover, in a not-too-distant future, neuroscientific evidence to not only link language, culture, and ethics within the human brain, but through this new understanding to have human beings come closer to one another. Even if of course some of the labels used here can and probably will be modified, certainly further improved, and/or invented, now the table is almost complete, at least as far as languages and cultures are concerned. I hope that this "tesseract matrix" captures and summarises the hypothesis, and I would like to invite neuroscientists, psychologists, sociologists, historians, philosophers, and educators to test its validity, each with their respective tools and methodologies – but certainly by working together: Transdisciplinary (Koizumi, 1998) and cross-cultural approaches are definitely needed here, as in many other domains as well. If one considers that ethics basically comes down to "dealing with others," and thus is closely related to empathy, crossing neuroscientific research on empathy and "ethics in the brain" with (more advanced) studies on language teaching/learning could not only prove useful, but it could be crucial to education research, and certainly would be at the core of the Mind, Brain, and Education field (Fischer et al., 2007; OECD, 2007; Hinton and Fischer, 2008).

Moreover, further down the road, some more circles can and will have to be added to the "tesseract". For instance, following a powerful idea suggested by French astrophysicist Pierre Léna (co-founder of the learning-sciences-by-doing program *La main à la pâte*, *http://www.fondation-lamap.org/*) natural sciences considered as universals, could also serve the same purpose. Interestingly enough, in a book dedicated to the fascinating trajectory of Italian Jesuit Matteo Ricci in 16th century China (Landry-Deron, I. et al., 2013). Ricci, arguably the first Western scholar in history who not only understood the need for anyone wanting to truly approach a culture different from his own to get rid of ethnocentrism as much as possible, also experimented and lived this theoretical breakthrough in his own flesh and mind by immersing himself during years in the Chinese society of his time, in order to learn the language – and to learn it well enough to become culturally competent: Ricci managed, under the Chinese name 利玛窦 ("Lì Mǎdòu"), to be admitted to the Chinese imperial court among the Mandarins. Even if Ricci was

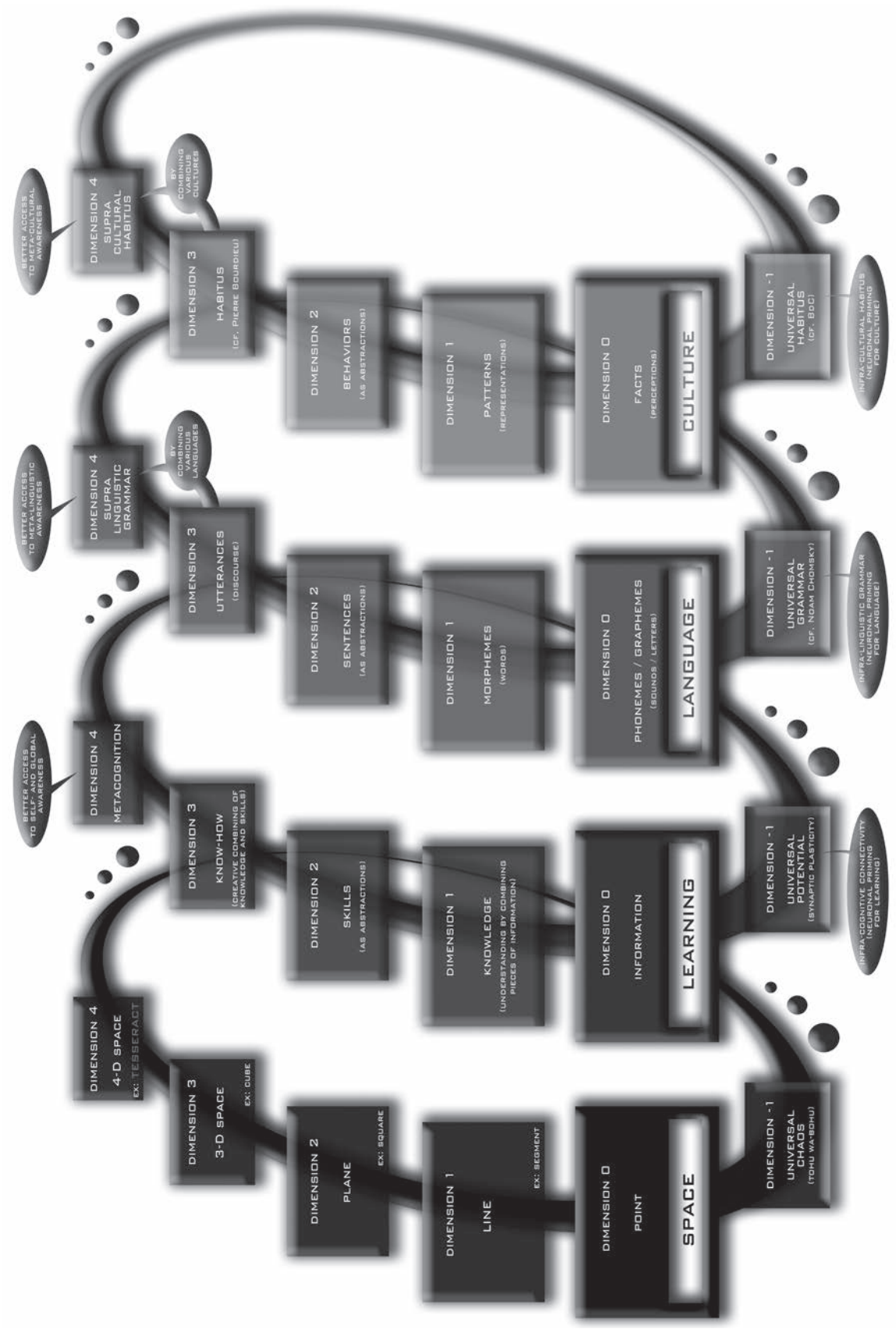


Figure 25.3. **In search of tesseracts in the brain** (by Bruno della Chiesa, 2008-2011)

certainly an exceptional mind, is what he did at the turn of the 16th to the 17th century (of course without any help from tools already prepared: grammars, dictionaries, etc.), really impossible to achieve today, at least for a majority of people?

Educating good citizens or good human beings?…

In the mid-18th century, Enlightenment philosophers, above all Rousseau (1762/1968; 1762/2003) already addressed the tragic dilemma faced by adults wanting to raise children to be good citizens and good human beings at the same time. This goes in line with the difficulty of the more recent expression "citizen of the world" that many people claim for themselves if they feel "at home" or, say, at ease, on the international playground. The problem is that citizens need to adhere to national laws and socially acceptable conduct, which would not make sense for "citizens of the world", due to largely inexistent written global juridical laws. Now, whether or not socially acceptable conducts can be found at global level remains to be seen… In this sense, we would need to dig deeper to identify common human unwritten laws of conduct that everybody may agree upon and should adhere to. Such a promethean task, if we do not shy away from it, may be supported through new approaches in NNL education, which ideally could and would be used also to reduce fear of the unknown, fear of what is perceived as alien ("xenophobia") and thus feelings of distinction/opposition between "Us and Them" (Todorov, 1989). Achieving a sense of global awareness logically presupposes first the development of cultural sensitivity, a goal more or less explicitly set for language education by most education systems.

We may have a key here to opening a gate which I hope can raise ethical standards, because it implies revisiting the way we perceive differences between human beings, and if proved exact, could mean a dramatic reduction in all sorts of narrow-minded chauvinisms: Getting rid of many forms of "us" *versus* "them", from confined parochialism to common nationalism (basically the same thing, only with various sets of reference displaying different sizes) and beyond. "Nationalism is war", as the late French president François Mitterrand said when addressing the German Bundestag on 20 January 1983: As soon as one starts to catch sight of the tesseract(s) underlying human nature, any justification of whatever form of chauvinism seems pointless. This could be a good beginning to end plagues, which always flourish from an ethnocentric breeding ground, and which are consciously watered and manipulated, if not artificially created (Ferrando, 2010), by war-mongers of all shapes and sizes, of every creed and colour. Of course, this would not be sufficient to end wars or violence in general: many other sources of conflicts will remain, such as economic interests to begin with (Zinn, 1980–2003), but at least one of the human passions that has been so destructive over the last five centuries could be cooled down, reduced, and – why not – eventually eliminated (Kant, 1795/2007; Roncalli, 1963). Is this what we want? Or do we prefer to continue to foster intolerant chauvinism in the same way that war-mongering mass media consistently do? If we do, why? Huntington (1993), who did not seem to consider that belonging to the human species was as important as belonging to a specific "civilisation," certainly disagreed with Harvard University (which declared on 7 February 2007 that one of the main purposes of the major curriculum overhaul it was then implementing was to overcome American parochialisms, referring to a national point of view) on the desirability of getting rid of ethnocentrism and chauvinism and of "educating citizens for global awareness" (Noddings, 2005).

So, one needs to ask why this is not a priority for most education systems. Maybe because "seeds of potential subversion are detected in multilingualism, [which is] hence not really encouraged" by politicians, who may see openness towards other cultures and languages as

countering a sense of nationalism or identification with national culture (della Chiesa, 2010b, p. 140)? The problem here is that globalisation is a fact, like it or not, and therefore the nations (and politicians) need to take this into account in pretty much all areas. Becoming aware that integrating (some) global features into one's own culture by objectively reflecting on its positive and not so positive aspects, loosening oneself, at least a little, from the local/national doxa (here the "box" in the expression "thinking outside the box"[6]), is a strong asset. It is time to become aware that we as humans have much more in common than what distinguishes us (Chomsky). But there is a long way to go, as history sadly reminds us…

Box 25.6. **On "The Clash of Civilizations" by Samuel Huntington (1993)**

Huntington's definitions of Civilisations are vague and over-broad at best and dead wrong at worst. As for state-to-state conflict/confrontation, I don't get too worked up about that, mostly because I tend to think that many states (with well-defined borders, strong unitary governments, and carefully delineated sovereignty) are on the way out. If we end up in a situation with real, desperate resource shortages, I think much of this international cooperation we see today will evaporate – but I tend to stay positive on that particular point. That said, I don't think we have to look very hard to find places where strong cultures and ethnicities (as a stand in for "Civilisations") are engaged in a number of wars, cold and hot. Things like language and colour and religion and tribe have built within them enormous capacity for fear and hate, within and without whatever group one might be looking at. In the West many of our institutions are strong enough to deal with this sort of thing before it gets violent, but that certainly isn't the case in the Balkans, Xinjiang, Afghanistan, Kenya, or any of the other places we associate with outbursts of violent conflict. Even in the West many countries struggle with how to deal with new citizens and immigrants whose culture we find different, strange, or offensive. Sometimes I worry that our increasingly irrelevant nation-states may coming to a peaceful equilibrium just as our increasingly relevant cultural associations enter a period of bloody conflict.

Peter Broad, United States

Conflict between States is not the real problem. There are many more battles that have been generated due to religious differences rather than national interests, primarily economic power. This is one of the main reasons which make me wonder why Huntington does not point out a radical issue that should be taken into account: religion is more a massive confrontational socio-historical artefact than an institution promoting peace and prosperity. Moreover, if the whole structure is built on faith, it proves to be artificial. We are only left to believe. This procedure works in the human psyche that creates such a story to relieve itself from the inherent fear of death in a more existential perspective, but also to relieve oneself from the everyday struggle of negative events that are part of society, culture and nature. And then, paradoxically, assuming that we are all human beings should also include the idea of thinking that shared human characteristics and its interaction with society are perfect candidates to fall easy on the hands of religion as a guide for "correct" existence. But, sadly, we deny the human nature that takes us far from real peace and coexistence because we don't use reason for our advantage. We keep walking in the way of ancient words and arbitrary institutions.

Alejandro Belmont, Peru

Huntington (1993) hypothesises that the primary source of conflict in the post-Cold War era will be between "civilisations" which are characterised most importantly by religion (p.22). His article reveals critical flaws and limitations that result from his ethnocentrism, beginning with his choice of the word "civilisation." This term connotes a belief that social evolution is progressive and that large, complex, and integrated societies are more evolved than those that are not (*e.g.* Spencer, 1886; as cited in McGee and Warms, 2000). During the era of discovery, western nations distinguished their own culture and themselves from the peoples they colonised: the former were considered to have achieved a state of "civilisation" while the later were viewed as existing in a state of "savagery" or "barbarism" (McGee and Warms, 2000). Why did Huntington choose the term "civilisation" rather than "culture"? How different his worldview is from the ethnocentrism of 19th century anthropologists?

Box 25.5. **On "The Clash of Civilizations" by Samuel Huntington (1993)**
(continued)

More importantly, his ethnocentrism fosters ignorance and arrogance towards other societies in part because his division of the world is not grounded in an accurate understanding of the cultures he discusses. One critical flaw is found in his categorisation of East Asian countries. He identifies Japan as a unique civilisation, and distinguishes it from other East Asian countries such as the People's Republic of China, North Korea, South Korea and Mongolia. He classifies these five Asian countries (excluding Japan) as belonging to "Confucian" culture. Yet the article gives no clear explanation of why this classification is justifiable. Among the five countries, how many can be characterised simply as "Confucian culture?" South Korean culture is absolutely not only "Confucian." Confucian values still exist in Korean society, particularly in its educational system and patriarchal social structure, but there are many other constituents of Korean culture and society including Buddhism, Christianity, Taoism, modernism, and industrialism. I doubt whether religion can function as a single distinguishing factor between cultures and societies, since cultures are complex composites of different ways of living and thinking, beliefs, and attitudes. Huntington seems to be unaware of the cultural constituents of the countries he discusses.

Furthermore, the article demonstrates that his ideas are rooted in arrogance towards other "civilised" societies: it asserts that modern democracy outside of the West is the product of Western "colonialism or imposition" (p. 41). Is this assertion true? At least, he overlooks the histories of how people in other countries have fought to establish democratic governments, and how they have endured hardship and adversity while struggling to realise democratic principles. Furthermore, he does not seem to understand that democracy cannot be inserted into non-western countries because it must be achieved through popular will. The modern history of South Korea demonstrates his arrogance. After liberation from Japan, the Korean people were subject to several tyrannical governments, including two military dictatorships, and they fought against these regimes to institutionalise democratic values. In order to do this, many people sacrificed their lives or endured imprisonment and torture. The Gwangju Democratization Movement, a popular uprising in the city of Gwangju (Korea) from 18 to 27 May 1980, is a good example. During this period citizens rose up against Chun Doo-hwan's military dictatorship, but they were ultimately subdued by the Korean army and at least 144 civilians were massacred (Cho, 1998). History shows that South Korea succeeded in establishing democracy not because of the West, but because of the persistence and sacrifices of the Korean people.

In conclusion, Huntington (1993) displays ignorance, arrogance, and ethnocentrism towards other countries and cultures, and it seems that the flaws in his hypothesis are rooted in his ethnocentrism. In the current era, which requires global awareness beyond cultural awareness, we need to be aware of how dangerous his views are to understanding ourselves and the world around us.

Keumjoo Lee, Korea

Learning from history, again: Las Casas in the "New World" and in Valladolid 1550

Some chapters of this book (7, 11, 12, 15, 16, 17, 19, 20, 21, this volume) directly or indirectly address relationships between peoples marked by linguistic and cultural domination of one group over another. As a dramatic example of such dominations, the phenomenon of colonisation represents a fundamental historical factor to take into consideration when investigating the perceptions and representations people belonging to a certain culture have of another culture, and hence when designing language policies: colonisation leaves profound marks (too often ignored) in the psyche of human societies, both on the side of the coloniser and on the side of the colonised. As always, there is

indeed much to be learned from history (see chapter 1, this volume). In this particular case, once again aspects of the Conquest of America by European powers, starting with the Spanish *Conquista* in the 16th century, is very useful to examine (there are unfortunately a lot of other, similar cases throughout history, but this one epitomises typical situations particularly well… and, hopefully, is now far enough in time to be considered somewhat harmless – at least at first sight…).

Following a series of revelations made especially by the Dominican Bartolomé de Las Casas (1484-1566) in the first half of the sixteenth century (he vocally uncovered the crimes committed by the *encomenderos*[7] against the indigenous people in the "New World"), a fierce controversy started to grow in Spain. What was a stake beyond the immediate questions raised by the way the "Indians" were treated (and beyond many complex theological-philosophical issues) was nothing less than deciding what "being human" actually means, how human beings should be defined – and, hence, how they ought to be treated; what sort of treatments should be considered as crimes? Another Dominican, Antonio de Montesinos (1475-1540), had started to speak against the conquerors' horrific abuses as early as 1511. On this, he was relatively quickly followed by a few others, including Las Casas (today, interestingly enough, still a controversial figure in Spain, even if elsewhere he is widely considered the father of the modern concept of human rights; he is also an early precursor of liberation theology). Needless to say that such "whistle-blowers", as they would be called today, were met with harsh resistance, not only by the colonialists (who were the first immediate beneficiaries, albeit by far not the only ones, of the barbaric practice of slavery), but also by different forces in Spain, including individuals (self?) defined as "humanists"… Of course, in spite of the revelations, the horrifying practices persisted, and, hoping to put an end to the controversies, in 1550 (a few years before his voluntary abdication), Emperor Charles V called an extraordinary *disputatio*[8] in Valladolid.

Box 25.7. **What led to the Valladolid Debate 1550 and what happened there**

It was only shortly after the *Conquista* that a few people (mainly monks present in today's "Latin America") started to deplore the condition of the "Indians". In 1515, their most vehement advocate, the cleric Las Casas, who had been an *encomendero* himself for several years up to 1514, started to actively defend the Indians against the catastrophic consequences of Spanish colonialism in the "New World".

Through personal audiences with the Spanish Crown, discussions within the Church, and numerous writings, along with other clergymen, for over 50 years he did his utmost to convince political and spiritual leaders to efficiently protect the Indians. He even accepted the hardship of travelling back and forth between Europe and America until old age to do so.

After several interventions by Las Casas, in 1537 Pope Paul III published the bull *Sublimus Deus* that forbade the enslavement of the indigenous peoples (and all other peoples already and yet to be "discovered"), entitled their right to liberty and property, and called for their evangelisation. However, like all other former decrees, this bull was hardly respected in the "New World": even if it led to the publication of the *Leyes Nuevas* by the Spanish Crown in 1542, ("new laws" protecting the Indians by power of the Crown), these had no effect and were openly disregarded by the colonialists, leading to protests and to the revision of the laws shortly after their "implementation".

In 1545, Juan Ginés de Sepúlveda (1489/90-1573, imperial chronicler, theologian and member of the Council of the Indies), Las Casas' most vigorous adversary, published his "Democrates Alter, sive de justis belli causis apud Indos", justifying the just, legitimate and justifiable causes

Box 25.5. **What led to the Valladolid Debate 1550 and what happened there**
(continued)

of the "war" against America's indigenous people. Due to the intervention of Las Casas at the University of Salamanca (supposed to investigate the text for the Emperor), Sepúlveda however never obtained the imprimatur from Emperor Charles V (1500-1558). Along with the prior events, publications and laws, it was this rejection of Sepúlveda's text by these academics and a refutation by Las Casas that led the Emperor to call a theological commission that was to once and for all clarify the question of whether the Indians were to be considered equal as humans or as natural slaves without souls: the Valladolid Debate ("Junta de Valladolid").

Sepúlveda and Las Casas presented their respective arguments, which included ethical, political, theological, economic and juridical aspects. The dissension of the jury made a unanimous decision impossible, with the positive result that Sepúlveda was still not allowed to publish his book; but on the other hand, enslavement and inhuman treatment of the Indians continued.

Vanessa Christoph

The specificity of this "Junta de Valladolid" lies in the fact that, at least to my knowledge, there has never been a similar debate in history: no other imperial power has ever officially discussed and questioned not only the conducts, means, goals, and consequences of its imperialism, but also its very justifications.

Some of the patterns of argumentation used in Valladolid are certainly still valid: this more-than-five-centuries-old event has a universal and thus prevailing character up to today. But the discussion is no longer only about the situation of indigenous people in contemporary Latin America, who too often are still discriminated against economically and politically: countless other peoples, millions and millions of human beings, also had, and in some cases still have to suffer from imperialistic violations in other regions of the world up until the early 21st century. Although the conditions have changed since the 1500s, the problems remain basically the same, and language very often plays a key role in the domination/discrimination patterns (see Nyeu, box 20.7, pp. 371-372, this volume).

What's (neuro-)science got to do with it?

Even though science cannot and should never replace ethics in decision-making processes, it can help to decide how to get from where we are to where we would like to go (see della Chiesa, 2010c). Thanks to discoveries in neuroscience over the last two decades, we now know that the brain is plastic, *i.e.* that it changes over the lifetime due to learning and (social) experience. And as Dewey put it, learning a foreign language fosters the "expansion of our own being" (1934, p. 339) that enables cross-cultural empathy. This again underlines the importance of effective NNL education for developing global awareness, since, to say it with Wittgenstein: "The limits of my language are the limits of my world"[9] (1921/2001). Being multilingual therefore seems to enable the development of empathy towards different languages and cultures, and, as stressed above, to triangulate meta-level linguistic and cultural consciousness[10] (see Küng's "Global Ethics", 1993).

Even though empathy and ethics are closely related (Aoki, Funane and Koizumi, 2010), they are obviously not identical: we know only too well that one can be empathic and display, in spite of that, low ethical standards. The opposite case seems, at least

theoretically, maybe also actually possible, although it seems less likely: intuition whispers that high ethical standards are extremely difficult to achieve for people lacking a strong capacity for empathy, which is corroborated by daily observation: "non-empathic-but-highly-ethical" people are difficult to find, to say the least. Along the same lines, we also know that there are, multilingual people out there, who are ethnocentric and chauvinistic (even if it is rare), and that there are also monolingual, monocultural people who are not. Multilingualism or multiculturalism can therefore not be considered sufficient to developing respect for others and thus, probably, shamble towards "moral excellence".

But it might be a good step forward, and NNL education can certainly contribute to the development of empathy, as it usually raises cross-cultural awareness and understanding, and thus at least a sense of tolerance (and beyond, respect, if not more) toward others. The essential work on mirror neurons, which began more than 20 years ago (Di Pellegrino et al., 1992; Gazzaniga, 2005), while paving the way to a better understanding of the biological underpinnings of empathy and/or theory of the mind, has opened avenues that are at once extremely exciting and also frightening. Empathy and ethics are closely related: They are both concerned with how we feel about and treat others. Me and You; Us and Them (Todorov, 1989). Here we go again, back to Kant's categorical imperative (Kant, 1788/1996). And with that, we can expect a minefield of ideological issues and biases ahead of us (see Lang, 2010), on the road to…what? Where? When? As a great ethical mind and heart once put it: "As usually in philosophy, the first difficulty is to realize that the problem is difficult" (Russell, 1950, p. 11). But recognizing the problem, at least, is of crucial importance: as Virgil warned us, *facilis descensus Averni* (Aeneis, 6.126). "Easy is the descent to Hell."

Smile (to avoid crying)…

At a small harbour town in Brittany, in the late 17th century, a Native American (a Huron, to be precise), who has learned English and French, arrives on board a ship after having first crossed the Atlantic Ocean to England and then the Channel to France. Intrigued by the "Indian" (political correctness has not been invented yet), the whole town gathers on the pier to see a genuine all-American man for the first time. The stranger is invited by the town notables for dinner. When asked, among other things, which of the three languages he masters he prefers, the man astonishes the company by stating without hesitation that it is the Huron language. "Is this possible?" exclaimed Mademoiselle de Kerkabon [one young female guest]; "I had always believed French was the most beautiful language on Earth after Lower Breton."[11] The Huron then loses interest in the discussion. The famous satirist who tells the story finally writes, with his inimitable irony: "There was some debate about the multiplicity of languages, before it was agreed that, without the adventure of the Tower of Babel, the whole world would have spoken French"[12] (Voltaire, 1767/1978). Almost 250 years later, we still find this acerbic remark quite amusing, because perceptions and representations on the topic have not changed much since, and not only in France: ethnocentric universalism still distils its venom all over the world and is most likely and unfortunately here to stay, as the first component of ethnocentrism, anywhere, is generally language (or maybe, in some cases, food). As Dave Barry (1991) puts it, "Americans who travel abroad for the first time are often shocked to discover that, despite all the progress that has been made in the last 30 years, many foreign people still speak in foreign languages". Beyond the joke and the wit, there is something crucial in this (why is it that humorists or satirists often seem to capture the problem more easily than others? Maybe it requires some irreverence…) In any case, what is at stake here is not at all a joke – quite the opposite. Again, it is firstly a philosophical issue, then a political-ethical one.

Notes

1. *Own translation*. In the German original: "Wer fremde Sprachen nicht kennt, weiß nichts von seiner eigenen", J. W. von Goethe (1833/1999) in *Maximen und Reflexionen II*, Nr. 23, 91.
2. *Own translation*. In the German original: "Die Sprache ist die Mutter, nicht die Magd des Gedankens", (Kraus, 1990, Fackel 288, S. 14, 1910).
3. Utterances pertain to discourse, the realm of pragmatics, for which lower dimensions are not relevant.
4. The word "tesseract" for this specific form of hypercube was coined at the end of the 19th century by Charles Howard Hinton (Hinton and Boole Scott, 1888/2010).
5. Design of figure 25.3 courtesy of Xavier della Chiesa.
6. And, in order to "think outside the box", the first condition to meet is arguably to be able to realize that there is a "box"…! This amounts to becoming conscious of one's own doxa, in order to get rid of it (if so desired!).
7. Owners of large estates received from the Spanish crown that "included" Indians as workers – in fact, slaves.
8. Back then, a debate, generally of theological nature
9. *Own translation*. In the German original: "Die Grenzen meiner Sprache sind die Grenzen meiner Welt" ("The limits of my language are the limits of my world).
10. In order to identify how different approaches to NNL education may foster empathy towards others, and shape the awareness that "they" are not so much different from "us", partnerships between research and practice, such as the "Research Schools International" Network at Harvard Graduate School of Education can be extremely useful and should be implemented world-wide (Hinton and Fischer, 2008)
11. *Own translation*. In the original French: "Est-il possible ? s'écria Mademoiselle de Kerkabon ; j'avais toujours cru que le français était la plus belle de toutes les langues après le bas-breton."
12. *Own translation*. In the original French: "On disputa un peu sur la multiplicité des langues, et on convint que, sans l'aventure de la tour de Babel, toute la terre aurait parlé français."

Acknowledgements and farewell

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Playing Hermann Hesse's "Glass Bead Game" outside of Kastalien is a difficult task: I had been warned a long time ago (thanks, Walo!) and was ready to face the multiple challenges, but the price to be paid for conducting this project, finalising the book and seeing it published turned out to be higher than I originally thought. On 10 January 2012, I had the opportunity to update Noam Chomsky on this endeavour and share with him the last steps of the ordeal, referring to the too often lost battles against cowardice, intolerance, simony and censorship. As he warmly shook my hands when I was leaving his office, he said, "You have chosen the right enemies." Was this "word-play" and/or a "word game" in Wittgenstein's sense? Anyway, it is more than comforting, especially since it comes from someone I consider a deeply humane political thinker, the greatest linguist in history, and a role model in terms of vision, courage and generosity. In short, a wonderful human being who has been a "Magister (Ludi)" of mine for 30 years, and whom I am now deeply honoured to call a friend.

"I will do what I can do", to quote a beautiful phrase from Peter Gabriel's moving song "Wallflower". We have done what we could do – so far. This has been a long "learning journey", as my dear friend Jarl Bengtsson would have put it (I miss you, Jarl!), but a much longer one still awaits us… In these pages, we have crossed the world, meeting on all continents people from Afghanistan, Argentina, Australia, Austria, Azerbaijan, the Bahamas, Bangladesh (Hill Tracts), Belgium, Belize, Bolivia, Brazil, Bulgaria, Canada, Central Africa, Chile, China, Chinese Taipei, Colombia, Costa Rica, Croatia, Cuba, Denmark, Ecuador, Egypt, Estonia, Finland, France, Germany, Ghana, Greece, Haiti, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Korea (North and South), Kyrgyzstan, Latvia, Malawi, Malaysia, Mexico, Micronesia, Mongolia, Morocco, Myanmar, Namibia, the Netherlands, New Zealand, Nicaragua, Norway, Peru, the Philippines, Poland, Portugal, Romania, Russia, Singapore, Somalia, South Africa, Spain, Sweden, Switzerland, Tanzania, Thailand, Turkey, Turkmenistan, Ukraine, the United Kingdom, the United States of America, Uruguay, Uzbekistan, Venezuela, Vietnam and the West Bank and Gaza Strip. Now it's time to go and visit all these places, and more, "for real": the journey is just beginning.

Willkommen zum *Glasperlenspiel*. Enjoy.

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Epilogue

Prospects for language policies in an age of globalisation

By Dirk van Damme*

In a globalising world, language policies in education are confronting many challenges and often become subject to fierce political debate. The historical objectives of language education linked to nation-building and state-formation are reshaped by the linguistic consequences of migration, international trade and the interaction of other ("foreign") languages with the national language(s). Schools are rapidly becoming complex multilingual environments. Language policies in education have to find a new balance between the need for high literacy skills in the national language(s) and increased proficiency in several non-native languages. Policies regarding languages in education are not only important for language skills as such, but also have profound consequences for raising intercultural awareness and enhancing a positive recognition of "otherness".

* OECD Centre for Educational Research and Development (CERI)

The opinions expressed and arguments employed in this chapter are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

This chapter and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Nothing is more intrinsically connected to education than language. Language permeates the educational field in an infinite number of ways. And often language issues in education also arouse strong emotional reactions. Few issues in education affect people more deeply than language issues. Positions in the various debates on languages in education also have strong political significance. Even in the scientific community research findings and scholarly arguments easily are transformed into causes that seem to need to be vigorously endorsed.

The strong emotional and political loading of language issues in education can be explained by the rapidly changing social context in which old paradigms seem to clash with the exigencies of the new order. As this book demonstrates, issues on languages and language policies in education are in a profound transition as a consequence of globalisation, migration and the transformation of contemporary societies.

Historical legacies

Since the 18th-century nation-building and state-formation had shaped the social context for the development of popular education and mass schooling as vehicles of language policies. Linguistic homogenisation was the corollary of territorial integrity and national identity. No wonder that national emancipation movements in the 19th and 20th centuries first turned to education as their preferred field of political action. Identification with the national language as a way to foster the transformation of a cultural community into a "nation" became by far the most dominant educational imperative. Basic literacy for the masses was as much an economic necessity as a political prerequisite for nations and states that needed to establish their identity on a common language. Mastery of the national language thus became the first objective of mass schooling until well into the 20th century. Emerging research evidence that good proficiency in the language of instruction is a critically important factor for educational success also supported this paradigmatic educational policy approach. This book includes several chapters which illustrate that today many countries still define this approach as the number one educational objective.

Till deep into the 20th century this policy approach to language in education remained dominant in most OECD member countries and beyond. Of course, there were many complicating factors. Some countries such as Belgium combined more than one national language in a more or less precarious balance and lacked linguistic homogeneity as a basis for nation-building. Others – Estonia provides a good example in this book – were occupied by another country that tried to impose its own national language and had a hard time to free them from this linguistic dominance and to become a bilingual country. Language has always been part of political dominance and cultural hegemony, so in many countries – not only those with a colonial or post-colonial heritage – the dominant national language was not the native language. Realities are not always as extreme as in South Africa which liberated from linguistic Apartheid by recognising 11 national languages, but where in reality the language children are instructed in at school is their third or even fourth language. In fact, in the 20th century most people on the planet have been schooled in a "non-native language". Even in countries at the core of the linguistic world system regional and local dialects remained very powerful and rather sturdy national campaigns were seen as necessary to impose the national language of instruction upon recalcitrant regional communities.

The obviously valid fact that a well-developed, well-codified language was superior to ill-recorded regional dialects for use in education, scientific knowledge production and cultural expression, also contributed to this process of linguistic civilisation in education and easily succeeded in overriding alternative concerns for linguistic pluralism and cultural concerns for the preservation of linguistic diversity. But there also were cases in which this process of linguistic civilisation was purely driven by objectives that had more to do with political dominance than with anything else. As several chapters in this book show, language use in education still is very much matter of fierce political debate and struggle, especially in many countries with complicated linguistic histories and realities.

Well into the second half of the 20th century learning non-native languages – different than the mother tongue or the national language of instruction – was a far less important educational objective in most countries. It was only deemed important for the economical and later also the political elites to master other languages, but not for the masses who started to make their way through the expanding education systems. Small countries increasingly engaging in multilingual regional integration processes, such as in Europe, may have been an exception. Such countries succeeded in turning non-native language proficiency into an asset in the context of economic growth in the 1960s and increased international political interaction in the post-World War II period. But at the same time larger countries did not yet realise the full potential of non-native language instruction and incurred a disadvantage with which they still cope.

New realities

Things started to change in the final decades of the 20th century. New economic realities, for which later the term "globalisation" was coined, started to fundamentally reshape the conditions and requirements for language learning. Economic integration of the world economy by rapidly growing trade and foreign investment hugely increased the flow of communications in other languages and the mobility of labour. For example in the European Union regional economic integration provided opportunities for skilled and less skilled labour to seek work opportunities in other countries. From the 1970s onwards, economic migration moved millions of people, mainly in immigration waves into the core countries of the global economy. Economic migration was followed by waves of migration of refugees and asylum seekers pushed by war and civil unrest to seek a safe shelter. Also, cheaper air travel resulting from air traffic liberalisation and other technologically advanced ways of transporting people heavily contributed to international mobility, not only for professional reasons but also, for example, for reasons related to the growth of international mass tourism. And finally physical mobility was drastically augmented – not substituted – by the opportunities for communication and virtual mobility offered by the breakthrough of the Internet in the 1990s. On top of all this the political integration of the international community, embodied in the rise of international diplomacy and international organisations, also strongly altered the mobility and communication patterns.

The linguistic effects of these changes were contradictory, with both homogenising and diversifying consequences. And they also could be very dissimilar in different countries, depending on the specific impact of these changes in various environments. Many chapters in this book illustrate the complexities of the linguistic consequences of the multiple ways globalisation reshaped societies. The most immediate consequence of course was the huge increase in the presence of non-native languages in human communication and every-day life at large, schooling included of course. People encountered many more languages than what the previous generations even had heard of. And many experienced the need

to acquire basic literacy skills in these languages for professional reasons or personal purposes. Language learning for example was the main driver behind the expansion of adult education provision in the past 20 years.

Not only non-native languages in themselves changed the linguistic environments of people, but also the often unpredictable interaction of these languages with the national language. The confrontation and interaction with other languages transformed national languages, especially in their daily uses by younger generations. The languages of the immigrants added to the complexity of all this, because in many countries these languages were of a radically different nature than the main languages in the countries of destination. Turkish and Arabic are clear examples of this in Europe. The chapter on *Verlan* in this book is a beautiful illustration of the surprising effects of the interaction of French as the dominant national language with the Northern African immigrants' Arabic.

Many schools in OECD countries, especially in cities, have seen themselves being transformed from more or less linguistically homogeneous places into very complex multilingual environments. In many cities languages spoken at playgrounds today count up to hundreds. Linguistic realities in contemporary schools have become so complex that teaching and learning processes are heavily affected. Teachers find their language skills – and more generally their intercultural communication skills – falling short in view of the challenges they face in everyday school life. Furthermore, OECD research shows that teachers neither feel well prepared in initial teacher education nor well supported in teacher professional development programmes to effectively deal with these challenges.

But the consequences of these changes also went in a more homogenising direction, radically undermining the dominance of national languages. The use of English as the new international vernacular increased dramatically, outplaying by far the most idealistic dreams of earlier attempts to impose an international *lingua franca* such as Esperanto. English spread rapidly as the world's dominant language in technology, research, diplomacy, trade, etc. and subsequently from these sectors into many other fields including higher education and even cultural expression. Several chapters in this book demonstrate that in fact it was not a completely homogenising process, as it gave way to many different forms of English, with "Globish" as its somehow "lowest-common-denominator" mutant.

Changing language policies in education

The educational policies that tried to cope with these various changes are necessarily complex and inevitably subject to fierce debate. Many governments struggled and are still struggling to find a balance in their educational language policies that preserves the historical emphasis on the value of (learning) the national language while trying to come to grips with the multilingual realities of today.

This book has not the intention, nor provides the necessary evidence, to formulate a comprehensive and universally valid language policy in education. It is a research product and not immediately aimed at prescribing policy recommendations. But there are some common themes and policy perspectives which seem to permeate the debates and approaches in many countries. At the end of this book, it may be helpful to very briefly enumerate them. But it should be clear that they are neither undisputed nor irrefutably supported by the available research evidence.

Developing high literacy in the (national) language of instruction

There is little doubt that this policy objective is still very dominant in most if not all countries. In most countries the language of instruction also is the national language, although more and more countries have prudently eased their linguistic centralism by recognising alternative regional languages as language of instruction. While recognising the political power of regions and in the process of political devolution of the national state to regional authorities some countries have established rather complicated mixed arrangements with part-time instruction in the dominant national language and part-time instruction in the recognised regional language. Spain is a clear case where alongside Castilian Spanish also the Basque (Euskera) language, Catalan, Valencian (Valenciano) and Galician (Gallego) languages are taught in schools.

Cognitive psychology and brain research have indicated that early acquisition and a high-level proficiency in the language of instruction is extremely important for cognitive development in general and for successful learning at school in many more subject fields than languages. Early language instruction is an important objective of policies trying to increase and improve the provision of early childhood education and pre-school education programmes. Indeed, insufficient proficiency in the language of instruction, as is the case of students who have been raised in another mother tongue or in regional dialects, risks resulting in severe learning deficits. In many contexts equity issues in education are closely related with the relative position of social groups and communities to the language of instruction. Those students have to learn the language of instruction at the same time as learning the various other subjects in the curriculum, which for most of them is an additional barrier to educational success.

There is some debate among experts about the real significance of such linguistic barriers to disadvantaged students. Earlier waves of equity-targeted compensation programmes – very much influenced by the work of Basil Bernstein and his followers – have put high emphasis on the need to offer disadvantaged community students intensive language learning opportunities in the language of instruction at an early stage of their school career. Other socio-linguists have supported a more optimistic policy approach, stressing the flexibility of young learners to master the language of instruction alongside their mother tongue. Still others build a case for the development of high literacy skills in the mother tongue prior to learning the language of instruction. Their argument is that a child needs to develop high literacy skills in one language – preferably the mother tongue – before embarking on the linguistic conquest of another language. This debate is still continuing and the various positions are often vigorously contested as they relate differently to political conceptions of social equity and ethnical autonomy. From an educational point of view it seems more important to acquire a sufficiently rich and sophisticated level of proficiency in at least one language than a superficial and narrow base in several languages.

Towards immigrants and indigenous populations most governments still adhere to a rather strict assimilation policy in which the acquisition of the language of instruction is put central. In the wake of recent political debates some governments have reinforced the integration requirements for immigrants by forcing them to participate in language courses and civic integration programmes. Courses in the national language also have become a common feature of activation programmes and vocational training programmes for unemployed people.

Reinforcing non-native language learning

Most governments now seem to understand the need to reinforce the learning of languages at school and in adult education programmes. But some of them have done so only recently or are still hesitant. Many fear that early non-native language instruction will harm the learning of the national language, especially when the national language is seen as having a vulnerable position against more dominant neighbouring languages or against the international *lingua franca* that in most cases is English. But in general resistances to non-native language learning are fading away rapidly. The economic benefits and incentives to language learning seem to be obvious, both at individual and at social levels. And the social and cultural advantages seem to be understood by more and more people as well. International mobility and communication, both physically and virtually and for both professional and personal purposes, have radically altered the landscape of incentives and motivations around language learning.

Of course, the languages learned are not evenly distributed over the existing six thousand or so languages. Non-native language learning tends to heavily reinforce the "condensation" of language use around the most hegemonic world languages, with English still leading the list. Governments from minority language countries or from communities that still see their nation-building unachieved and under pressure might see this as problematic. Other governments – even from major language countries such as France – see the condensation of non-native language use to English or other dominant world languages as at threat to cultural pluralism or the preservation of their own cultural and linguistic heritage.

The policies on the use of English as a language of instruction and research in higher education are a good example of the tensions and political debates emerging from this. Most European countries for example see the use of their national language in science and research as a major policy objective in language policy in education and therefore tend to restrict the use of English in higher education. The argument is that declining use of minority languages in the field of science, research, higher learning and the "higher culture" would halt the development of that language as a living language and would in the end impoverish the language in itself. On the other hand the vast majority of scholars and researchers, who are encouraged to publish in peer-review international journals – the vast majority of which is in English –, and most of the university leadership who aspire to attract more international students, vehemently defend the use of English as language of instruction and research in higher education. Also in Asian countries the use of English in higher education is a sensitive issue. And although some seem to think that Spanish could challenge the position of English as the *lingua franca* of science and research, there are also political tensions on the use of English in higher education in South America.

There is no empirical survey on the preferred languages taught in secondary education, but there is little doubt that English will also the top of that list, which Mandarin Chinese as a close competitor. Also young people themselves seem to favour English as the first non-native language option. Combined with the huge numbers of immigrants learning English in host Anglophone countries, the numbers of people learning English as a "second" language has reached historical peaks. This has coined the somehow erroneous concept of "English as second language" (ESL) learning.

From a policy perspective the dominant position of English has changed the debate on non-native language learning. Some would even claim that learning English in fact no longer should be considered as learning a "foreign language". Many governments now start to favour learning a third or event fourth non-native language. In Europe for example the

European Commission now favours an education policy that has the objective of learning two or three non-native languages, implicitly hoping that linguistic pluralism – seen as a political and cultural advantage of Europe – beyond English could be saved. Also governments in Anglophone countries now start to see the benefits of reinforced language instruction, realising that their perceived competitive advantage of being Anglophone rapidly could turn into a severe disadvantage in a fast-changing world.

Enhancing a diversified set of languages taught in education is also a policy objective that finds ample support in this book. One of its key arguments is that non-native language learning not only generates personal economic benefits, but also wider personal and social outcomes such as a more developed intercultural awareness, even leading to a more enhanced global understanding between the ever more interconnected people and nations on the planet. Learning a language is not only a technical undertaking, but also engages a person in a complex and often challenging cultural discovery in which identities are questioned and one's empathy towards the "other" is enriched.

To finish

Language is crucial to personal cognitive development and interpersonal communication. Globalisation has moved languages up to an even higher level of intercultural communication and global connectedness. Yet, the issue of languages and language learning is not often seen as a key aspect of globalisation, which is mostly seen as an economic and technology-driven reality. This book has shown that the impact of globalisation on languages is profound and sometimes challenging – and that, on the other hand, the already visible and expected future contributions of languages and multilingual communication to globalisation and the prospects of the planet are overwhelming as well.

Policy debates on language in education will only intensify, as none of these developments are without contradictions. The political debate on languages in education necessarily will be controversial and passionate, as it is about so many critically important matters in life, both with regard to personal development and to social development at national and global level. The debate between, for example, fostering the development and learning of the national language and promoting multilingual education and ambitious foreign language learning will continue to engage many experts and policy makers. Understanding the "other" will be a meta-competence which might be needed to keep the exchange mutually beneficial.

Diversity also implies that there are no simple truths. Let that be the main policy message of this book.

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