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5 Sustainable development from an East-West integrative perspective: Eastern culture meets Western complexity theory

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Keywords

Sustainable development; complex adaptive systems; Daoism; yin-yang; Indian philosophy; mandala

Abstract

Sustainable development as a concept and a practice has much to gain through an integration of traditions of thought culture. This entails cultivating the holistic approach found in Eastern philosophy and culture, while still valuing the analytical Western contribution. The conceptual catalyst for this to occur is an emerging ‘tradition’ of thought: complexity theory. More specifically, Complex Adaptive Systems, or CAS, represents a Western match to Eastern thinking. Therefore it is possible to have an integrative perspective, without having to privilege Western cultural perspectives on development, nor upturn them in favour of alternative models of development. The integrative or holistic model can work well for incorporating diverse approaches. This also appears to be Chinese President Xi Jinping’s message when he conveys the Chinese approach to development in his ‘common destiny’ speeches. India’s pluralistic traditions also sit well with the idea of ‘the one and the many’, and of the harmony of opposites.

5.1 INTRODUCTION

Sustainable development may be regarded as a preferred form of change that reflects a dynamic order. This resonates with the famous saying of the early Greek philosopher Heraclitus: You cannot step into the same river twice. His intellectual descendants in today’s world, systems theorists, would explain that renewal of the waters of a river allows the river as a larger system to continue. Early Chinese philosophy, too, is premised on change: one polarity inherently gives rise to the other within a universal circle, as depicted by the *yin-yang* symbol. This circle exists by virtue of the dynamic parts. ‘Going with the flow’ is the prescriptive message of Daoism (see Lau, 1963); stagnation, by contrast, is the fate of systems that seek only to preserve. If the very early philosophers of the East and West exhibit common cause in their notion of change, even if their arguments are often expressed differently, what does the modern West have to offer in advancing towards an integrative perspective on an issue of pressing global concern: sustainable development? One fruitful avenue of approach is the application of Complex Adaptive Systems. It would not only encourage the incorporation of diverse approaches to sustainability – and hence greater ‘resilience’ through innovative combinations – but would also allow complexity to work itself out in cycles of renewal. This is why it is important to remind ourselves that sustainable development is predicated on change – and that change is a process that can be grasped both analytically through systems science and intuitively through Eastern (especially Chinese and Indian) philosophy.

5.2 WHAT IS A COMPLEX ADAPTIVE SYSTEM (CAS)?

CAS derives from systems theory – that is, systems that arise from the interaction of their parts. Systems can be distinguished from a collection of objects, such as a bag of sweets or seashells that are not connected to form a whole. Weather systems, social systems, ecological systems, for example, are interconnected. By constantly adapting to the changing environment in a self-organizing way, they become known as complex systems. This is dynamic change that can be viewed as a spectrum of equilibrium-to-chaos. Modern science has traditionally concerned itself with equilibrium-to-equilibrium transitions, but this changed with chaos theory and the modelling via ‘computer experiments’ that came with it (Colchester, 2016). Out of chaos theory grew complexity theory (or complexity science), which gave rise to Complex Adaptive Systems as a field of study. One of CAS’s key findings is that ‘robust’ (competitive) systems are not too static, as they desire innovation. But they are also careful not to fall apart – or go over the ‘edge of chaos’, a term referring to the transition phase between order and randomness. They want just enough innovation to thrive, but not so much as to be swamped by it. This makes them ‘complex’ (as distinct from ‘complicated’). At this point it is worth noting that scientific understanding of ‘sustainability’ remains a work-in-progress, especially on ‘how transitions to sustainability may occur, or can be actualized’ (Peter and Swilling, 2014, p. 1,595). Complexity theory is regarded as a ‘unifying principle’ and an ‘over-arching way of thinking’ whose task is a practical one: ‘to help better understand and support transitions to sustainability’, but with the proviso that any such support needs to be ‘plurifocal, multi-scale, multi-level and adaptive’ (Peter and Swilling, 2014, p. 1,596).

This raises another feature of complexity: nested systems. Systems are embedded in larger complex sets and often contain smaller ones. The notion of sustainable development would need to take this into account, recognizing that the parts are not self-sufficient but interact within a larger context of relationships. This means that renewal at the lower scale may represent turbulence within its own horizon but stability for the larger system within which it is embedded. In other words, sustainable development may need to experience ‘creative destruction’ at sub-levels if the system as a whole is to adapt and evolve. Is this not a contradiction? How can a system be sustainable yet flirt with chaos and even destruction?

The answer may lie in shifting one’s focus from ‘sustainable’ to ‘development’. The idea of development – like change – is not a static one. Natural systems display a life-cycle of birth, growth, consolidation, decline and death. Voinov and Farley (2006) make the point that ‘If a system is sustained for too long, it borrows from the sustainability of a supersystem and rests upon lack of sustainability in subsystems. Therefore, by sustaining certain systems beyond their renewal cycle, we decrease the sustainability of larger, higher level systems’ (p. 104). This implies that all the parts of a system need not be sustainable:

Fostering sustainability for too long at local and regional scales, and for lower level subsystems of the global human system and the global ecosystem may be detrimental to global sustainability. The function of the biosphere is more than a sum of functions of continents, countries and regions; local and regional goals and priorities may conflict with global ones and therefore we cannot envision the sustainable global design as a hierarchy of sustainable subsystems. (p. 110)

The message here is the same as that of the document which made sustainable development a defining slogan for the global era: *Our Common Future*. This report of the World Commission on Environment and Development (WCED, 1987) defined sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ and projected the whole planet as its unit of analysis. This returns us to the problem, well-posed by Voinov and Farley (2006), of how

‘we reconcile sustainability with systems dynamics in an ecological-economic system’ (p. 111). The authors find the solution in subsystem sacrifice. Thus, ‘if we are to build sustainable economies able to support a human population of 8bn–10bn, one inescapable conclusion is that we must destroy much of today’s growth-driven economy and jettison many of the lifestyles it supports’ (p. 111).

Still others, questioning the hierarchical assumptions in nested systems and the life-cycle analysis that comes with it, emphasize the fact that hierarchies change. In their examination of linked social, economic, environmental, physical and political (SEEPP) systems, Peter and Swilling (2014) therefore advance the notion of heterarchy rather than hierarchy:

A heterarchy can be conceptualized as ‘fishnet’ or a flat hierarchy in which ‘functions rise to authority’ depending on context. As such, it is a more appropriate framework with which to ‘track’ the changing relationships and behaviours of complex systems. In a heterarchy, hierarchies can evolve. (p. 1,601)

Moreover, the sub-optimization of subsystems would require trade-offs that are ‘acceptable to different sectors of society in actualizing sub-optimization’ and that this would require these sectors to negotiate changes in the norms that could lead to such an outcome. Considering that *Our Common Future* was published in 1987 and the global level of analysis still remains a contested proposition, as evidenced by the climate change debates of more recent times, it is little wonder that a strategy towards sustainability will require ‘integration, inclusion and coordination’ amongst interest groups (Peter and Swilling, 2014, p. 1,607).

The interest groups that have made up the climate change debate are often more policy-oriented than concerned with climate science. In seeking justification for avoiding the implications of climate change, policy-makers have afforded ‘climate sceptics’ the ‘oxygen of publicity’ – to borrow a famous turn of phrase from the United Kingdom’s Thatcher government in the 1980s. While the then prime minister was referring to terrorists and calling on broadcasters to deny them an opportunity to gain publicity, ‘climate sceptics’ have been emboldened by an aversion by big business and politicians to reduce emissions – especially when the argument for change in behaviour and the way the socio-economic system operates concerns the unknowable future.

Indeed, the inherent nature of making projections for the long-term future is that there is no certainty, only degrees of likelihood. But when the likelihood approaches near certainty, can warnings be ignored? A prognosis that there is a certainty of more than 90% that global warming is caused by human activity represents a high degree of certainty for such a high-impact occurrence. It would call for concerted action. This assessment by the United Nations Intergovernmental Panel on Climate Change (IPCC) in 2007 was upgraded to ‘extremely likely’ (more than 95%) in the lead-up to the 2015 Paris Agreement on Climate Change. A commitment was made by most countries to limit emissions so that global warming would not exceed 2 degrees Celsius, with a further attempt to keep it within 1.5 degrees above pre-industrial levels. While not technically binding, and funding promises to developing countries to assist in coping with emission cuts may prove inadequate, ‘integration, inclusion and coordination’ were instrumental in arriving at such a consensus. National conferences held prior to the Paris conference were accompanied by preparatory reports by the IPCC that involved the scientific community around the world. The inclusion of governments and organizations also advanced the cause of coordination with interest groups, so that the IPCC was able to provide advice that went beyond a superficial debate between climate change sceptics and supporters.

Nonlinearity is another feature of Complex Adaptive Systems. Rather than being determined by the principles of cause and effect, mathematical progression, or expecting the

future to follow past trends, CAS are intersubjective. The parts mutually define themselves within their environment. Whilst its nomenclature is modern, and systems terminology has become specialized, the phenomenon of CAS stretches as far back as one cares to search, and may be discerned across many disciplines of endeavour. For example, the Western classical strategist Carl von Clausewitz was attuned to war's nonlinear nature (see Beyerchen, 1992). Therefore, the commanding 'genius' on the battlefield is the one who grasps the whole situation and can move decisively even in the face of uncertainty (Clausewitz, 1976, Book I, Ch. 3). This is an unexpected example of CAS applied to history and strategic studies. It is 'unexpected' because we are not trained to read Clausewitz's tome, *On War*, from this perspective. But in doing so, our experience is enriched by this novel configuration. As complexity theory would have it, new bridges of understanding have been formed. Before long, CAS is no longer an unexpected way of thinking about the world, but a way of opening up a bigger picture of possibilities. This is the quest that is also pursued in finding an integrative way of looking at sustainable development, not only from within the systems theory community and its offshoots but also across cultures – which themselves constitute complex systems.

5.3 THE HARMONY OF OPPOSITES

It is a truism that we not only believe what we see but also that we see what we believe. Alternative ways of thinking are therefore worth entertaining, not only because of their intrinsic worth but also because, for many cultures, that which we call the alternative is in fact the mainstream. A clear example is holism versus reductionism. The first refers to interconnected thinking which is nonlinear, the latter to analytical thought. The first is typically Eastern, the second predominantly Western. Two Eastern cultures that display holistic thinking are the Chinese and Indian. They are also 'rising powers' that will be influential in shaping the discourse on sustainable development, as their cultural orientations become more globalized. China has already articulated a sustainable development ethos via its ecological civilization plans (see UNDP, 2013; Ferguson and Dellios, 2017, pp. 56-57) and Xi Jinping's efforts at 'inclusive development' (e.g., NDRC, 2015). Indian pluralism is well represented in the mandalic notion of interconnectedness. Because India has still to make the policy strides achieved by China, discussion here will focus mainly on China. The Indian mandala, however, serves as the unifying platform upon which different perspectives find 'common ground'. It is an uncommonly powerful metaphor that has much to offer the sustainable development dialogue.

Turning to China, perhaps the best-recognized systems symbol is that of the *yin-yang* (Figure 5.1). With its two mutually regarding hemispheres that form a whole, it has been adopted globally from health products to the martial arts to surf culture. Conceptually, *yin-yang* represents a theory of correlativity, even a 'dialectics' of harmonization. The complementary polarities of the *yin* (female) and *yang* (male) principles are seen in such pairings as waning-waxing, receptive-proactive, hidden-open, defensive-expansive. One gives rise to the other in a cycle of renewal. *Yin* and *yang* are forms of *qi* – a life energy which is both 'matter' and 'potentiality' – and give rise to the myriad phenomena (Zhang, 2005, pp. 45-46).

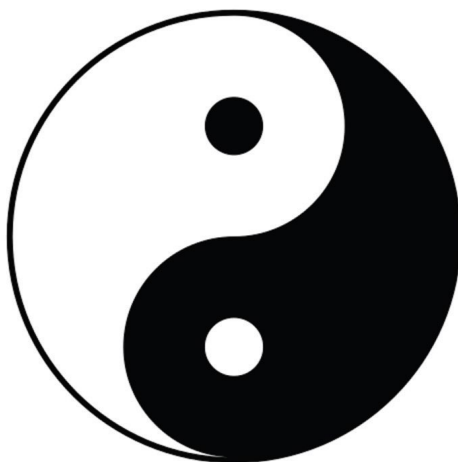


Figure 5.1. *Yin-yang* symbol (Source: Wikimedia Commons).

Reality, in Chinese ontology, contains its potential. Something exists, or has the potential to exist, in relation to something else. This is the *yin-yang* dialectic of mutual articulation. The pursuit of the *Dao* – the Way – entails harmonizing with this process rather than controlling it. Thus, in CAS parlance, the trade-offs between different levels and agents within a system would indeed be inclusive rather than controlling, for the classical concept of harmony (*he*) is one in which diverse interests prevail in a dynamic balance. Harmony was understood as the ‘unity of any nonidentical objects’, as fulfilling ‘living things’, which in their diversity allowed for ‘the possibility of new things arising’ (Zhang, 2005, pp. 270-271). Translated into CAS, harmony is inclusive of discord but not overtaken by it. If discord does overtake the system, dynamic harmony loses its integrative quality and breaks up into chaos; alternatively, when it is stifled by uniformity, harmony ceases to exist – as it is not to be confused with ‘assent’ (see Zhang, 2002, p. 272; Neville, 1988).

Where the *yin-yang* symbol stands out as a Chinese mode of thought, the mandala has strong Indic associations. Sanskrit for ‘circle’, the mandala is a nested system of concentric forms that commonly depict Hindu and Buddhist cosmologies (Figure 5.2). It represents an inter-relational whole and carries Indian cultural concepts, including ‘codependent origination’. This Buddhist idea teaches the interdependence of all phenomena. They are empty of their own existence, contingent, and pluralistic.

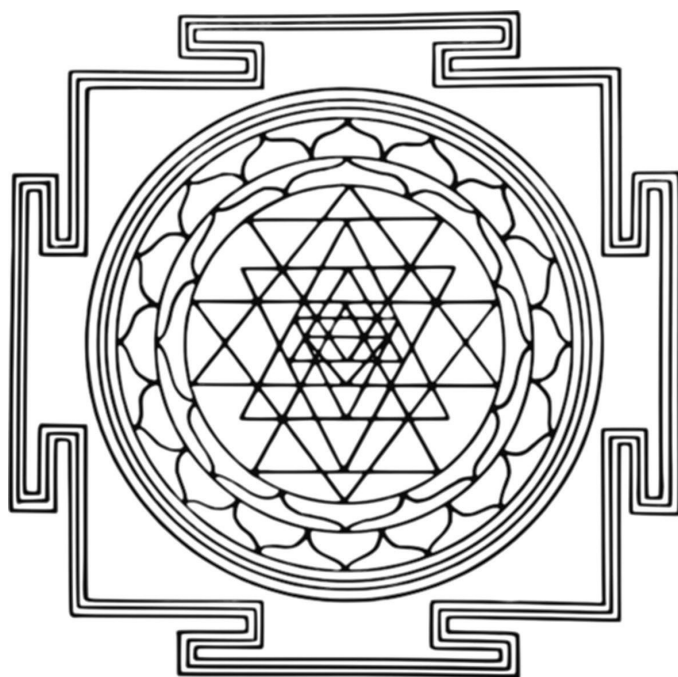


Figure 5.2. Mandala (*Source:* Wikimedia Commons)

Beyond the spiritual, there was the political expression of mandala as a ‘statal circle’ that described the international politics of the Mauryan empire (321-185 BCE). This was enshrined in the *Arthashastra* or *The Science of Polity* (Shamasastri, 1967), a third-century BCE Indian governance text, attributed to the Mauryan chief minister Kautilya. As a political structure, mandalas in pre-modern Southeast Asia, which was influenced by Indic culture, were regional complexes with shifting hierarchies of power. Use of the term ‘mandala’ can refer to a single entity with an internal structure of concentric circles comprising a dominant overlord and tribute-paying vassals, as well as to relations among a number of such entities in the region (Wolters, 1968, 1982). A single polity’s structure was not rigid and often shifted from one centre to another, sometimes exhibiting polycentric characteristics (see Dellios and Ferguson, 2015). Even within a single centre, according to Gesick (1983), ‘the secondary and tertiary centres preserved a great deal of their internal autonomy in exchange for acknowledging the centre’s spiritual authority’ (p. 3).

Political constructs in this traditional world order reflected a spiritual cosmology. In Buddhist thought, the centre, which represents perfected Buddhahood, can be either concentric or polycentric. Such an apparent paradox may be explained in terms of a dynamic relationship of codependent origination. Moreover, each sentient being harbours the potential for Buddhahood, thereby holding the centre within, just as ‘the seeker is none other than the sought’ (Sharma, 1995, p. 11), from the Hindu philosophical perspective. The mandala represents a cultural technology in which the world is seen ‘in the round’ – a unity for all its diversity.

In this respect it is interesting to note that the Sanskrit word for ocean, *sagar*, has been converted into an acronym. SAGAR stands for Security and Growth for All in the Region. It was used when Indian Prime Minister Narendra Modi visited Mauritius in 2015, saying, ‘We seek a future for the Indian Ocean that lives up to the name of SAGAR – Security and Growth for All in the Region’ (Bhaskar, 2017). Here may be found a Kautilyan application for modern Indian statecraft, using its own cultural vocabulary.

To India's inherent pluralism, so well-depicted in the mandala's differentiation and interconnectedness as well as its oceanic metaphor, China adds mutuality, and together they contribute to a more adaptive international order, with an Eastern holistic outlook. At the start of this century, Beijing officially invoked the classical discourse of 'harmony' to give developing countries a stronger voice as part of the 'democratization' of international relations. When President Hu Jintao (China's leader from 2002-2012) articulated his country's 'harmonious world' foreign policy perspective at the United Nations in 2005, he addressed the need 'to preserve the diversity of civilizations in the spirit of equality and openness, make international relations more democratic and jointly build a harmonious world where all civilizations coexist and accommodate each other' (Xinhua, 2005; see also Dellios and Ferguson, 2013). The subsequent president's rendering of this message was captured in his 'common destiny' speeches. Two examples in 2015 are the Boao Forum, at which President Xi Jinping spoke of a 'Community of Common Destiny' in which 'we need to seek win-win cooperation and common development' (Xi, 2015a), and the 60th anniversary of the 1955 Asian-African Conference in Bandung. Apart from calling for an expansion of South-South cooperation, which was to be expected at such a conference, President Xi was even more inclusive. He saw the need for greater North-South cooperation: 'From the strategic perspective of building a community of common destiny for mankind, North-South relations are not merely an economic and development issue but one that bears on the whole picture of world peace and stability' (Xi, 2015b).

Here may be found the potential for an emerging SEEPP (social, economic, environmental, physical and political) world system that enables sustainable development to take root. This requires both cultural and administrative channels. Without the cultural dimension of mutuality and inclusive harmony, it would be difficult to administer China's most ambitious project to date, the new silk roads. Collectively known as the Belt and Road Initiative (BRI), this endeavour seeks to transform the economies and connectivity of regions that adjoin China and beyond. The authoritative *Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road* (NDRC, 2015), states, 'We should promote ecological progress in conducting investment and trade, increase cooperation in conserving environment, protecting biodiversity, and tackling climate change, and join hands to make the Silk Road an environment-friendly one'. One of the Belt and Road Initiative's financing and investment bodies, the multilateral Asian Infrastructure Investment Bank (AIIB), which was initiated by China, is clear on this point. It seeks to meet 'the challenges of sustainable development in Asia' (AIIB, 2016, p. 1), and its Environmental and Social Framework document sets out detailed environmental and social requirements. These include the need for projects to demonstrate that they are environmentally and socially sound; are capable of addressing environmental and social risks and impacts; allow for public consultation and disclosure; address both short- and long-term development; and cooperate with development partners on environmental and social matters (AIIB, 2016, p. 2).

A successful BRI will need to become a set of evolving systems, incorporating SEEPP elements engaged by diverse international organizations, states, and private companies at different scales within major development corridors across Eurasia and South Asia. Although initially a Chinese-led mega-project, a developmentally successful BRI will need to evolve into a multilateral, multinational and transnational complex system.

This is where President Xi Jinping's 'common destiny' message – reminiscent of WCED's *Our Common Future* in that we share in the fate of this planet, and are co-creators of its well-being or otherwise – takes on an empirical presence. The BRI, in its transcontinental reach, is not only an expression of the world as one, but also as a mandala of integration and differentiation. If China is a near-realized superpower, then its top leader is one step ahead in

seeing the transition through. President Xi's accrual of power across the nation's policy-making apparatus has been advanced by the removal of constitutional constraints to the duration of his presidency. Perhaps more substantial than the penetration and perpetuation of Xi's rule is the elevation of his 'thought' in Chinese communist ideology. This lives beyond the grave and is enshrined in the party and state constitutions. 'Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era' acts as a guide for the Chinese Communist Party in the 'new era' of China's global future. It adds to 'Mao Zedong Thought' and 'Deng Xiaoping Theory' in taking China to the next level of governance. Not surprisingly 'Xi Jinping Thought' includes three essential principles: *common human destiny* (discussed above); *new development ideas* that incorporate 'innovative, coordinated, green, open and shared development'; and *coexistence with nature* – 'We must establish and practise the philosophy that lucid waters and lush mountains are invaluable assets, uphold the basic national policy for energy conservation and environmental protection, treat the ecological environment as we treat life, . . . and contribute to global ecological safety' (Xi Jinping quoted in *BBC Monitoring*, 2017).

5.4 CONCLUSION

With the return of Eastern civilizational thought in a contemporary context, a world system mandala may now be conceptualized as a diagram of relationships toward sustainable development. The mandala as a conceptual tool may be regarded as a high-context totality picture, which allows national development and future-oriented policies to be viewed 'in the round', incorporating the religious and spiritual alongside the material and scientific. The mandala is a dynamic process and accords with the Chinese view of change as the underlying principle of the universe, expressed through the alternating interaction of *yin* and *yang*. The traditional Western scientific view tends to concentrate on causal change – or that which we can attempt to control and seek to predict. The new science of complexity is more structured in scientific language than Daoist intuitive thinking but also less mechanistic than the Western model. It has more in common with the pre-Socratic philosopher of change, Heraclitus of Ephesus, who not only made the point that change in the subsystems (water) sustains the higher structure (the river), but also that the unity that manifests in diversity 'rests by changing' (see Guthrie, 1977, Ch. 7). This 'going with the flow', in Daoist terms, permits the paradox of resilience. Complex Adaptive Systems, in its nonlinear treatment of change, provides a bridge between East and West. Awareness of different scientific and cultural perspectives helps in identifying the future contours of sustainable development through an integrative perspective.

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REFERENCES

- AIIB (Asian Infrastructure Investment Bank) (2016) Environmental and Social Framework. February. https://www.aiib.org/en/policies-strategies/_download/environment-framework/20160226043633542.pdf
- BBC Monitoring* (2017) His Own Words: The 14 Principles of 'Xi Jinping Thought'. From China Central TV-1, Beijing, in Mandarin Chinese, 18 October. <https://monitoring.bbc.co.uk/product/c1dmwn4r>

- Beyerchen, A. (1992) Clausewitz, nonlinearity, and the unpredictability of war. *International Security*, **17** (3), 59-90.
- Bhaskar, C. U. (2017). IORA Summit: India's Maritime Opportunity – Analysis, *Eurasia Review*, 18 March. <http://www.eurasiareview.com/18032017-iora-summit-indias-maritime-opportunity-analysis/>
- Clausewitz, C. (1976) M. Howard and P. Paret (Eds. and Trans.) *On War*. Princeton, NJ, Princeton University Press.
- Colchester, J. (2016) Edge of Chaos. *Complexity Academy*. 24 August. <http://complexityacademy.io/edge-of-chaos/>
- Dellios, R. and Ferguson, R. J. (2013) *China's Quest for Global Order: From Peaceful Rise to Harmonious World*. Lanham, MD, Lexington Books.
- (2015) Thinking through Srivijaya: polycentric networks in traditional Southeast Asia. Paper presented at the Second Global South International Relations Conference – *Voices from Outside: Re-shaping International Relations Theory and Practice in an Era of Global Transformation*. Storrs, CN, International Studies Association (ISA). http://works.bepress.com/rosita_dellios/54/
- Ferguson, R. J. and Dellios, R. (2017) *The Politics and Philosophy of Chinese Power: The Timeless and the Timely*. Lanham, MD, Lexington Books.
- Gesick, L. (1983) Introduction. In L. Gesick (Ed.), *Centres, Symbols, and Hierarchies: Essays on the Classical States of Southeast Asia*. Monograph No. 26. New Haven, CN, Yale University Southeast Asia Studies.
- Guthrie, W. K. C. (1977) *History of Greek Philosophy*, 4th ed. Cambridge, Cambridge University Press.
- Lau, D. C. (Trans.) (1963) *Lao Tzu: Tao Te Ching*. Harmondsworth, UK, Penguin Books.
- NDRC (National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the PRC, with State Council authorization) (2015) *Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road*, 1st ed. http://www.fmprc.gov.cn/mfa_eng/topics_665678/xjpcxbayzlt2015nnh/t1249618.shtml
- Neville, R. C. (1988) Between chaos and totalization. In S. H. Liu and R. E. Allison (Eds.), *Harmony and Strife: Contemporary Perspectives, East and West*. Hong Kong, Chinese University Press.
- Peter, C. and Swilling, M. (2014) Linking complexity and sustainability theories: implications for modelling sustainability transitions. *Sustainability*, **6**, 1,594-1,622.
- Shamasastri, R. (Trans.) (1967) *Kautilya's Arthashastra*, 8th ed. Mysore, India, Mysore Printing and Publishing House.
- Sharma, A. (1995) Hinduism. In A. Sharma (Ed.), *Our Religions*. San Francisco, CA, HarperCollins.
- UNDP (2013) *National Human Development Report 2013: Sustainable and Liveable Cities: Towards Ecological Civilization*. With the Institute for Urban and Environmental Studies China. Beijing: China Translation and Publishing Company, August. http://www.cn.undp.org/content/dam/china/docs/Publications/UNDP-CH-HD-Publication-NHDR_2013_EN_final.pdf
- Voinov, A. and Farley, J. (2006). Reconciling Sustainability, Systems Theory and Discounting. *Ecological Economics*, **63**, 104–113.
- WCED (World Commission on Environment and Development) (1987) *Our Common Future*. Oxford and New York, Oxford University Press.

- Wolters, O. W. (1968) Ayudhya and the rearward part of the world. *Journal of the Royal Asiatic Society*, 3 and 4, 166-178.
- (1982) *History, Culture and Religion in Southeast Asian Perspectives*. Singapore, Institute of Southeast Asian Studies.
- Xi. J. (2015a) Towards a community of common destiny and a new future for Asia. Boao Forum for Asia Annual Conference, 28 March, Boao, Hainan Province, China, China.org.cn. http://www.china.org.cn/business/2015-03/29/content_35185720.htm
- (2015b) Carry forward the Bandung spirit for win-win cooperation. Asian-African Summit, Jakarta, 22 April. *Theory China*. http://en.theorychina.org/xsqy_2477/201505/t20150511_322108.shtml
- Xinhua (2005). President Hu makes four-point proposal for building harmonious world. *China View*. 16 September. http://news.xinhuanet.com/english/2005-09/16/content_3496789.htm
- Zhang, D. (2005) E. Ryden (Trans.) *Key Concepts in Chinese Philosophy*, 2nd ed. Beijing, Foreign Languages Press.