1. Argument

Globalisation and the process of change in societies whose *multiculturality*¹ is becoming more and more marked, raising numerous questions, some unprecedented² at least in their current scale. Migration flows and demographic trends at world level are altering the socio-ethnological composition of our populations. This phenomenon is contributing substantially, though not exclusively, to the development of the extremely rapid transitions affecting our economic, political and social structures, and, in addition, is causing major impacts on various aspects of our lives – not just in the so-called “developed” 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 experienced)³. Cultural diversity represents potential enhancement but is also a source of colossal challenges to be met by these societies⁴. No human organisation can nowadays 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 to work towards increasing awareness of diversity-related problems.

Prominent among these questions, of course, are the challenges facing our education systems. The media frequently echo the difficulties resulting from multiculturality in the context of education (especially, though not

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¹ “Multiculturality” is used here as a neutral word that aims to describe an existing situation; it should be distinguished from “multiculturalism”, understood as a political agenda.

² Only partly unprecedented, in that the experience of certain countries during the 20th century (when their societies had to contend with migration flows that had to be managed in terms of education and, more generally, at the social and societal levels) may no doubt prove useful. This is why any work on a specific issue here will probably find the contributions made by historians quite useful (without, of course, confusing questions that arose in the years 1920-30 or 1950-70 with what is happening today). Further, when deeply rooted cultural representations are involved, as is often the case, it is also be necessary to canvas the skills of specialists from earlier periods.

³ It is important, however, to qualify this rather simplistic classification, some countries having experienced both emigration and immigration at the same time, or having moved 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 can be of crucial importance in fuelling thought and helping to broaden viewpoints.

⁴ CF. this seminar, Breakout Session 3: *Globalisation and linguistic challenges in Japan.*
For most countries covered by the Programme for International Student Assessment (PISA), 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 native-born, 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, those who are native-born always perform better, regardless of the context. In addition, it is also interesting to look at these PISA results in comparison with statistics related to employment: in all 16 countries studied, there is often a 1:2 unemployment ratio between “natives” and “non-natives”, if not more (from 1:3.3 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.

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. These approaches impact on the expectations of the upholders of the educational community (such as teachers, students, parents) and result in appreciable differences in the education policies and practices put in place, as well as in the programmes. Encompassing as many countries and cultures as possible should be the goal of any in-depth study that aims to shed new light on old issues related to ‘Non-native Language Learning’ (NNLL).

2. What “languages” are we talking about?

Language is an essential component of a given culture: “Language is an overt marker of cultural membership, and because people place values on different cultural groups, a second language involves decisions about values” (Bialystok & Hakuta, 1994). To many people, language ability is inseparable from their cultural identity, and sometimes complex situations are mirrored in daily situations. For example, when asked to fill an administrative form, an American-born US citizen of Korean origin might not necessarily know whether to put “English” as “first language” – which could be seen as a forsaking of the cultural traditions, values and ideologies in which the individual was raised by immigrant parents. To write “Korean” on the other hand, would mean ignoring one’s identity as an individual born and raised in the United States. The instruction of a non-native language can arguably be the most delicate, complex and challenging of all academic subject areas. It deals not only with the coherent application of grammar, syntax, and vocabulary but also with the honest understanding of the values, ideologies and histories of a tangible and often familiar people-group.

3. The need for linguistic proficiency

The term “language” as used in academic terms and in PISA studies often refers to an ability to communicate in a language other than the one a child is born into. This divide is often seen as a taboo that is not to be talked openly about, and as such, is not discussed in depth. The Programme for International Student Assessment (PISA) studies, however, offer rich data in this regard. In a country like the United States, where more than 20% of the population is of foreign origin, the stakes are high. The Programme for International Student Assessment (PISA) studies, for instance, show that while the majority of US students scored above the OECD average in reading, they performed below average in mathematics and science.

9 Language curricula and instruction should, then, weave in lessons of history, literature and culture as well as contemporary social, economic and political phenomena in order for students to acquire linguistic fluency and attain cultural literacy. Agents of change in the field of school education must recognize that non-native language learning is not only essential for professional and financial promotion (see below) but also crucial for the development of a global cultural awareness in future generations.

5 While every country has to contend with the problems posed by new forms of diversity, media coverage thereof differs from one country to another, and this angle should not be forgotten even if many seem keen on carefully avoiding this issue. A new taboo?...

6 Cf. this seminar, Plenary Session 3, Koji Miyamoto: “Globalisation and Linguistic Competencies: The role of motivation in raising linguistic proficiencies”.

7 This 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 seek to encourage diversity, others promote the idea of adhering to a set of values and principles which make up a national identity.

8 The example of educational neuroscience strongly illustrates the urgent need for more cross-cultural research: so far, the vast majority of neuroscience research has been limited to English-speaking cultures. And, while this has changed over the past decade, it is still the case that most neuroimaging studies — whether conducted in China, India, or elsewhere — are mono-cultural in nature. Given that brain structure and function are dramatically influenced by experience, mono-cultural research by definition lacks the ability to isolate biology from context with the kind of certainty needed to inform educational research, practice, and policy. Educational neuroscience could play a constructive role in the study of the brain by emphasizing the importance of cross-cultural research designs (along with utilisation of multiple imaging techniques) from the beginning.

9 Language curricula and instruction should, then, weave in lessons of history, literature and culture as well as contemporary social, economic and political phenomena in order for students to acquire linguistic fluency and attain cultural literacy. Agents of change in the field of school education must recognize that non-native language learning is not only essential for professional and financial promotion (see below) but also crucial for the development of a global cultural awareness in future generations.
This being the case, it follows that languages and cultures are closely linked and, likewise, cultural diversity and linguistic diversity. While GLC has focussed exclusively on language problems, it does not overlook the fact that the latter are part and parcel of the same complex phenomenon\(^\text{10}\) but only separates them in a heuristic manner. However, for methodological as well as practical purposes, the focus here will be mainly on the learning (and teaching) of languages or, to be more precise, on NNL teaching/learning – since almost any learning involves a teaching dimension, whether formal or informal, traditional or otherwise.

The table below provides five language categories that can be used to frame research work, namely: mother tongue, school language, lingua-franca, NNL and local language. Although there may well be other language categories, these are the ones that are considered to reflect highest policy relevance among the OECD member countries, especially in the context of globalisation. Note that in certain contexts a language would be represented in more than one category. For instance, for a Korean native speaker in Korea, English would fall into the typologies of both lingua-franca and NNL. For an English native speaker in Australia, in contrast, English would fall into the categories of mother tongue and school languages. Hence, it is important to note that these categories have different implications in different contexts\(^\text{11}\).

<table>
<thead>
<tr>
<th>Language</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>1. Mother tongue:</td>
<td>The language one first learned (particularly within the family context during the pre-school years) and the language that one grew up with.</td>
</tr>
<tr>
<td>2. School language:</td>
<td>The language spoken and taught in school.</td>
</tr>
<tr>
<td>3. Lingua-franca:</td>
<td>A language commonly understood as being either English or “Globish”.</td>
</tr>
<tr>
<td>4. NNL:</td>
<td>Non-native language. Any language which, for a given individual, is neither the “mother tongue”, nor the “school” language.</td>
</tr>
<tr>
<td>5. Local language:</td>
<td>Any language shared by a minority group in a population within the confines of a given area (where the group in question has long been established).</td>
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</table>

**Mother tongue**

Generally, what is meant by “mother tongue” is the language that every person hears spoken, particularly within the family context, during his/her pre-school years. Cases where individuals have several mother tongues (children of so-called “mixed” couples, for example) might warrant specific attention. The same applies to individuals who hear a language spoken at home (between the parents, for instance), but do not actually express themselves at home in that language. As for “second languages” (which are not “mother tongues” but which cannot be considered to be entirely “foreign” in a given context – for example, when the multilingual situation is officially recognized and reflected in the education system), they need to be tackled on the basis of their respective status, either as a special case of “school languages”, or as a special case of “non-native languages”.

\(^\text{10}\) While language is but one component of any language/culture complex – admittedly an essential one, but one that is, nevertheless, subordinate to the overall notion defining 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. The debate has been going on for decades, if not longer, and is becoming all the more virulent in that it is the actual notions of identity and alterity that are at stake here. The preoccupation with acquiring other languages reflects an acknowledgement of Foucault’s discourse theory (2007), which suggests that embedded within language and discourse are cultural biases and norms. Language allows for the propagation of culture and the etymology of words reveals much of a culture. Understanding another’s culture is accomplished not simply through studying facts about that culture; learning the language allows a deeper penetration into culture and worldview, and while in itself insufficient, it allows access into living and interacting with the culture.

\(^\text{11}\) Note that these categories are used to compare different groups of individuals (e.g., communities) and not make comparisons across countries/states. There are various groups of individuals within a country/state with different mother tongue and school languages (e.g., Switzerland and Canada).
School language

For a certain groups of population (or communities), the school language is different from the mother tongue. While the fraction of this population is often relatively small, it is of high relevance given the significant learning challenge that these groups face and the policy priorities that many countries attach to this issue. Success in learning the language used at school is essential to all subsequent learning, not just that of other languages. It is important to look at the links between learning one’s mother tongue and learning the language used at school – when they are not the same. Moreover, in schools where the primary instruction occurs in a language other than a child’s native language, the student may perform less well academically than peers who are fluent users of the majority language (Kosonen, 2008; Rong, 2007; Trudell, 2007).

Lingua franca and the question of “Globish”

“Globish” is a simplified form of English nowadays used as a means of communication by many non-English speakers throughout the world. Ideally, research would take into account the special status of this language (and its many variants), which cannot be treated like other languages, at least in terms of “linguistic globalisation”. An open question is the following: is there a “trans-culture” attached to Globish? In other words, can one talk about a cultura franca? 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 that is linked to Globish is difficult. It is not at all certain that it is currently possible to adopt a position – even in regard to the existence of said cultura franca - without running into all the ideological pitfalls that litter the ground. This suggests some interesting discussions in prospect. It has for instance been argued, from a strictly economic standpoint, that “globalisation merely is a transparent euphemism for ‘Americanization,’ the global diaspora of American-style capitalism and, with it, the spread of its materialistic values” (Thomson, 2008), although the effects of globalisation are manifested through multiple veins of society, and not just economically. According to this view, globalisation is Americanization, the worldwide imposition of American culture, practices, and beliefs. In many parts of the world, this is seen as accompanying the spread of “materialistic values” in terms of an individualist social structure and mentality. Thomson (2008) largely describes the view of globalisation from an economist’s lens; equally important social, cultural and linguistic values are excluded. Could it be that the development of Globish finds resistance as it meets with a cultura franca, perceived differently depending on the individual’s (or group’s) native culture?

Local language

It is possible that focusing instruction on a national language could result in attrition of a student’s native language or the local language, as well as in the devaluing or abandonment of local cultural practices and ideals (Abdel-Jawad, 2006; Allen, Crago & Pesco, 2006; Priven, 2008; Rong, 2007). Academic achievement among minority language speakers may also suffer as students struggle to learn the languages taught in their schools. Monolingual, majority language education may also alienate students from the educational system, or create a sense of disconnectedness from the students’ own cultures (Kosonen, 2008; Trudell, 2007). Although it is possible that students instructed in the lingua franca or another majority language may meet with increased international education and employment opportunities later in life, is it acceptable to risk the loss of local languages and cultures to achieve global economic viability? While some research shows that exposure to a non-native language such as English in school supports increased meta-linguistic awareness of one’s mother tongue (Kosonen, 2008), other research indicates that the sole use of a majority or national language in the educational environment may lead to a decline in the student’s fluency with their native language, (Abdel-Jawad, 2006; Allen, Crago & Pesco, 2006; Priven, 2008) or potentially to a reduced level of educational attainment among minority language speakers (Kosonen, 2008; Rong, 2007; Trudell, 2007). Providing children with an education that includes a language, such as English, that will help

12 The specific case of sociolects (when an individual’s mother tongue is a non-dominant sociolect, linked of course to one or more specific “subcultures”) could itself be the subject of a sociolinguistic study.

13 A study in China found that minority language speakers who were educated using only Chinese were unsuccessful in mastering academic disciplines (Rong, 2007). Additionally, although Kenyan children are educated using English, it was found that only 15% of the population were fluent English speakers (Trudell, 2007). Among a native population in Quebec, Canada, researchers found that children who were educated in the majority language [French] from third grade onwards still did not attain the level of fluency that would be required of them if they attended a French-speaking post-secondary institution (Allen, Crago, & Pesco, 2006). Muslim citizens educated in Thailand were largely unable to speak Thai fluently, despite the fact that their education was delivered exclusively through the Thai language (Kosonen, 2008).
them be competitive in a global market should probably not come at the expense of the language of the student’s family and local culture.

3. **A suggested analytical framework for research (four components)**

**Component 1: before and around learning – the contextual factors**

Motivation towards language learning may already have been determined to a large extent even before formal learning takes place. Education systems have to make do with perceptions that are already instilled. This is a significant point given that motivation has such an important impact on learning in general. Motivation to learn languages, in turn, can be hypothesized as driven by representations such as values and beliefs that shape an individual’s worldview.

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 development, global competitiveness, emotional bonding (e.g., someone who wants to learn a language because he or she is married to a native speaker of that language), 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 need to come up with innovative strategies to keep this motivation high and reinforce the students’ enthusiasm for learning.

In addition, the media can play an important role in re-enforcing or counter-acting this impact of individual representations on the motivation to learn languages. At some stage, all these contextual factors will need to be included in the analysis of effective teaching and learning.

**Component 2: during the learning process – the learning innovations**

Teaching and learning (in both formal and informal settings) most probably play an important role in raising learning outcomes. Various methods of teaching different types of languages exist for both children and adults. Of particular interest is the role of (a) variation in timing for starting to learn languages – e.g., introducing non-native language learning at an earlier stage in the curriculum, (b) innovative methods of learning – e.g., a balanced approach to language learning that takes into account phonetics, semantics, syntax and pragmatics, and (c) technologies – e.g., tutorials using internet-based and interactive tools. Recent years have witnessed a significant number of these innovations in language learning and teaching.

**Component 3: after the learning process – the outcomes of learning**

Labor market demand for linguistic competencies has changed significantly in recent years (see below), and this has an important implication for individuals incentives to learn different languages. This calls for both learners and language teaching institutions to better understand and respond to the types and levels of languages that are required for labor market success. Linguistic competencies may also have an impact on the social integration of the learner and their family, notably in respect of migrant populations.

**Component 4: the language learning circle**

The three previous elements cover the process that runs from the environment to economic and social outcomes. In addition, it would be of interest to know if improved learning outcomes and/or economic and social outcomes would help to further raise individual representations, hence starting the virtuous circle.

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14 A challenge would be to identify a way to measure this role of media. It has been suggested that a good starting point would be a set of case studies in specific media (such as a given TV channel - television would certainly be the most directly relevant here) in specific contexts. Cf. this seminar, Breakout Session 6: Informal language learning: The role of media and ICT.

15 Cf. this seminar, Breakout Session 4: Linguistic challenges for migrants and minorities.
There is no one “right” way of teaching a second language and no “absolute barriers to second-language acquisition,” (Bialystok & Hakuta, 1994). In addition, the complex but crucial relations between the learning processes involved in the cases referred to above suggests the use of a varied approach in view of the multiplicity of situations. Lastly, it should be noted that the distinctions between the different mixes described above are only rarely as hermetically separate as the said classification might suggest. Often, in fact, people find themselves somewhere in between these idealized representations, moving along a continuum between languages and cultures as they themselves evolve.

4. **Formal and traditional educational contexts: a few 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 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, it has to be acknowledged that 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, providing information derived from research (in the natural and social sciences) in a forward-looking perspective, 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 (thanks to scientifically established facts).

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16 By way of example, and this is a point with a host of consequences when it comes to drawing up education policies and programs: while everyone realizes, intuitively, that learning one’s mother tongue (and/or school language) has a major impact on learning a non-native language, it is on the whole only dimly understood that learning a non-native language also has a by no means negligible (and positive) effect when it comes to learning one’s mother tongue. What is already an old debate has recently come back to the fore in certain countries. A lot of people are arguing in favour of introducing non-native language teaching in schools at a very early age (primary school or even sooner), basing their arguments in some cases on, inter alia, results of neuroscientific research on cerebral “sensitive periods”, in spite of the fact that there is no one “right” way of teaching a second language and no “absolute barriers to second-language acquisition” (Bialystok & Hakuta, 1994). Others, on the other hand, are worried that this might be at the expense of acquiring a sound knowledge of one’s mother tongue. A working hypothesis might be expressed as follows: experience would suggest that exposure to a non-native 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 will be his meta-linguistic reflection on his mother tongue, making for more sophisticated analysis and a closer understanding of the structures of the said mother tongue. According to this argument, learning a non-native language has a decisive and positive impact on a person’s understanding of his mother tongue. Studies on the different forms of bilingualism, in different countries and contexts, could usefully be canvassed here to fuel the debate. Moreover, it has been shown that “infants have the innate capacity to learn two languages from birth and, [contrary to popular opinion], this early dual language exposure does not delay development in either language” (Espinosa, 2008)." In fact, non-native language learning positively impacts the literacy development of both the mother tongue (MT) and the non-native language (NNL1) due to linguistic interdependence or “transfer” (Cummins, 1979).

17 To illustrate the complexity described via the five categories outlined above, let us imagine an individual who acquires his mother tongue (MT) 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 (LL) 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 (SL) will be different from the MT and LL. The lingua franca (LF) will, in turn, be different from the first three. Any other language/culture mix will be considered a “non-native language/culture” (NNL, with its variants being L1, L2, L3…). Obviously, this is an extreme case, but another extreme case which does in fact occur frequently, is that of an individual whose MT, SL and LF are one and the same.

18 The case of Spanglish, spoken by some Hispanics living in the United States, is an excellent example of this, having been fairly extensively documented and described. This sort of situation is encountered everywhere, in different forms, so that international comparisons may be useful in this connection.

19 Some students of low social economic standing (SES) have never traveled outside of their area of residence. For them, the world stops at the city line. Television is just a fantasy land that they never hope to see in reality. Such representations stifle the motivation to learn another language. Moreover, as an example, in some parts of the US, the English-speaking natives see the poverty suffered by migrants and are certain that they would never want to travel to Mexico. This serves only to lower the motivation to learn another language even further. It would be interesting to see what effect class field trips to international events would really have on the study of NNL.
Because of the globalisation phenomenon, 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. By narrowing our view toward small communities rather than global societies, we see migrant populations struggling to form new languages in the midst of large monolingual populations. The development of the language in these populations lies somewhere between the MT of their ancestors and the LF that is used by a community where they, or their parents, have decided to stay. These students present a unique challenge for language learning. And only too often they have become a lost generation, unable to communicate intelligibly with peers, parents or teachers. Those adolescents who do not have strong communication skills sometimes join gangs where they feel understood and a part of a group. By teaching these students how to use language to communicate difficulties, it might be possible to help them to regulate emotions which, in turn, can increase chances for more favorable academic and social outcomes (Hinton, Miyamoto, & della Chiesa, 2008).

The command of various different languages can become one of the fundamental objectives of education, if this is not already the case. As indicated above, specific attention needs to be given to the special case of migrants because more and more individuals and families are changing countries. Although migrants have differing levels of education, many have in any event to learn a second or even a third language. Doing so (and acquiring the culture “that goes with it”) is of crucial importance for economic and also social integration. What is involved is the acquisition of knowledge (“savoirs”) and know-how (“savoir-faire”), or even inter-personal skills (“savoir-être”), all of which have a considerable impact on economic performance and social integration by virtue of defining – redefining, even – people’s cultural identity.

5. Dimensions to be taken into consideration

5.1 - Context of learning: representations, motivation, success and failure

Key questions: What are the representations at work in societal diversities (values, etc.)? What is their influence in terms of motivation and the success or failure of learning in a given context (language learning and beyond)? What are the “indirect” benefits of learning languages, at individual and collective levels?

Upstream from learning, it is important to begin by establishing in what way representations are at work in diversities (whether it is a matter of values, beliefs, etc.) and what their influence is as regards motivation (and hence the success or failure of learning) in a given context. The initial premise is that attitudes and motivation with regard to learning a non-native language depend very largely (where the learner is concerned) on his/her representations, feeling of belonging, values and the opinions voiced in his surroundings (immediate or more remote). 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. If this initial assumption proves correct, the “motivational circle” will operate as follows:

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

21 As an example, one of the first questions (chronologically speaking) is that of the relations between the various languages in the world and the lingua franca (cf. also this seminar, Plenary session 2, Nobuyuki Honna: “Globalisation and Linguistic Competencies: The role of English as a multicultural language” and also “Breakout Session 1: Status and function of English as a language of international/intercultural communication”). The first step involves identifying, as accurately as possible, the practices in use in the different contexts considered (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. The case of English-speaking countries should be the subject of special attention in this regard. In view of the pace at which perceptions and practices with regard to non-native language teaching/learning are changing, native English speakers could well make up the majority of exclusively monolingual people in the world within a few decades. What would be the consequences of this sort of situation? Among other questions, might monolingualism and monoculturality not ultimately be a comparative disadvantage, both individually and collectively?
Captions:

= causal sequence

= external influences strengthening, weakening, or modifying the representations

Notes: (1) The representations can be defined as “perceptions, values, beliefs, identity and alterity (‘otherness’) images” which have a structuring effect on an individual’s “vision of the world”; (2) The learning results correspond to the successes/failures of individuals, or at least this is how they perceive it. They are influenced by social and economic conditions and in return, incorporate social and economic consequences.

The circle in question (vicious or virtuous, depending on the individual and his context) represents the child’s learning process, but could turn out to be even more appropriate for adults since, as an individual gets older, the more his representations of identity (and, hence, otherness, the two concepts being linked by a reciprocal polarity of a causal nature) are solidly rooted and, as a result, likely to turn either into a powerful motivational springboard\(^{22}\) or, conversely, a powerful resistance to learning\(^{23}\).

\(^{22}\) A second-generation Indian-American, reflecting upon her experience as a teacher in a multicultural school in India: “According to the Merriam-Webster’s Dictionary, identity is defined as the distinguishing character or personality of an individual. For [these] children, their identities will be forever shaped by their international experiences. For the young boy in my class, whose mom was Irish, dad was German, and who at the ripe age of only 9 years old, had lived in Vietnam, Cambodia, Italy and India, these experiences will continue to shape how successfully he is able to engage and understand people from a new culture. When you can change the way you look at things, the things you look at change”.

\(^{23}\) This conceptual framework assumes that a variety of environmental factors — such as attitudes/norms within the household and the community— have an important impact on individual representations. If a child’s parents have positive attitudes toward a certain country or culture, and communicate these attitudes to a child, this child is likely to develop similar attitudes towards the given country or culture. The framework also assumes that the media shape motivations. The power of media in shaping people’s perceptions is not new, goes beyond imparting a particular image of a country or culture, and could strongly affect the motivation
The model above attempts to suggest a direct causal relationship between representations, motivation and learning results. The reality is that motivation can also affect representations; the direction of causation can be reversed. One’s motivations can influence the ways of viewing the world and oneself and lead to constructing new understandings of the environment. To suggest that representations’ effect on learning results is always mediated through motivation does not take into account other factors which might obstruct motivation, such as lack of resources or opportunities, or cognitive deficits for those with learning difficulties²⁴.

If it is indeed a “neuromyth” that there is a sensitive and finite period for learning a non-native language, then the logical conclusion would be that, in fact, all people can acquire another language if they so desire. Unfortunately, it is not as simple as that. As the aforementioned anecdotes demonstrate, individuals’ experiences with NLL are quite varied. While many factors – including representations, the media, and economic and social outcomes – play into the hypothesized motivational circle a key role for the acquisition of a non-native language, there might also be a reciprocal causal relationship between motivation and the learning context. Stanovich (1986) discusses this reciprocal relationship in terms of its effects on reading development: “…processes may be interlocked with reading in relationships of reciprocal causation; that individual differences in a particular process may cause differential reading efficiency, but that reading itself may in turn cause further individual differences in the process in question”. (p. 378). Therefore, students who begin school “behind” in their literacy skills are more likely to stay behind because their history of failure in the subject will in turn cause a self-fulfilling prophecy of continued low achievement. This continued lack of success can then lead the learner to choose activities and environments that are less associated with the challenging subject. In this case, those students’ reading and language development continues to be stunted because the act of reading is what partly catalyzes growth and progress. This unfortunate cycle of failure is labeled “Matthew effects” (Stanovich, 1986)²⁵.

What is needed here is to:

- Clarify so far as possible the complex relations between motivation (or the lack of it) and success (or failure) in the context of formal and informal learning by drawing up measurement criteria which could in time be used to create an “incubator” for quantitative studies on language learning (the relevant differences here being comparisons not necessarily first and foremost between different countries, but between different social and cultural groups to be determined on the basis of existing research).

- Identify and put together in a transdisciplinary approach the information (scientifically established and proven) available with regard to the hedonic workings of motivation, in conjunction with the heterogeneity of learning requirements (individuals of all ages and in different social and cultural contexts).

5.2 - Formal language teaching/learning (in or outside traditional frameworks) + Informal learning (children, young people, adults)

*Key questions: What could a scientific viewpoint offer today on formal or informal language teaching/learning methods? What would be the best way to assess the effectiveness of this language learning and the diverse forms it encompasses? Taking into perspective an entire life cycle, would it be possible to identify “sensitive” phases for to learn the language that is spoken as well as learning in general. In reality, both the media and environmental factors affect all three areas of motivation, representations and learning results. For instance, the media is a source of informal learning which occurs, and can directly affect learning outcomes. Similarly, the media is part of the cultural factors which influences representations which an individual develops. The environment similarly affects motivation, and learning results, through both the physical (e.g. the weather, the infrastructure) and metaphysical (e.g. intellectual, socio cultural, emotional). The environment also plays a part in informal teaching, with the child as an active learner who experiments with his physical environment as suggested by Vygotsky. These external influences effect all parts of the cycle and it is impossible to control for their effects, thus complicating attempts to research specific relationships between factors.

²⁴ These characteristics may feed into representations but can also be distinct. These include aspects such as cognitive deficits, processing deficits, learning disabilities. An individual with depression may not be as motivated to learn, but this originates from biological conditions such as imbalances of chemicals in the brain.

²⁵ Stanovich’s “Matthew effects” are close to Pierre Bourdieu’s notion of “causalité du probable”, as both phenomenon are related to self-fulfilling prophecies of socio-cultural origin and/or based on the individual’s experience in school.
certain types of language learning? If so, what is the optimal way to take into account these phases in the conception and definition of programs in terms of curricula? What type of link should be set between formal and informal learning?

Although dealt with separately, these two dimensions could (and maybe should) maintain particularly close and constant ties. The first element which is central to these dimensions concerns certain technical and scientific aspects of language teaching/learning. The approach recommended is one which embraces the entire life cycle, whether the focus is on formal or on informal learning contexts (from pre-school to senior citizen level), which are of particular importance when it comes to acquiring linguistic skills. As part of this life-long learning approach, the aim here (in chronological order) could be to:

- Complete the mapping of what exists, in particular the teaching/learning of the lingua franca, and in general, non-native languages.
- Identify and put together in a transdisciplinary approach the (scientifically established) information currently available concerning the effectiveness of different approaches to NNLL, in connection with the heterogeneity of learning needs (individuals of all ages and in different social and cultural contexts), and begin to outline the (scientifically grounded) answers to the key questions posed by life-long language/culture learning.
- Clarify, as far as possible, the complex relations between formal and informal learning by making comparisons between different countries which, from this point of view, reveal different situations.

A transdisciplinary strategy is therefore recommended and would involve canvassing points of view and calling for outside competencies (cross-fertilization) to analyze research and quantitative data (statistics, indicators and cohort studies based on scientific premises), to draw up conclusions and to develop research programmes tailored to education.

At the centre of the first two dimensions there could thus be various disciplinary backgrounds (natural sciences, mainly cognitive neuroscience; social sciences; philosophy; and educational research mainly in language and culture didactics), whose task it will be to map the problems and delineate the areas of investigation. Language learning

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26 Similar to the approach adopted by the previous CERI project entitled ‘Brain Research and Learning Sciences’ (OECD, 2007). See also this seminar, Keynote Session 1, Hideaki Koizumi: "Understanding the Brain: The birth of a learning science” – book release presentation, and the transition to the ‘Globalisation and Linguistic Competencies (GLC)’ project”

27 This seminar, Keynote Session 3, Satya Brink: “Linguistic competencies in Canada in a Globalisation context”.

28 This seminar, Breakout Session 2, Understanding language acquisition through brain science presentations by Hideaki Koizumi and Hiroko Hagiwara.

29 Neuroscience offers the possibility of comparing brain processes across languages. It is specifically with regard to personal biological and genetic differences that neuro-scientific investigation is expected to contribute greater understandings. Questions it is expected to answer involve the nurture-nature debate – are some individuals predisposed to learning languages more quickly; are some languages easier to acquire than others? Would some with dyslexia learn a different language more easily? Is it a question of instruction or cognitive capacity? Idealistcally, most would prefer to know that motivation, representations, environment and the other factors mentioned in the model are the items which create the greatest differences in learning outcomes, since this implies that NNLL takes place on a level playing field. However, neuroscience has revealed that different languages activate different parts of the brain; Chinese native speakers employ additional areas of the brain when reading compared to native English learners, and those areas are activated when they read in English (Tan et al., 2003). Whether this means that having Chinese as a mother tongue makes one a more efficient language learner is debatable, but more such research is beginning to reveal that language learning can be affected to a large extent by cognitive processes, and not just nurture and the environment. Moreover, given the current intrinsic limitations of brain-imaging technology (OECD, 2007), it is critical that educators not mistakenly endow this work with more causal interpretations than is warranted by their scientific merit. No matter how intuitive, biological correlates are not the same as biological causes. Neuro-imaging techniques offer indirect measures of brain activity — that is, they are correlational in nature. It is undoubtedly true that brain-imaging research supports brain-behavior links for a wide range of educationally relevant issues. However, it does not offer unequivocal evidence regarding the direction of these links. Neuro-imaging research is best viewed as one of many different tools that should be used simultaneously to understand the process of learning. Cf. this seminar, Breakout Session 2: Understanding language acquisition through brain science.
should be tackled from both a technical and a scientific angle, and then analysed in conjunction with the underlying social issues.

5. 3 - Innovation with regard to language learning (formal and informal), including ICT

Key questions: Which innovations can be distinguished in terms of language teaching/learning? How does one best measure (scientifically speaking) the outcomes of this language teaching/learning and circulate the new ideas brought to light? What is the role of ICT?

Here again, the preferred approach should be one embracing the whole of the life cycle and there is as much focus on “informal” as on “formal” learning methods. The aim should be to:

- Identify language teaching/learning innovations in various contexts (formal or otherwise) and in different countries assess the findings and seek to explain them through analysis of existing policies and practices (in light of recent research findings).

- Clarify the role that ICT can play in such learning processes, bearing in mind that the mapping is liable to be very complex because it depends on a wide variety of factors (the age of learners, access to resources, economic factors, quality of the products available, market orientations, etc.).

- Identify those innovative factors which, in the particular framework of language and culture learning can (indeed must) be crossed with thinking about other innovative practices not linked to this specific subject. By way of example: in what way does the “New Millennium Learner” differ from his predecessors in this area? In what way can innovations spotted in other areas be useful in connection with language learning?

Space could be devoted to case studies which will be looked at from a scientific point of view, thus overturning the paradigm established by previous research related to practice. It is a matter here of bringing in scientific skills to assess existing or emerging (and in any event innovative) practices, instead of seeking to induce or deduce practices on the basis of established theories or laboratory-constructed hypotheses.

5. 4 - Economic and social outcomes of linguistic competencies

Key questions: what is the impact of language competencies on economic and social outcomes and the implications for learning policies and practices? Here, various outcomes including labour market outcomes, social cohesion and integration could be analyzed.

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 nowadays expected to be able to express himself at least in English (assuming it is not his mother tongue), or, say, “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 1970s-80s) when mastering a non-native language (mainly English) was considered to be a

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30 The role of instructional technologies in language learning has long been a subject of intense study and debate. Will these technologies ever be able to replace a human teacher or tutor? Can a non-native language be acquired exclusively through the use of these technologies? Based on experience of language teachers and of information technology professionals, in our current technological state no technology will be able to replace a human teacher or tutor. Language, after all, is about communication and communication usually occurs between human beings. Therefore, a human factor needs to be put in place when learning any language. However, technologies can be used to deeply engage and provide a context for non-native language learners. Technologies that offer simulations or the ability to connect with native speakers in other parts of the world can serve as “immersion” scenarios for students who do not have the time or resources to travel to other countries. Technologies that bridge time and space can be used for students who need or want extra practice time outside the classroom, or even for students who do not want to learn inside a classroom. Despite the extensive potential in the implementation of language learning technologies, the human element will need to be present in one way or another – as a facilitator, mentor or just someone with whom to practice a new language. Learning a language whether native or non-native does not occur in isolation.

31 This seminar, Keynote Session 2, Luis-Felipe Lopez Calva: “Linguistic challenges facing the OECD countries” & Plenary Session 3, Koji Miyamoto: “Globalisation and Linguistic Competencies: The role of motivation in raising linguistic proficiencies”.

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“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 are substantial. The first step would be to assess the phenomena that will have then to be analysed (based on quantitative and qualitative evidence) in order to evaluate the labour market/social returns on education policies and practices.

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.

The preference should be for an approach embracing the whole of an individual’s life cycle (including the working life) and the emphasis should be on “informal” learning, although formal learning can obviously not be forgotten. The aim could be to:

- Assess the labour market and social demands for language competencies, in various contexts and in different countries.
- Measure the impact of such competencies on the labour market competitiveness and the role that this impact has on individuals’ representations, thereby creating a new language learning/teaching market to a very large extent occupied by the private sector. The multiple factors on which the market in question depends (age of learners, access to resources, economic factors, product quality, etc.) stem (and to a large extent tie up with) the factors pointed to above.
- Identify the most effective policies and practices.
- Identify those components of social integration and cohesion which depend (in part at least) on successful learning, whether it is a matter of the individual (or group) integrating harmoniously in a globalised world, or in a specific language and culture (the case of migrants).

The method employed could first of all involve drawing up an overview of the research and inventory of evidence available. It will be a matter of setting up an intensive research programme encompassing all the evidences (including data-sets and qualitative information) related to the relationship between linguistic competencies and various economic and social elements. A conceptual framework could then be prepared with the objective of describing the relationships (and when possible causalities) between language competencies and economic and social outcomes.

**Conclusions**

If multilingualism and multiculturalism are to truly be valued in a society (which remains to be seen), then, to begin with, its institution of education must reflect this value (not limit value to those students who choose to take a foreign language in high school as opposed to those who aim to be bilingual through immigration). When these constructs are embraced, and instructional practices meet the needs of those students who are learning more than one language, then true NNLL will be possible. Whether that learning takes place formally or informally, the education process will be advanced, not hindered.

One might suggest that, in a perfect world, all men would speak a common language so that they could communicate ideas freely. They would carry common ideals, values, goals, aspirations and ethics. Such a world would be … colorless. It is the very fact that we have diversity that gives this world color and spice. Given the realities of globalisation, the current worldwide trend toward increased interaction between citizens of all nations and ethnicities, the economic success of the individual and the community is inextricably tied up with our ability to relate to one another. Comprehension of the “other” is dependant upon cultural understanding, since culture cannot be divorced from language. Thus, linguistic competency beyond that of our own mother tongue builds connections across cultural divisions. On the other hand, globalisation, when taken to extremes, threatens the diversity of human culture. While the development of a cultura franca, a global culture, can aid in breaking down old stereotypes and bring about a greater awareness of the interdependence of all the world’s inhabitants, we must be careful to avoid the hubris of a totalitarian mindset. No single society has ever developed a perfect way of life that can be universally exported, a
system that can function flawlessly in every context. Civilizations across the world have been evolving for thousands of years, accumulating knowledge that is passed on to each successive generation. Rather than extinguish these multiple and various perspectives on human existence, we must work to preserve and utilize them to enhance and enlighten our path towards increased world-wide cooperation. A global culture, representing a global worldview and expressed through a global language, must, therefore, defend its own origins in all the neglected corners of the world.

As globalisation continues, as we move toward a cultura franca, it is vital that we remain cognizant of this issue. Increased economic cooperation and co-dependence can help to bring peace to the world, but it must not be allowed to do so at the expense of freedom and the expression of the individual through his or her native language and culture. The lessons that each human group has learned over the millennia can enrich the communal knowledge of all humanity. To learn about other cultures we must learn other languages, but we also must remember our own and be willing to defend those in danger of being lost. We must take control of this process, using our increased awareness of other foreign cultures to come to a better understanding of them and show them the respect they deserve. Globalisation, unchecked, can crush diversity. Handled wisely, it can make the world a far better, far more peaceful, and still very interesting place.

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