

Well-being opportunities

Shann Turnbull PhD
sturnbull@mba1963.hbs.edu

ABSTRACT

This paper identifies opportunities for increasing individual wellbeing to provide a basis for its measurement and improvement. Opportunities for increasing wellbeing exist in the private, non-profit and government sectors by introducing elements of network governance to complement, restrain and improve the operations of hierarchical organisations. Identifying elements of network governance provides a statistical basis for quantifying wellbeing. This also provides a basis for assessing the degree that signatories to the United Nations Principles of Responsible Investment are honouring their commitment to encourage their investee firms to improve their operations and wellbeing of their stakeholders.

Keywords:

Behaviour, Complexity management, Network governance, Tensegrity, Wellbeing

JEL Classifications:

A14, D03, D23, D74, D85, D87, G30, I31, L22, L32, M14

Shann Turnbull PhD,
Principal: International Institute for Self-governance
PO Box 266, Woollahra, Sydney, Australia 1350
☎ +612 9327 8487; Cell: +61 (0) 418 222 378
Bibliography & CV: <<https://independent.academia.edu/ShannTurnbull>>

Well-Being opportunities

Introduction

Modern humans are the only social creatures that frustrate their wellbeing by creating hierarchic organisations. Hierarchies introduce asymmetries of power, prestige and privileges. They also introduce dysfunctional subservience, blind obedience, alienation and conformity. Conformity is dysfunctional because social creatures and their organisations require a dynamic rich menu of behavioural responses to survive and thrive in novel complex and ever changing environments.

All social creatures, including humans, are hardwired by their DNA to generate a rich menu of ever changing behaviours to survive and thrive in novel dynamic complex environments. This rich menu is generated by our contrary instincts like being cooperative ~ competitive, trusting ~ suspicious, altruistic ~ selfish and so on (Kelso and Engstrøm 2006).

However, these instincts become suppressed and inhibited in hierarchies that depend upon subservience, obedience and conformity. Non-conformity can jeopardize promotion and even employment. Hierarchies can become frustrating, alienating and dehumanising to deny wellbeing be they be in the public, private or non-profit sectors.

The asymmetry of power in hierarchies can lead to economic exploitation and inequality. It can also facilitate sexual harassment and/or social exploitation to jeopardize mental and physical health. Hierarchies typically lack checks and balances or contestability in decision-making to downgrade or frustrate the operations of organisations or obscure existential risks that could terminate their existence.

A forensic analysis of the failure of Lehman Brothers Inc. in 2008 identified how there was a disconnection between parties who *together* possessed the information, incentive, power and capability to act to prevent failure (Turnbull and Pirson 2012). The failure of Lehman represented a specific example of systemic failure in the financial system that arose from conflicts of interests and disconnections described by Pirson and Turnbull (2011a). The conflicts of interest create “toxic governance” (Turnbull 2014c) that even exists in For Benefit or “B” corporations (Turnbull 2016b).

The alternative way to make collective decisions is to manage complex tasks on a decentralised basis is described as “network governance” (Craven, et. al 1966). This also enriches democracy while mitigating exploitation to improve individual wellbeing. Network governance also provides a basis to improve the resilience and operating performance of organisations as described by Craven, et, al (1966) and Pirson and Turnbull (2011a, b; 2012; 2015; 2016).

Durand and Boardini (2016: 30) identified eight “Quality of life” elements for individual wellbeing. Of these eight, network governance can improve: (1) “Social connections”; (2) “Civic engagement and governance”; (3) “Subjective wellbeing”, (4) “Environmental quality”, and perhaps also (5) “Health status” as raised in the fourth paragraph above and (6) “Personal security” from stronger social and community connections. “Subjective wellbeing” can be improved by network organisations mitigating the problems found in hierarchies raised in the first paragraph. Improvements in “Environmental quality” are depended upon hierarchic organisations being complemented with elements of network governance that establishes systemic formal feedback from environmental stewards as explained in Turnbull (2014b).

The lessons of nature in surviving and thriving

Network governance is ubiquitous in nature. All forms of life survive because they are self-regulating and all social creatures are self-governing. Thousands of small brained ants and

Well-Being opportunities

bees collectively decide without a command and control hierarchy where to build and maintain their homes that are constructed without an architect, plans, centralised decision making or a conductor. Modern humans are the only creatures that attempt to manage complex tasks centrally.

Traditional Australian Aboriginals used network governance to locate, time, cater and manage complex corroborees involving up to a dozen tribes speaking mutually unintelligible languages living hundreds of kilometres apart. No command and control hierarchy was involved. Communication on the nature, time and place of the ceremony were distributed over hundreds of kilometres with symbols carved on a message stick. Ceremonies could take up to a week and involve ever changing self-governing groups undertaking the catering, dance, sing and ceremony (Turnbull 1980: 9-11).

Modern society has largely resorted to command and control hierarchies to manage complex activities. Dee Hock (1995: 4) the founding CEO of the credit card organisation VISA International Inc. recognised the lack of well being in such hierarchies by stating:

Industrial Age, hierarchical command and control pyramids of power, whether political, social, educational or commercial, were aberrations of the Industrial Age, antithetical to the human spirit, destructive of the biosphere and structurally contrary to the whole history and methods of biological evolution. They were not only archaic and increasingly irrelevant; there were a public menace.

Hock (1999) coined the word “chaord” from combing the contrary words “chaos ~ order” to describe the networked governed firm he created. Hock (1994:7) explained that VISA "has multiple boards of directors within a single legal entity, none of which can be considered superior or inferior, as each has irrevocable authority and autonomy over geographic or functional area".

Distributed decision making with checks and balances is deeply ingrained into Aboriginal culture as it was with North American Indians. As an adviser to the Australian government on distributing their mining royalties I attended the eleventh annual meeting of the Groote Island Aboriginal Benefit Trust Fund in 1977 (Turnbull 1980: 14-17). Two weeks before the meeting pitches to allocate funds were nailed on trees for each clan to consider. Over a hundred full-blooded Aboriginals attended the meeting held in an open area with each clan sitting down at locations that mirrored the location of where the clans resided on the Island. Everyone had the right to speak and to be heard. Funding was approved for charter flights to attend mainland ceremonies but not for white advisers to teach how to operate electric stoves without burning wood in their ovens. Funding the establishment of a local taxi business was only approved as a repayable loan not as a grant.

Distributed decision making of North American Indians is said to have encouraged Thomas Jefferson to introduce this idea with its checks and balances into the US Constitution. One Indian example of appropriate distributed decision-making involved going to war with another tribe. It was not a decision taken by power seeking elders or by testosterone driven young warriors but by the mothers of the warriors. This practice has merit for modern societies.

The way nature simplifies complexity is through networks of distributed communication and decision-making centres. This is how the human brain is designed. It has no Chief Executive Neuron (Kurzweil 1999: 84). Network governance is how self-regulating and self-governing automobiles and robots are designed. Network governance introduces bottom up and outside in communication and control circuits to complement the top down command and control processes of hierarchies (Kelso et. al 2013).

Well-Being opportunities

To obtain the resiliency to survive a global war the Internet was designed as a decentralised changeable network. A poor nation using decentralised dynamic networks of resistance in Vietnam won their war against the most advanced and powerful Nation in the World governed by command and control hierarchies.

The evolutionary importance for DNA to transmit contrary behaviour in social animals can be explained by the “science of governance” (Turnbull 2008). Governance science is grounded in the science of control and communications in the animal and the machine described as “cybernetics” (Wiener 1948). The laws of cybernetics indicate why contrary behaviour is the most efficient way for social animals to survive and thrive in novel dynamic complex environments (Turnbull 2014a: 173).

The natural laws of governance

The astonishing power of combining physical components with contrary characteristics was noted by architect Buckminster Fuller (1961) who developed the use of geodesic domes. The ability of geodesic domes to cover the greatest area with the least material arises from them being constructed with components possessing contrary characteristics such as withstanding tension or compression forces. This led Fuller to coin the word “Tensegrity” to describe materials composed of materials with contrary properties.

Like physical tensegrity, behavioural tensegrity minimises the material and energy required to govern behaviour to survive complexity. Humans illustrate the crucial evolutionary importance for biota to minimise their material and energy for governing their survival. “In the average adult human, the brain represents about 2% of the body weight. Remarkably, despite its relatively small size, the brain accounts for about 20% of the oxygen and, hence, calories consumed by the body” (Raichle and Gusard 2002).

Biologist, Donald Ingber (1998) identified tensegrity as “The architecture of Life”. It is also the architecture of the universe (Turnbull 2014a: 167). The complexity of the universe arose from combining components with contrary “ying ~ yang” like characteristics.

For example, consider bones that are well suited to accept compression and muscles that act in tension. Very few stable structures could be built from a bag of bones or a bag of muscles. But combining them together new emergent properties arise to create creatures that can be stable in many configurations with a huge variety of life sustaining movements.

A corollary of the natural law of requisite variety is that the control of variety, like the law of conservation of energy, can only be *reliably* achieved indirectly through a requisite variety of supplementary co-regulators (Ashby 1956: 268). This has profound implication for both CEO’s of complex organisations operating in complex environment or for government regulators. It means that reliable regulation is impossible by governments or CEO’s using command and control hierarchies alone, be they in the private, public and non-profit sectors.

Reliable self-regulation and self-governance requires decentralised network governance to allow the engagement of a requisite variety of stakeholders acting as supplementary co-regulators. This statement is subject to mathematical proof provided by Ross Ashby (1956: 268) in his *An Introduction to Cybernetics*. Details of how the natural laws of governance can be applied to organisations are presented in Turnbull (2012).

Wellbeing dependent upon Stakeholder governance

The integration of stakeholders into the governance architecture of organisations not only provides the requisite variety required to provide reliable self-regulation and self-governance but it also allows the integration of Corporate Social Responsibilities (CSR) into the governance of organisations.

Well-Being opportunities

The operating and/or competitive advantage from introducing elements of stakeholder governance into firms was identified by Michael Porter (2005: 15). Porter recommended that shareholders: “Nominate significant owners, customers, suppliers, employees and community representatives to the board of directors”. Porter developed his recommendations from considering the practices found in Japan and Germany. What Porter overlooked was that stakeholder involvement in these countries was achieved by there being more than one board.

A single board accountable to many different interests becomes accountable to no one. It allows governance to become toxic as found in firms without dominant investors or other stakeholders to hold management to account on their systemic unethical conflicts. This point is recognised and avoided in all non-trivial sustainable stakeholders controlled firms. A global survey of such firms by Bernstein (1980) reported that all possessed multiple boards and so the minimisation or elimination of toxic governance. The detailed governance architecture of five selected stakeholder governed firms are presented in Turnbull (2014a: 231-307). Generic details of stakeholder governance are presented in Turnbull (1997; 2002a,b; 2012).

The number of boards, or significantly different control centres, is subject to measurement as are the diversity of the stakeholders involved. This introduces objective metrics to indicate the degree that elements of network governance are present. The author developed a number of additional metrics used to determine the reputation of the largest 100 organisations by turnover in Australia (Turnbull 2001: 5). The metrics are even better suited to determine wellbeing as they used the determinants identified in my PhD thesis to undertake the “Evaluation of hierarchies to control, regulate or self-govern” (Turnbull 2000b: 118).

This framework lead to the use of three criteria: (i) the performance standards to which the company aspired; (ii) the integrity of the processes for identifying when standards of performance were not met, and (iii) the integrity of the processes for taking corrective action. The United Nations Principles of Responsible Investing (PRI) take in the first criteria but not the others. The second and third criteria provide a reality check subject to measurement as to whether PRI signatory firms were walking their talk with their investee firms. In this way the development of wellbeing metrics could provide a basis for improving the rigour and value of the UN (2017) PRI program.

Implicit in the evaluation framework is that self-governance is a condition precedent for good governance as it reduces the need for and the size of government and their associated laws, regulation, regulators and court actions. My definition of good governance is qualified by the need for organisations to act ethically, equitably and do no harm or introduce unacceptable risks (Turnbull 2016a). In this way wellbeing for both individuals and society arises from good governance.

The dimensions of wellbeing for society from organisational self-governance is to directly enrich democracy at the individual level and indirectly at the macro level by reducing the size and cost of government. It would follow the idea of the former Vice President of the US Al Gore (1996) who saw the role of government was to act indirectly “to imprint the DNA” of institutions to replace the role of government.

Reliable management of complexity also requires both distributed decision making with distributed control to allow contestability between decision-making agents with a rich diversity of views. Organisations with distributed control allow managers to release their instincts to be contrary to manage complexity comprehensively.

Hierarchies create risk by oversimplifying complexity as illustrated by (Pirson and Turnbull 2011a,b, 2015, 2016). Simplification is achieved by eliminating information transmitted through each level of a command and control hierarchy. This can also introduce biases not to

Well-Being opportunities

report problems for which the person reporting may be held accountable. Network governance minimises this problem and the problem of not managing complexity comprehensively. It achieves this by introducing distributed intelligence to allow decision making to be decomposed so it can be simplified and cross checked with a rich diversity of feedback and control channels.

Organisations that have adopted distributed control by being governed through networks of hundreds of boards have proved to be both competitive and resilient. Examples are The John Lewis Partnership in the UK, the Mondragon Cooperatives in Spain and Visa International in the US as outlined in Turnbull (2014a: 231-307). Their existence proves that no change in the law is required - only a change in thinking and crafting corporate constitutions (Turnbull 2000b, 2015).

The efficacy of distributed decision-making is illustrated by the most complex entity known in the universe. Distributed decision-making is how evolution has designed the human brain. Different parts of the brain make different types of decisions. Different parts of the brain dominate according to the environmental context. A practice that is followed in human organisations that have adopted distributed decision-making to create what I described as “compound board” (Turnbull 2000b: 20).

Compound boards can involve decision-making centres within and/or external to an organisation. A majority of publicly traded firms in the world have a compound board even if they have been formed with only a single board. This is because a majority of listed firms have a dominant shareholder (Shleifer and Vishny 1997) who makes governance decisions like appointing and remunerating the directors and controlling the auditor.

Wellbeing requires avoiding toxic governance

The widespread emergence of toxic governance was noted by Hock (1999: 6) nine years before the financial crises of 2008 when he stated:

We are experiencing a global epidemic of institutional failure that knows no bounds. We must seriously question the concepts underlying the current structures of organization and whether they are suitable to the management of accelerating societal and environmental problems – and, even beyond that, we must seriously consider whether they are the primary source of those problems.

A basic requirement for avoiding toxic governance is to separate the power to manage from the powers to govern. This is common practice when investors form a Leverage Buy-Out (LBOs) Association to supervise the executives executing the buyout. Like an LBO Association, Venture Capitalists typically make it a condition of their funding that all shareholders enter into an agreement with the VC to take-over the governance powers of other shareholders.

There are no sound reasons why company directors should introduce systemic unethical conflicts of interest through possessing both the power to govern and the power to manage. Michael Jensen (1993: 869), a co-author of Agency Theory observed that the separation of powers created by an LBO provided “a proven model of governance structure”. The separation of power to manage from the power to govern eliminates the most sensitive and systemic unethical conflicts of self-interest. It avoids “toxic governance” (Turnbull 2014c, 2016b) and introduces “Good governance” (Turnbull 2016a).

Just as importantly distributed decision-making reduces information overload to reduce data overload and associated errors that could threaten the existence of an organization.

Hierarchies create risk for organisations because they:

Well-Being opportunities

- a) Depend upon simplifying complexity by eliminating data that can be crucial to survival while still being subject to information overload;
- b) Create incentives in subordinates for conscious and/or unconscious biases for omitting data that could reflect unfavourably on their performance while crucially
- c) Frustrate managers from using their contrary instincts.

By frustrating the ability of managers to be contrary, managers and their organisations can be denied discovering and managing the unknown unknowns or obtaining crosschecking information on the known knowns or known unknowns.

It is from inhibiting their employees to use their natural instincts that hierarchical organisations can become exposed to existential risks. This explains how network governance with distributed decision-making reduces operating risks, improve decision-making and reduce miscommunications. Well-being is improved for individuals, their social organisations and society.

Concluding remarks

One may conclude that network governance or the introduction of elements of network governance provide operating advantages for organisations in the private, public and non-profit sectors. For firms, the introduction of elements of network governance offers competitive advantages and existential resiliency. This conclusion reinforces the statement of Durand and Boardini (2016: 135) that “firms also influence profoundly the way communities are organized and shape people’s social connections and relationship”. But the influence can either be negative or positive according to their architecture being in hierarchical or network form or contains elements of each.

But our analysis allows us to conclude that elements of network governance introduce wellbeing not just for individuals but also for organizations and society.

References

- Ashby, W. R. 1956, *An introduction to cybernetics*, New York, Wiley, p.268.
<<http://pespmc1.vub.ac.be/books/IntroCyb.pdf>>.
- Bernstein, P. 1980, *Workplace democratization: Its internal dynamics*, Transactions Books: New Brunswick, New Jersey.
- Craven, D.W., Piercy, N. F. and Shipp, S. H. 1996, ‘New organizational forms for competing in highly dynamic environments: The network paradigm’, *British Journal of Management*, 7, pp. 203-218.
- Durand, M. and Boardini, R. 2016, ‘Well-Being as a business concept’, *Humanistic Management Journal*, 1: 127-137.
- Fuller, R.B. 1961, Tensegrity, *Portfolio and Art News Annual*, 4:112–127, 144, 148.
- Gore, A. 1996, 'The Technology Challenge: What is the role of science in American society?' Prepared remarks delivered to American Association for the Advancement of Science, February 12, Baltimore, Office of the Vice President, Washington, DC,
<<http://www.ostp.gov/html/vp-aaas.htm>>
- Hock, D.W. 1994, ‘Institutions in the age of mindcrafting’, Bionomics Annual Conference, October 22, San Francisco, California, <http://ntl.bts.gov/lib/jpodocs/repts_te/259.pdf>.
- Hock, D. 1995, *The Chaordic Organization: Out of control and Into Order*,
<<http://www.21learn.org/archive/the-chaordic-organization-out-of-control-and-into-order/2/>>.
- Hock, D. 1999, *Birth of the Chaordic Age*, San Francisco: Bennett-Koehler Publishers, Inc.

Well-Being opportunities

- Ingber, D.E. 1998, 'The architecture of life', *Scientific American*, 30-39, January.
- Jensen, M.C. 1993, 'The modern industrial revolution: Exit and the failure of internal control systems', *The Journal of Finance*, 48(3): 831–880.
- Kelso, J. A. S., 1995, *Dynamic Patterns: The self-organization of brain and behavior*, Cambridge: MIT Press, <<http://www.letras.ufmg.br/arquivos/matte/bib/kelso.pdf>>.
- Kelso, J. A. S. and Engström, D. A. 2006, *The Complementary Nature*, Cambridge, MA: MIT Press.
- Kelso, J. A. S., Dumas, G. and Tognoli, E. 2013, 'Outline of a General Theory of Behavior and Brain Coordination', *Neural News*, 37, pp. 120-131, <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3914303/>>.
- Kurzweil, R., 1999, *The age of spiritual machines: When computers exceed human intelligence*, New York: Viking.
- Pirson, M. and Turnbull, S. 2011a, 'Corporate Governance, Risk Management, and the Financial Crisis- An Information Processing View', *Corporate Governance: An International Review*, 19(5): 459–470, <<http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8683.2011.00860.x/abstract>>.
- Pirson, M. and Turnbull, S. 2011b, 'Towards more humanistic governance: Network governance structures' with Michael Pirson¹. In *The Journal of Business Ethics*, 99(1): 101–114, <<http://www.springerlink.com/content/k26w255266718176/fulltext.pdf>>.
- Pirson, M. and Turnbull, S. 2012, 'A New Approach to Fix Broken Governance', *ISEI Insight* 13: 28-35, IESE Business School, University of Navarra, <http://www.ielseinsight.com/doc.aspx?id=1366&ar=3>.
- Pirson, M. and Turnbull, S., 2015, 'The future of corporate governance: Network governance – A lesson from the financial crisis', with Michael Pirson¹, *Human Systems Management*, 34: 81-89, <http://ssrn.com/abstract=1570924>
- Pirson, M. and Turnbull, S., 2016, 'Decentralized governance structures are able to handle CSR induced complexity better', *Business and Society*, pp. 1-31, DOI: 10.1177/0007650316634039 <<http://ssrn.com/abstract=2709413>>.
- Porter, M.E. 2005, Capital choices: Changing the way America invests in industry, *Journal of finance*, April, https://www.academia.edu/2917971/Capital_choices_Changing_the_way_America_invests_in_industry
- Raichle, M. E. & Gusnard, D. A. 2002, 'Appraising the brain's energy budget', *Proceeding of the National Academy of Sciences of the United States of America (PNAS)*, 99(6), 10237–10239, August 6, <<http://www.pnas.org/content/99/16/10237.full>>.
- Shleifer, A. and Vishny, R. W. 1997, 'A survey of corporate governance', *The Journal of Finance*, Vol. LII, No. 2, June.
- Turnbull, S., 1980, *Economic Development of Aboriginal Communities in the Northern Territory*, Department of Aboriginal Affairs: Canberra, <<https://ssrn.com/abstract=2419953>>.
- Turnbull, S. 1997. 'Stakeholder governance: A cybernetic and property rights analysis'. *Corporate Governance: An International Review*, 5(1): 11–23. Republished 2000, in: R. I. Tricker, (Ed.), *Corporate Governance: The History of Management Thought*, 401–413, London: Ashgate Publishing, <<http://ssrn.com/abstract=11355>>.

Well-Being opportunities

Turnbull, S. 2000a, 'Corporate charters with competitive advantages', *St. Johns Law Review*, 74(1), 89-173, <<https://ssrn.com/abstract=245691>>.

Turnbull, S. 2000b, *The governance of firms controlled by more than one board: Theory development and examples*, PhD Thesis, Macquarie University Graduate School of Management, Sydney, <<https://ssrn.com/abstract=858244>>.

Turnbull, S. 2001, 'Measuring Corporate Reputation', *Board Report*, The Association of Australian Company Directors, August, <<https://drive.google.com/file/d/0B13bh2n3zrFAZi1PQ1ktQlZtQzA/view>>.

Turnbull, S. 2002a, *A New Way to Govern: Organisations and society after Enron*, The New Economics Foundation, London, <http://www.corporation2020.org/Papers_files/Turnbull2.pdf>.

Turnbull, S. 2002b, 'The competitive advantage of stakeholder mutuals' in *The New Mutualism in Public Policy*, ed. J. Birchall Chapter 9, pp. 171–201, Routledge, London. <<http://ssrn.com/abstract=242779>>.

Turnbull, S. 2008, 'The science of governance: A blind spot of risk managers and corporate governance reform', *Journal of Risk Management in Financial Institutions* Volume 1(4): 360–368, <<http://ssrn.com/abstract=1742584>>.

Turnbull, S. 2012, 'Discovering the "natural laws" of Governance', *The Corporate Board*, March/April, 2012, (ed.) Ralph Ward, Vanguard Publications Inc.: Okemos, MI, <<http://ssrn.com/abstract=2062579>>.

Turnbull, S. 2014a, *Designing resilient organizations: With operating advantages for public, private, non-profit and government entities and their stakeholders*. Saarbrücken, Germany: Lambert Academic Publishing, Table 3.8, <<https://www.morebooks.de/store/gb/book/designing-resilient-organisations/isbn/978-3-659-34586-9>>.

Turnbull, S. 2014b, 'How Might Network Governance Found in Nature Protect Nature?' *Journal of European Law*, 11(2): 98-102, April, <<https://www.kluwerlawonline.com/document.php?id=EUCL2014019>>.

Turnbull, S. 2014c, 'Its time to fix toxic governance', *INFINANCE, Journal of the Financial Services Institute of Australasia*, <<https://www.finsia.com/news/news-article/2014/11/13/it-s-time-to-fix-toxic-governance>>.

Turnbull, S. 2015, *Practices, science and art of drafting corporate charters and Bylaws*, Video introduction to Turnbull 2002a, Swiss International Law School, <<https://vimeo.com/138517623>> access code "SiLS".

Turnbull, S. 2016a, 'Defining and achieving good governance', in Güler Aras & Coral Ingley (eds.), *Corporate Behavior and Sustainability: Doing Well by Being Good*, Chapter 13, pp. 232-249, Ashgate Publishing Ltd., UK. Working paper at: <<http://ssrn.com/abstract=2571724>>.

Turnbull, S. 2016b, 'Toxic Governance in B Corporations', *LinkedIn*, December 22, <<https://www.linkedin.com/pulse/toxic-governance-b-corporations-dr-shann-turnbull?articleId=6217624238334050304>>.

Turnbull, S. and Pirson, M. 2012, *International Journal of Disclosure and Governance*, 9(1): 1–27, <<http://www.palgrave-journals.com/jdg/journal/v9/n3/full/jdg201126a.html>>.

UN 2017, <<https://www.unpri.org/about/the-six-principles>>.

Well-Being opportunities

Wiener N. 1948, *Cybernetics*, John Wiley & Sons: NY.

oooOOOooo
3886/03022017

*Principal: International Institute for Self-governance, Sydney,
Australia, <https://independent.academia.edu/ShannTurnbull>