Kwansei Gakuin University
Social Sciences Review
Vol.20, 2015
Nishinomiya, Japan

Interfacing Social Innovation and Policy Learning for Sustainable Future?

On-Kwok LAI*

Abstract

Globalization is not just challenging the limited governance capacity of nation states and international governmental organizations (IGO), but also re-activating people's (non-governmental organizations - NGOs) quest for global sustainability. The new media-facilitated critical progressive advocacies have been expanding opportunities for sustainability, with many social agencies–generated, or do-it-yourself, activities to cope with ecological problems. Juxtaposing these mobilizations, there is yet a concerted paralleling force to developing new policy initiatives to interfacing social innovations. This brief examines these initiatives. It has three parts. After outlining the dynamics of the globalization project in new urban theory terms, Part Two examines the initiatives for human existence and biodiversity within a wider context of new (and media-enhanced) global-local scaling of energy resourcing. Part Three discusses socio-political significance of transnational engagements and new development norms for ecological modernization. This brief ends with normative remarks on the project for global sustainability interfacing biodiversity and humanity.

1. Whose Sustainable Future: *Finale* for Whom?

The challenges for steering the course for sustainability in and beyond 21st Century are embedded into the crisis of advanced capitalism, coupled with cosmopolitanism in the informational age. Critical urban theory actively takes on the contradictions of the informational city, conditioned by emerging mega-urban growth ideologies. David Harvey (2009: 17-36) has challenged Immanuel Kant's

* O-K.Lai is professor, School of Policy Studies, Kwansei Gakuin University. Email: oklai@kwansei.ac.jp
Acknowledgement: This brief is derived from an on-going research funded by Kwansei Gakuin University–School of Policy Studies, and the author's affiliation as Honorary Professorship (Social Work & Social Administration) The University of Hong Kong 2000 onwards and Visiting Professorship, United Nations University – Institute of Advanced Studies 2010-2014. Many colleagues provide comments for this study. The normal disclaimers apply.

conception of cosmopolitan law, criticizing it as having dependency upon certain kinds of restrictive geographical thought that implicated what he thought to be the finite qualities of a globe divided into discrete culture-language areas, or territories. In other worlds, the notion of global cosmopolitanism is in question; the variations of the differential, or multiple, modernity are more likely the reality in the advanced informational, digital capitalism in a globalizing world, yet coupled with socio-economic calamities (Jazeel 2011; Rosenau 2003).

Recent global critical social activism responds to the sustainability challenge. In a highly globalizing world, the informational cosmopolitanism is embedded with the diversities and complexity of human civilization in, through and beyond cross-cultural and cross-border exchange-encounters and flowing (Castells & & Himanen 2014; Katz, Ed. 2008). By facilitating and reinforcing various civic progressive networks for the better world (say, the campaigns to end global poverty, global peace movement and sustainable future), vis-à-vis the globalizing economic hegemony shaped by international business and governmental organizations (IMF, World Bank and WTO; G8, G20 and World Economic Forum), transnational advocacies network to create cosmopolitan coalitions of progressive social agencies for sustainable future as the so-called cosmopolitan realpolitik for a better world with new global norms and ethics (Beck & Grande 2010: 435; Halle et al. 2013; Lai 2008, 2011a/b).

To quest for sustainable future in a globalizing risk society in the information age, the cosmopolitan realpolitik as articulated (Beck 1986; Beck & Grande 2010: 436) has the following premises:

- The new historical reality of world risk society is that no nation can master its problems alone; those who play the national card *per se* will inevitably lose.
- Global problems produce new cosmopolitan imperatives which give rise to transnational communities of risk beyond nation state's mitigation.
- International organizations are not merely the continuation of national politics by other means; they can perhaps transform national interests.
- Cosmopolitan realism is also economic realism. It reduces and redistributes costs (profits) because socio-economic costs rise exponentially with the loss of legitimacy.

Hence, the essence of cosmopolitanism is a specific critical engaging approach to ensuring that one's own (individual or collective) interests are promoted and made to prevail. Cosmopolitan realism calls for the respect for one's own and everyone interests, and taking an inclusive normative position for ideals and virtues. In this process of recognizing one's and everyone position – for the pursuit of individual and (compatible to) collective goals, juxtaposing the national and

(serving for the) global ones, interests become 'reflexive national interests' through long term engaging strategies of self-limitation; more precisely, empowerment arises from self-limitation. In reality, however, the path towards a sustainable one is rocky and for cosmopolitan realpolitik, it is full of embedded contradictions. The right approach facing these challenges is a critical re-examination and reflection on the ethics and norms of human civilization on the one hand, and the interfacing of the bio-ecological ethics of the natural world on the other. Hence the future for cosmopolitan realpolitik is still open-ended; all subject to social progressive endeavour (Beck 2010, Beck & Grande 2010; Lai 2011a/c, 2015a).

Strategically, the new cosmopolitanism calls for fresh critical engagements of individuals in global system; thanks to new media of the Internet and the "Clouding of New Media", people can engage in global affairs more than ever – one forgotten dimension of social innovations originated from people around the world can be rejuvenated for participatory actions, in and beyond the cyberspace, with all kind of self-generating media contents (Lai 2008, 2011a/b/c). With sophisticated application of information and communication technologies (ICT) in everyday life – new social media at large, there is an emergence of new cosmopolitanism- driven socio-politicking for the reflexive eco-modernity.

Sharing strong affinities with Doreen Massey's calling for '*geographies of responsibility*', the social agency in geo-politics thesis of Iris M. Young (2003, 2004, 2007) proposed a 'social connection' model in which political responsibility is derived from the ways in which different actors are shaping, as well as being shaped, in structural socio-geo-political processes. The new political responsibility represents a collective practice, articulating social justice with the evaluation of individual conduct and social interaction in a non-reductive way. This alternative is a new model of '*shared responsibility'* between individuals and the communal one in which responsibility is distributed across complex networks of causality and agency (Barnett 2011: 252). Here, the normative challenge for the *World City*, the globalization project at large, is echoing the critiques on global-local inequalities derived from new international division of labour process in advanced capitalism (Harvey 2010).

More specific, the mistaken functional specific land use in cities throughout the last century is doomed to failure! For future, a socio-cultural compatible, small scaling and mixing-up of urban land/space use is the key for sociable, livable cities: people need spaces for socio-economic reciprocities, aiming and achieving socially sustainability. To achieve this, we need both normative appeals and positive logical reasoning, taking into account of multiplicity of urbanity in a globalizing world; say the least is the respect for human needs (social, economic and cultural rights) and biodiversity at large.

Without a significant change from the pro-growth development model as championed by the market-friendly international governmental organizations, like IMF, World Bank and WTO, human civilization will be destined to be genocidal. Perhaps, Karl Marx and Friedrich Engels' characterization on the inherent contradictions of the crisis-ridden capitalism is partially right, as in the context of 21st century, the pro-growth development model is grave-digging: strong population growth in urban centres, along with multiple mobilities, excessive global consumption and rising carbon, -cum- greenhouse gases, emissions… all are destroying human life and ecological worlds (Urry 2010: 192) – yet global climate change is an irreversible destiny: frequent flooding and drought, and (un-)seasonal disasters and catastrophes, plus extreme weather conditions become the norm, with no exception. And the only way for human survival is to mitigate such global crisis in the coming decades, whilst pursuing ecological modernization (http://newsroom.unfccc.int/).

2. Differential Re-Sourcing Green Energy after 2011.3.11

The new *modus operandi* of social innovation and policy learning is emerging; as demonstratively shown in the speeding-up of global media attention on natural and man-made disasters across different geo-political spaces; as cyber-linkages are revolutionary in changing the modes of socio-cultural interactions, global-locally, behavioural repertoires among people in different geographical regions and time zones. The most developmental aspect of the informational age is new media's enabling of multidisciplinary, cross-and-inter-cultural communication – hence policy and practice learning from, with new experience and discoveries. But all these new learning are structurally costing from tragedies of various kinds.

The obvious case is nuclear energy syndrome: the crisis-ridden nuclear power reflects the post-war myths on the de-militarization of the new uranium-isotopic power ("the controlled radiation") by the high-cost and questionably application of nuclear physics and engineering for peaceful use of nuclear power; though once questioned in the Three Mile Island accident (1979) and the Chernobyl disaster (1986). The mythical scientific regime confronting unprecedented risk of nuclear engineering is much under the historically-old (over 25 years) yet critic-analytical delineation on *Risikogelleschft* (*The Risk Society*) by Ulrich Beck (1986).

Haunted by Fukushima crises (2011.3.11) and global financial crises (since late 2008); driving continued insecurity upon global development, there is irreversible trend and consensus towards alternative, clean, new and alternative energy re-sourcing (IEA 2015). Recent updates (REN 21, 2015: 6) confirm the trend for renewable re-sourcing that

- renewable energy provided an estimated 19.1% of global final energy consumption in 2013, and growth in capacity and generation continued to expand in 2014;
- the most rapid growth, and the largest increase in capacity, occurred in the power sector, led by wind, solar PV, and hydropower;
- renewable energy accounted for approximately 58.5% of net additions to global power capacity in 2014, with significant growth in all regions. Wind, solar PV, and hydro power dominated the market. And they comprised an estimated 27.7% of the world's power generating capacity, enough to supply an estimated 22.8% of global electricity.

Against economic uncertainty, technological challenge and business inertia, the European Union built more renewable energy capacity in 2011 than ever before, and the new clean energy sector accounted for more than half of all newly installed electric capacity in the region (since 2007) – more than 71% of total additions. At the global level, renewable energy continues to grow strongly in all end-use sectors—power, heating and cooling, as well as transport—and supplied an estimated 17% of global final energy consumption; for instance, in 2011, about half of the new electricity capacity installed worldwide was renewable based (REN 21, 2012: 7).

Historically, power generation policies are the most strategic-effective move for energy-paradigmatic shift: Feed-in-tariffs (FITs) and renewable portfolio standards (RPS) are the most commonly used policies in this sector. FIT policies were in place in at least 65 countries and 27 states by early 2012. While a number of new FITs were enacted, most related policy activities involved revisions to existing laws, at times under controversy and involving legal disputes. Quotas or Renewable Portfolio Standards (RPS) were in use in 18 countries and at least 53 other jurisdictions, with two new countries having enacted such policies in 2011 and early 2012. (REN 21, 2012:14).

In response to the re-sourcing problem of, and for renewable, energy after the 3.11 disasters, Japanese government adopted a new law for renewable energy re-sourcing (Lai 2015a); this is in line with the related initiatives to promote sustainable power supplies.

But for Japan, the 3.11-disasters reveal the paradigmatic puzzles: the realism of the poverty of high-tech based new energy sourcing at the post WWII (1950s-80s) and at the turn of the new millennium (2000-2011). The likely ending of nuclear power in Japan in some sense is not as accidental one as it is thought due solely to 3.11 disasters, but it is embedded in the exponential growth of risks in large scale (speculative) high-tech system deriving from nuclear technology (for

weaponry to kill?). Paradoxically against the sudden-death of nuclear energy in Japan, Japanese government through its bilateral aids and technology transfer initiatives, in addition to trading supports, Japanese nuclear power plant builders, like Toshiba, Hitachi and Mitsubishi Heavy Industries are still being commissioned to develop nuclear power plants overseas, particularly in ASEAN countries: Indonesia, Malaysia, Thailand, and Vietnam.

Yet the pro-active energy policy should be stressed here. Japan's partial shift away from nuclear energy, with more energy re-sourcing for the renewable ones, is not unique; as it is in line with major initiatives recently by the United Nations' *Sustainable Energy for All* (SE4ALL) initiative (http://www.se4all.org/) – calling for a global target of doubling the share of renewable energy by 2030, along with targets and to ensure universal access to modern energy and to double the rate of energy efficiency (SE4ALL 2014, 2015).

More strategic for future sustainable development, it is the emerging industrializing economies (e.g., the BRICS: Brazil, Russia, India, China, South Africa) which have strong dynamism to shape global development (SE4ALL 2014, 2015). The state policies for renewable future continue to be a driving force in shaping markets for renewable energy, despite some setbacks resulting from a lack of long-term policy certainty and stability in many countries: at least 118 countries (more than half of which are developing countries) had renewable energy targets in place by early 2012 - up from 109 as of early 2010. (REN 21, 2012:14).

But more problematic, there are more words than actions for governing global-and-local re-sourcing for renewable energy. Global energy system has not been considered as global governance issue, if compared with health, peacekeeping and environment – the pursuit for global energy governance has been almost a taboo in political and foreign policy circles (Karlsson-Vinkhuyzen, et al. 2012). Alternatively, there is urgency for such a transformation for strong and coherent governance at all political levels at global-and-local scales (SE4ALL 2014, 2015); but the Rio+20 (and the post-Kyoto Climate Change policy) alone could not provide a roadmap for sustainable energy future which requires a revolution in the energy system (Halle et al. 2013; Lai 2015a).

3. Global Consensus for Ecological (-Crisis) Modernization?

History of consensus building for sustainable development shows the half success of most global initiatives. In spite of many United Nations' conferences so far in 21st Century: up to October 2015 – before the Climate Change Paris COP21 Conference, global initiatives for sustainability have not been strategic nor demonstratively policy-enforceable, especially in nurturing global greenhouse gases emission limits after the Kyoto Protocol, nor enhancing biodiversity and

sustainable development. For instance, the UN Climate Change Summit in Copenhagen (COP15; 7-18.December 2009) disappointed not just environmentalists and political leaders, but developing worlds at large, by failing to produce a legally binding treaty on reducing greenhouse gas, carbon dioxide (CO_2). Seemingly, it is also a double-failure of the United Nations' initiatives on Climate Change for the related initiatives since 2010 (http://unfcc.int); the *modus operandi* is more meetings after one meeting, more flexible yet indeterminate declarations:

- **2011** — The Durban Platform for Enhanced Action at COP17: Governments clearly recognized the need to draw up the blueprint for a fresh universal, legal agreement to deal with climate change beyond 2020.
- **2012** – The Doha Amendment to the Kyoto Protocol is adopted at CMP8: new commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 1 January 2013 to 31 December 2020; a revised list of greenhouse gases to be reported on by Parties in the second commitment period.
- **2013** – The Warsaw COP19/CMP9 include further advancing the Durban Platform, the Green Climate Fund and Long-Term Finance, the Warsaw Framework for REDD Plus and the Warsaw International Mechanism for Loss and Damage.
- **2014** –The Lima COP20 Meeting agreed the ground rules and terms on how all countries can submit contributions to the new agreement to be concluded in November 2015 Paris COP21. These Intended Nationally Determined Contributions (INDCs) will form the foundation for climate action post 2020 when the new agreement is set to come into effect.

Since the post-Copenhagen preparative meetings for United Nations Framework Convention on Climate Change (UNFCCC), the search for new adaptation measure for post-Kyoto Protocol has been repeatedly toning down for a "flexible" and "comprising" approach for achieving something just for non-legally binding agreement for Cancun (Mexico) Climate Change Summit (COP16), 29.November to 10.December 2010 beyond – while the next hope will be another series of talks for Climate Change Conference COP21 in Paris November 2015 ... But before that, the real question is still open: how to contain the +2 degree Celsius without concrete target and binding agreement; or just another round and series of talk?

Similarly, the "soft-targeting" biodiversity development without strong sanctioning – incentive mechanism is the key policy achievement (?) for the CBD (COP10) in Nagoya October 2010. Yet, the CBD is a compromised form for the

contradictions between economic developmentalism and biodiversity: though it argues that functional aspects of bio-localism need to be strengthened. But the question of how to pursue for biodiversity (the nation states' commitment in terms of policy and concrete targets) for sustainable development is still open.

Perhaps more and more global summits (2010 Nagoya Convention on Biodiversity and Rio+20 in 2012, waiting for more meetings after another apocalyptic disaster?) are needed prior to real consensus building and formation of the global will for the (dying?) human species and for ecological urban-modernization. But we are running out of time! Obviously there is urgency for transparent communication and honest commitment for all involving nation states for real policy change!

Climate change is especially intertwining with a global-regional-local energy crisis, with the excess use of, and dependency on, the carbon emission fossil fuels; but it is exacerbated by the under-investment and development for renewable energy (UNEP & WTO 2009). The inertia and predicaments against "the global solution for global problem" are ironically demonstrated by apathetic participation of the emerging economies, like the BRICS and the once reluctant participant for global governance for climate change, U.S.A. Here, the role of BRICS is particularly critical in shaping global warming that since 2007, the BRICS countries, representing one-fourth of the world GDP, have contributed to over 30% of global energy use and 33% of CO_2 emissions from fuel combustion (IEA 2009a/b; Olivier & Peters 2010). At the very least, they are the growth engines, requiring more energy, emitting more greenhouse gas, for (or destroying?) global development in the past last decade, now the future.

Perhaps the 3.11 disasters have never been learnt by Japanese business, trading and diplomatic communities once the risks and disasters are externalized territorially and for export-oriented growth they are still exporting nuclear technologies overseas; juxtaposing strong competition between / among rival nation states in East Asia: hyper-industrializing giants of South Korea and China, geo-political position of newly energizing Russia and the unpredictable solo communist North Korea.

Obviously, the contradictions and risks on nuclear power development will have security ramifications and geo-political consequences (- it is not an if question, but) when another nuclear fall-out occurs in those hosting (less developed) counties – like Japanese 3.11 history, multiple disasters are in waiting…. And nuclear power in the geo-politics of energy re-sourcing will not be withering away, but be more problematic for human survival in future!

For policy learning and consensus building for sustainability, digital capitalism as a global corporate-led market system therefore is problematic. The

present form of informatization of people's work and societal (virtual) encounters has reinforced a divided as well as a dual society: the informational-based informal economy is juxtaposed with a down-graded labour-based informal economy resulting in a spatial structure; a city which combines segregation, diversity, and hierarchy. ICT enhance flexible production to create more wealth and global economic activities. Yet far from developing an equitable and better society, our ICT-driven post-material society has produced more social disasters (gaps and divisions among communities, countries, and regions) in the period 1980–2010s than ever before. But there are protests and social mobilizations against the globalization project (Lai 2011a/b/c).

The timely critical issue is how global communities manage hyper-modernization and mega urbanization with clean and renewable energy, with less carbon footprints or neutrality, during climate change crisis – some form of smart city with sustainable energy re-sourcing locally is urgently required. In other words, the paradigmatic shift requires more than technological change *per se*; normative-ethical questions and ethical choices to foster the shift towards ecological modernity are deemed urgent necessary (IEA 2015; SE4ALL 2014, 2015).

Obviously, the contradictions and mitigating strategies require good guardianship. We should be reminded that too much of the concept of "green politics" castrates sustainability. It ignores the fact that sustainability guardianship is precisely not about climate but about transforming the basic concepts and institutions of industrial nation-state's modernity – the calling is for a transformation of our life world (Beck 2010: 256; SE4LL 2015). Hence, the new worldview for sustainability is a fundamental shift for the greening of economy and society - reflexive ecological modernization for global-cum-local sustainability!

4. People's Initiatives and Policy Learning for Sustainability

For humanity, global population dynamics will have strong implication for sustainable development. Regional ageing for the developed economies and hyper-modernization for the emerging economies should not be neglected (WHO 2015). Mega-urbanization means more than two-thirds of the global population will be living in cities by 2050. Historically, cities create not just opportunities-driven hope but also concentrate health hazards and risks. The ultra-rapid urban growth has created enormous challenges – this can be shown in the rapidly developing urban problems in the BRICS cities; China's 30-year hyper-modernization-driven mega-urbanization is phenomenal: over 50% of its population now reside in cities (Lai 2015b).. Good urban governance is a must for coping urbanization crises, say the least is the swelling number of slum-dwellers

(more than 800 million people in 2012), mostly in developing economies (WHO 2012). There is urgent need for slum improvement for better health with universal access to clean water, food, energy and basic utilities (SE4LL 2015; UN 2015).

The questionably ecologically-unsound modern lifestyle(s), in terms of the excess of production, consumption and exchange, has been charting the course of unsustainable development; over production-consumption -cum- wastage of energy is part of the syndrome. Modern lifestyle is much shaped by its gifted energy foundation. Historically, nuclear energy was once (for a few decades) considered as safe, reliable and sustainable energy source; but the 2011.3.11 Fukushima disasters (earthquake, tsunami and nuclear power plant "accidents") redefine what is (not) sustainable (re-)sourcing of energy and human destiny, as in the repeatedly apocalyptic terms after Three Miles Island (1978) and Chernobyl (1986).

The unmanageable risks of nuclear power are crisis-driven therefore Germany planned to decommission all nuclear power plants by 2022 and Japan, likely by 2040. Similarly, there is a new call for, or the rejuvenation of, the less-energy -cum- carbon neutral lifestyle, represented by the LOHAS (lifestyle of health and sustainability) movement. International agencies' initiatives under the framework of the United Nations and the European Union are becoming important, perhaps as the last resort. Hence, the greening of market may attribute to individuals' commitment to *Save the World*, *Think Globally and Act Locally*, for individual's health and quality of life for LOHAS. The new global green mainstreaming for sustainability has been shaping society and market significantly (Emerich 2011, Lai 2011c, 2014).

Globally, the rise of new media of e-learning reflects the instrumental role of ICT in a free global market is crucial – 'digital capitalism', the condition where ICT networks are directly generalizing socio-cultural range of the global (and local) capitalist economy as never before (Harvey 2010). Economic forces also free to physically transcend territorial boundaries and, more importantly, to take economic advantage of the sudden absence of geopolitical constraints (Castells & Himanen 2014; Rosenau 2003). Our deliberation highlights the emerging cosmopolitanism in the information age, focusing on the new initiatives and networks for global-local sustainability. Enhanced by new media (mobile communications, Internet, etc.), NGOs' critical e-mobilizations at various geo-political forums have been redefining international norms for global governance on sustainability: IGOs have been forced to make policy adjustments or concessions, resulting in new IGO-NGO policy regime for consultative consensus building(?) for people's survival.

With new media-enhanced participatory regime for global governance for sustainable development, eco-friendly initiatives therefore are part of such new learning; bring back those socio-economic green practices for sustainability, with reference to good culture, ethics, traditions and wisdoms for preserving human resilience and ecological vitalities (Macer, et al. 2012; Lai 2011c). For the future, the challenges for cross (or multi-) disciplinary, cultural and temporal-spatial communicative (re-)learning in both cyberspace and the real world, quest for not just new skills for adaptation in audio-visual interactive revolution, but also the communicative capacity building for individual learner to cope with exponential growth of, questionably conflicting, 'green' information and knowledge.

Epitomizing by the free flows of capital, goods and labors as championed by international governmental organizations (IGOs) like IMF and WTO, the last few decades' globalization project (in advanced capitalism at large) has its destructive impacts both to making people's livelihood worse and making ecology unstainable; climate change is one of the apocalyptic syndrome. The crisis-ridden global capitalism has its inherent contradictions. Far from benign that fosters better economic benefits for all, the unbridled capitalism leads to the exploitation of the weak and to socio-ecological degradation, and engendering xenophobia and the demise of local people's jobs and culture. The globalizing mobility processes have been not just indeed affecting, if not polarizing, people's socio-economic lives; but also shaping the Earth's unstainable destiny toward humanity's genocide as apocalypse.

Indeed, there are many issues to be raised for pursuing sustainable course of actions beyond ecological modernization frontiers. This is a challenge for all stakeholders to strive for, lately the 2015 September adopted United Nations »*2030 Agenda for Sustainable Development*«, aiming to achieve 17 Sustainable Development Goals and 169 targets (UN 2015). The demonstrated large scale and strong ambition for this new universal Agenda are unprecedented, more even so for the challenges of transnational and cross-cultural policy learning and praxis transfer, juxtaposing the related social innovations. All these prompt actions are though imminent; need to be coupled with the socio-political will, to effectively facilitate the greening economy and socio-equitable fair development, and fostering the unique and highly differential ecological-reflexive modernization process. Given the closing-in of the window of opportunity, and the limited time frame available, socio-economic ecological miracle is less likely, humanity is now at best on the rocky and winding path to global-local sustainability!

Reference

Beck, Ulrich (1986) Risikogesellschaft – Auf *dem Weg in eine andere Moderne*. Frankfurt/M: Suhrkamp.

Beck, Ulrich (2010). Climate for Change, or How to Create a Green Modernity? *Theory, Culture & Society.* 27(2-3): 254-266.

Beck, Ulrich & Edgar Grande (2010). Varieties of Second Modernity: the Cosmopolitan Turn in Social and Political Theory and Research. *British Journal of Sociology*, 61(3): 409-443.

Barnett, Clive (2011). Geography and Ethics: Justice Unbound. *Progress in Human Geography.* 35(2): 246-255.

Emerich, Monica M. (2011). *The Gospel of Sustainability: Media, Market and LOHAS*. Champaign, IL: University of Illinois Press.

Castells, Manuel & Pekka Himanen (Eds. 2014). *Reconceptualizing Development in the Global Information Age*. Oxford: Oxford University Press.

Halle, M., Najam, A. & C.Beaton (2013). *The Future of Sustainable Development: Rethinking sustainable development after Rio+20and implications for UNEP*. Winnipeg: IISD.

Harvey, David (2009). *Cosmopolitanism and the Geographies of Freedom*. New York: Columbia University Press.

Harvey, David (2010). *The Enigma of Capital and the Crises of Capitalism*. Oxford. OUP.

International Energy Agency (IEA, 2009a). *World Energy Outlook 2009*. Paris: IEA.

International Energy Agency (IEA 2009b). *CO_2 Emissions from Fuel Combustion – Highlights 2009*. Paris: IEA.

International Energy Agency (IEA 2012). *World Energy Outlook 2012*. Paris: IEA.

International Energy Agency (IEA 2015). *Renewable Energy: Mid-Term Market Report*. October 2015. Paris: IEA.

Jazeel, Tariq (2011). Spatializing Difference beyond Cosmopolitanism: Rethinking Planetary Futures. *Theory, Culture & Society.* 28(5): 75-97.

Karlsson-Vinkhuyzen, S. I., N. Jollands & L. Staudt (2012). Global Governance for Sustainable Energy: The Contribution of a Global Public Goods Approach. *Ecological Economics*, 83:11-18.

Katz, James E. (Ed., 2008). *Handbook of Mobile Communication Studies*, Cambridge, MA: MIT Press

Lai, On-Kwok (2008). Rediscovering Kosmopolis in the Cyber-Information Age? Social Agencies and Activism in their Geo-Historical Place, In: Rebecka Lettevall and My Klockar Linder (Eds. 2008). *The Idea of Kosmopolis. History,*

Philosophy, Politic of World Citizenship. Huddinge: Södertörn University College. pp.121-142.

Lai, On-Kwok (2011a). Critical Engagements of NGOs for Global Human Rights Protection. *International Journal of Social Quality*, 1(2, Winter 2011): 5-18.

Lai, On-Kwok (2011b). Kulturimperialismus, Staatsmacht und Buergeractivismus im Internet und Asserhalb: Asiensschwellenlaender im Vergleich, in Bernd Hamm & Russell Smandych (Hrsg. 2011) *Kulturimperialismus. Wie unsere Koepfe „koloniseriert werden"*, Berlin: Kai Homilius Verlag. pp.219-245.

Lai, On-Kwok (2011c). Synergizing Socio-Technological Innovations in Risk Society? *Kwansei Gakuin University – Social Sciences Review*, 16: 16-36.

Lai, On-Kwok (2014). Human Rights for All in the (Anti-)Globalization Project @ New Media Spaces? *Kwansei Gakuin University (KGU), Social Sciences Review*, 2014 (19): 9-24.

Lai, On-Kwok (2015a). Humanity in Sustainable Development with (Anti-)Globalization? *Journal of Policy Studies*, 2015 (50): 31-43.

Lai, On-Kwok (2015b). Housing Questions in Hyper-Modernizing (Post-) Socialist China; in B.Aldrich & R.Sandhu (2015). *Housing for the Urban Poor in Developing Countries*. Jaipur: Rawat Publication.

Macer, Darryl, et.al (2012). *Ethics of Nuclear Energy Technology*. Report of UNESCO-Bangkok: http://www.unescobkk.org/fileadmin/user_upload/shs/Energyethics/ECCAPWG12rpt4.pdf

Olivier, J.G.J. & Peters, J.A.H.W. (2010). *No Growth in Total Global CO_2 Emissions in 2009*. Report of PBL (Netherlands Environmental Assessment Agency), Den Hague: PBL. http://www.rivm.nl/bibliotheek/rapporten/500212001.pdf

Renewable Energy Policy Network for 21st Century (REN 21, 2012). *Renewables 2012: Global Status Report*. REN 21: http://www.ren21.net/default.aspx?tabid=5434

Renewable Energy Policy Network for 21st Century (REN 21, 2015). *Renewables 2012: Global Status Report*. REN 21: http://www.ren21.net/wp-content/uploads/2015/07/GSR2015_KeyFindings_lowres.pdf

Rosenau, James N. (2003). *Distant Proximities: Dynamics beyond Globalization*. Princeton, NJ: Princeton University Press.

United Nations (UN 2015). *The 2030 Sustainable Development Agenda*. New York: UN. https://sustainabledevelopment.un.org/post2015/transformingourworld

United Nations Environment Programme and Word Trade Organization (UNEP & WTO, 2009). *Trade and Climate Change: WTO and UNEP Joint Report*. Geneva: WTO.

United Nations, Sustainable Energy for All (SE4ALL, 2014). *Sustainable Energy for All, 2014 Annual Report.* http://www.se4all.org/wp-content/uploads/2015/05/SE4ALL_2014_annual_report_final.pdf

United Nations, Sustainable Energy for All (SE4ALL, 2015). *Progress towards Sustainable Energy 2015: Global Tracking Framework Report*. http://www.se4all.org/wp-content/uploads/2013/09/GTF-2105-Full-Report.pdf

Urry, John (2010). Consuming the Planet to Excess. *Thoery, Culture & Society*. 27(2-3): 191-212.

World Health Organization (WHO 2012). *Measuring Health Gains from Sustainable Development*. Geneva: WHO. http://www.who.int/hia/green_economy/en/index.html

World Health Organization (WHO 2015). *World Report on Ageing and Health*. WHO: http://apps.who.int/iris/bitstream/10665/186463/1/9789240694811_eng.pdf?ua=1

Young Iris M. (2003) From Guilt to Solidarity: Sweatshops and Political Responsibility. *Dissent.* 50(2): 39–44.

Young Iris M (2004) Responsibility and Global labor justice. *Journal of Political Philosophy*. 12(4): 365–388.

Young Iris M. (2007). *Global Challenges: War, Selfdetermination and Responsibility*. Cambridge: Polity Press.