

## Cultural Change and Fourth Sustainable Revolution

Úrsula Oswald Spring, CRIM-UNAM, Mexico and Hans Günter Brauch, AFES-PRESS, Germany

Excellencies, ladies and gentlemen,

I am grateful to our host, Dr. Jean-Marc Coicaud, and to Ms. Portia Gama for organizing this book launch. I thank the panellists for your comments on this third volume of the *Global Environmental and Human Security Handbook for the Anthropocene*. Why a fourth sustainable Revolution?

### 1. Introduction

The global and systemic crisis with a financial-economic debacle and a rescue operation that required a bailout of more 27 trillions of US\$ since autumn of 2008; an estimated population growth up to 9 billion people by the year 2050, an increase of the temperature due to anthropogenic induced climate change between 1.1 to 6.4° C by the year 2100; an urbanization and slum development, where soon over half of world population are living in cities and demanding employment, basic services and livelihood, may push and maintain 4 to 5 billion people into poverty. Furthermore, the environmental deterioration with an enormous bio-debt in almost all countries, the loss of water security (1.1 billion are without safe drinking water and 2.4 billion people are without sanitation facilities; Oswald Spring/Brauch, 2009); the food insecurity characterized by billions of overweighted persons and more than one billion of hungry people, are creating food and health threats (Oswald Spring, 2009, 2010). As a result modern diseases cohabit with traditional ones, where still 90% of all illnesses are related to unsafe water and vectors.

The second increase of basic food items and oil prices in three years have produced hunger and political riots and the climate change threats are triggering the survival of poor people in developing countries. Environmental degradation is now in most developing countries of such a magnitude that it is threatening the sustainability of ecosystem services and thus the survival of human beings. Deforestation, desertification, soil and water over-exploitation, combined with air pollution are undermining the caring capacity of the natural supporting systems that nature and humankind depend on. Together with population growth and changes of consumption patterns, it has also increased the competition for renewable yet scarce resources. Further high population growth in rural area and among slum dwellers are threatening the insufficient land availability, where shortage is additionally aggravated by unequal land distribution and private speculation on the best land.

In synthesis, the dominant cornucopian vision related to business-as-usual has brought Earth and society to an environmental, financial, and food crisis with the loss of values and new, often unknown risks. The present critical situation needs a global transformation of civilization including a change in culture of consumptive patterns, different world view and mindset in political relation, an alternative vision of policy and a paradigm shift for sustainable peace with inclusive development.

Thus, the Fourth Sustainable Revolution propose radical changes in the four key elements of peace, security, development and environment, including deep transformations in the daily habits, beliefs and social representations, but also in the power structures at the international, national, and local level. This Fourth Sustainable Revolution goes further than the former agricultural, industrial and the technological-communication revolutions and believes in the unity of humankind anchored in solidarity and compassion with nature and human beings.

## 2. Towards a Fourth Sustainable Revolution

A desirable future within the frame of a Fourth Sustainable Revolution (FSR)<sup>1</sup> is a process that involves first a transdisciplinary approach where humanitarian knowledge (history, anthropology, psychology, indigenous understanding of Earth and humanity), combines with Earth sciences (ecology, hydrology, meteorology, biology, environmental engineering) hard and social sciences (physics, mathematics, computer, modeling, architecture, sociology, demography, geography, etc.). Second, it requires that all sectors of society (government, business community and organized society) are invited to collaborate for the consolidation of the cultural transformation, where all nations, races, genders, age groups and social classes are contributing to a socially and culturally diversified process of change, that is adapting to the combined interest of citizens of the world and the requirement of the ecosystem and the biodiversity. This Fourth Sustainable Revolution signifies therefore a change of civilization, where the key element is a cultural change from the existing occidental dominant worldview and economic prevalence to a sustainable and diverse understanding of living together with respect for nature and tolerance for other behavior.

### 2.1 Culture and Cosmvision

Culture is understood as a globally organized way of life based on values, norms, beliefs, institutions and productive processes including the development of science and technology. It is transmitted from generation to generation by formal and informal learning processes, which includes acculturation and enculturation processes. Culture is therefore not based on natural laws, but is socially constructed, thus interests are created and maintained and thus reinforce the present structures of power and mechanisms of control, creating the threats for the survival of humankind and nature due that culture is deeply internalized and for that reason is perceived by most people as natural or given for ever.

Critical studies analyzed the perception and the cognition processes that legitimized the deep and often unconscious structures of beliefs and behaviors. These reflections permitted also to understand the complex relation between the natural and the human systems, their interdependency, but also the progressive destruction of the natural system by an irrational human exploitation and concentration of wealth. Therefore, individual and social actors, institutions, regimes and worldview require a fundamental change of the present cultural processes, where the cornucopian view does not permit the survival of the complex bio-human system. Thus this radical cultural change is related to changes in the anthropogenically dominated worldview and to return to a dynamic understanding of the complex interrelations between nature and humankind, where boundary processes between different disciplines, but also between the natural and the human system must be analyzed.

### 2.2 Worldview

The term worldview refers to a world perception, ideas and some beliefs through which people interpret the world and interact with it. Palmer (1996: 114) includes a cognitive orientation of a society, its values, emotions, and ethics and Aerts et al. (1994) comprise seven elements: 1. an *ontology* (descriptive world model); 2. an *explanation*; 3. a *futureology*; 4. *values*; 5. a *praxeology* or a theory of action on how we should attain our goals; 6. an *epistemology*, or a theory of knowledge

---

<sup>1</sup> The first revolution was the *Agricultural*: 7,000-10,000 years ago, with the establishment of human settlements during the period of the Holocene; the second revolution was the *Industrial*: from 1750, where a process of urbanization started with a massive use of fossil energy, bringing Earth to its limits; the third revolution is the *Technological-Communicative*: from 1950 or after the II World War it brought the globalization process, the global environmental change and the present phase of Earth history called the Anthropocene. The proposed forth revolution, the *Green Sustainable*: must start as soon as possible but not later than 2020 to avoid dangerous tipping points in natural and human systems.

on what is true and false; and 7. an *etiology* or a constructed worldview with an account of its own building blocks, origins and construction.

The prevailing Hobbesian mindset of the political and military elites applies power concepts, strategic rationales and military instruments (armed forces, weapons, intelligence) for dealing with a new and fundamentally different security danger that it is not any longer ‘them’ (China, India, Russia, Brazil, South Africa, the developing countries and the new rapidly rising GHG emitters) that poses the threat but ‘us’ due to our fuel-intensive mode of production and consumption patterns where the externality of the costs have been ignored far too long (Booth, 2007, 1987, 1979).

While from the perspective of major industrialized countries no prize was too high to bailout the consequences of the global financial crises since 2008, at COP 16 in Cancun, many of those countries that referred to climate change as a major new threat to international security (UK in the Security Council in 2007) were neither ready and willing to treat climate change as an issue of utmost importance nor to commit even less than one per cent of their bailout costs for a global fund to assist developing countries in coping with the impacts of global climate change.

From the alternative worldview both scientists and policy-makers have repeatedly declared to shift towards a sustainable development. However, the shift was not able to overcome a declaratory policy during the past two decades and an *Earth Systems Science* (ESS) requires fundamental human changes moving towards a new paradigm for global sustainability. The fundamental change is related to a decarbonization, renewables (Girardet/Mendonca, 2009) and dematerialization of the economy. In political terms, a more cooperative and multilateral world is needed to translate the sustainability goals into concrete actions.

### **2.3. Mindset**

The mental attitude and predetermined personal and public responses are limiting the deep understanding of the present crisis and the global interrelation between environmental, economic, social, political and cultural crises. Some of these obstacles are due to traditional human practices and experiences, to the knowledge and preferences that have influenced, framed and often determined the worldviews and mindsets of the elites, of the media and of social, economic and political institutions that have inhibited socio-environmental learning and respect for nature and human beings. Some of these deeply rooted determining factors may have been influenced by religious beliefs, patriarchal patterns and the market-based capitalist system that is primarily driven by a profit motive and less by a sense of societal and global obligations to the Earth System or – in belief terms to ‘creation’. The existing power relations are deeply embedded within the patriarchal system of human relation, often supported by religious beliefs.

The mindset includes a fixed mental attitude or ‘cultural lenses’ (Fisher 1988, 1997) that filter our view of and reaction to the world. The over-coming of these deeply engrained constraints cannot be solved by convenient technical fixes, but requires much deeper and radical changes in our own aspirations and consumption patterns and those of civil society, the business community, and finally also those of our governments and international organizations.

### **2.4 Participative Governance**

Without any doubt the ‘Fourth Sustainable Revolution’ requires a new policy setting with a participative governance, where “the complex of formal and informal institutions, mechanisms, relationships, and processes between and among states, markets, citizens and organizations, both inter- and non-governmental, through which collective interests on the global plane are articulated, rights and obligations are established, and differences are mediated” (Weiss and Thakur, 2010).

Among the major shortcomings of national systems, structures and processes of governance there are several structural impediment such a the competition and a lack of horizontal coordination among ministries in this policy field; the lack of information, training and competence; the dominance of short-term reactive over long-term proactive strategies and policies; missing longer-term visions, commitments and planning; mismanagement and corruption and short-term, narrow and selfish economic, political, military and social interests and desires where the environmental consequences and costs have been ignored for far too long.

On the international level a weak multilateralism prevails with an anarchic inefficiency of international organizations, due to its bureaucratic structure of decision making and the concern with maintaining national sovereignty and control, which has already been fundamentally eroded by globalization processes and by the activities of multinational corporations and uncontrolled financial flows. Finally, the power of some multinational enterprises with bigger financial flows than most of the developing countries together has reinforced their narrow individual interests often related to the military, oil and chemical industry. The prevailing worldview of the elites and people, often manipulated by the mass media, and also the mindsets of policy-makers and their advisers must drastically change (Giddens, 2009).

### **3. Some Conclusive Ideas of Agenda Setting: From Knowledge to Action**

Thus, the Fourth Sustainable Revolution has to overcome several obstacles such as the mental short-comings and the governance deficits to efficiently cope with the physical and security impacts of global climate change. The first systemic obstacle is immerse in the patriarchal culture, consolidated for more than 5,000 years, the prevailing Hobbesian mindset of the political and military elites applies power concepts, the mindset of wasteful consumption patterns where the externality of the costs have been ignored far too long. To transform the deep rooted cultural processes an alternative vision is required going beyond the adaptive strategies guided by business-as-usual considerations and reactive behavior to disasters and conflicts. To reach the goal of a global average increase of temperature of 2°C by the end of this century, enhanced energy efficiency, a shift towards renewables and a gradual dematerialization and decarbonization of the economy (De Buen, 2007; Edenhofer et al., 2009) together with the recovery and restoration of ecosystems are crucial. Stern (2006, 2009) indicated that proactive policies will in the long run be cheaper and less violent and can avoid major humanitarian tragedies and complex emergencies the Earth and global politics may increasingly face during this century.

In synthesis, the Fourth Sustainable Revolution proposes radical changes in four key elements: peace, security, development and environment, including deeply transformations in the daily habits, beliefs and social representations, but also in the power structures at the international, national and local level.

With regard to governance processes the Fourth Sustainable Revolution after the agricultural, industrial, and communication revolutions is a huge undertaking where human interventions and changes are necessary to avoid the deep changes in the Earth System with inescapable consequences. The symbiosis of strategies for sustainable development with sustainable peace as two goals of a new peace policy for the early 21<sup>st</sup> century requires to move from understanding and facing these new security issues to concrete political, economic and societal strategies, specific policies and measures for coping with these new security dangers.

The notion of a *sustainable peace* combines peace with sustainable development and implies the institutionalization of participatory processes (Heinberg, 2004; Oswald Spring 2008) to provide civil and political rights for all peoples and a process of peaceful negotiation of conflictive resource access with preventive elements; peace-building processes and the consolidation of a culture of sustainable peace (Brauch/Oswald Spring, 2009).

Therefore, the Fourth Sustainable Revolution includes changes in material and immaterial processes, beliefs and in behavior, including power relations and control mechanisms. Human beings are part of the Earth System and not their owners. Climate change poses primarily challenges for human and international security that can only be overcome by human ingenuity and the recovery of the natural processes. Therefore, a radical Fourth Sustainable Revolution is a decentralized civilization process, where the cultural background of the dominant worldview, the imposed mindset and the political structures must be transformed in favor of a sustainable development with sustainable peace. Indigenous and traditional societies were able to maintain during thousand of years the equilibrium with Earth. Population growth, greater demands of natural resources and environmental services have substantially changed the conditions of Earth. Sciences has shown that the existing resources are sufficient to offer every human being dignified live conditions, but excess and concentration of wealth must be redistributed in favor of humans with less access and for Mother Earth. She will be able in the future to care, provide, mitigate and renovate the environmental services, if humans are able to work in a culturally diverse and environmental protective way with her.

## References

- Aerts, Diederick; Apostel, Leo; De Moor, Bart; Hellemans, Staf; Maex, Edel; Van Belle, Hubert; Van der Veken, Jan, 1994: *World views. From Fragmentation to Integration* (Amsterdam: VUB Press).
- Althusser, Louis, 1971: "Ideology and Ideological State Apparatuses", in L. Althusser (Ed.), *Lenin and Philosophy and other Essays* (New York: Monthly Review Press).
- Aripze, Lourdes, 2009: *El Patrimonio Cultural Inmaterial de México. Ritos y Festividades* (México City: Chamber of Deputee, CNCA, CRIM-UNAM, M.Á. Porrúa).
- Aripze, Lourdes, 2004: *Los Retos de la Antropología en México* (Mexico: CRIM-UNAM/M.A. Porrúa).
- Asian and Pacific Islander American Health Forum (APIAHF), 2010: "Lifetime spiral of gender violence" in : [http://www.apiahf.org/images/stories/Documents/publications\\_database/dv\\_lifetime\\_spiral\\_handout.pdf](http://www.apiahf.org/images/stories/Documents/publications_database/dv_lifetime_spiral_handout.pdf).
- Biermann, Frank; Betsill, Michele M.; Gupta, Joyeeta; Kanie, Norichika; Lebel, Louis; Liverman, Diana; Schroeder, Heike; Siebenhüner, Bernd, 2009: *Earth System Governance - People, Places, and the Planet Science and Implementation Plan of the Earth System Governance Project*. Earth System Governance Project Report No. 1 (Bonn: IHDP); at: [http://www.earthsystemgovernance.org/publications/2009/Earth-System-Governance\\_Science-Plan.pdf](http://www.earthsystemgovernance.org/publications/2009/Earth-System-Governance_Science-Plan.pdf).
- Blazquez Graf, Norma, Fátima Flores Palacios and Maribel Ríos Everardo (Eds.) 2010: *Investigación Feminista. Epistemología, Metodología y Representaciones Sociales* (Mexico: UNAM-CEIICH, CRIM, Fac. Psicología).
- Boas, Franz, 1940 [1932]: "The Aims of Anthropological Research", in: Stocking, George (Ed.): *Race, Language and Culture* (Chicago: University of Chicago Press).
- Booth, Ken, 2007: *Theory of World Security* (Cambridge – New York: Cambridge UP). Booth, Ken, 1991: *New Thinking about Strategy and International Security* (London: Harper Collins).
- Booth, Ken, 1987: "New challenges and old mind-sets: Ten rules for empirical realists", in: Jacobsen, Carl G. (Ed.): *The Uncertain Course. New Weapons, Strategies and Mind-sets* (Oxford: Oxford University Press, 1987): 39-66. Booth, Ken, 1998: "Cold Wars of the mind", in: Booth, Ken (ed.): *Statecraft and Security. The Cold War and Beyond* (Cambridge: Cambridge University Press): 29-55.
- Booth, Ken, 1979: *Strategy and Ethnocentrism* (London: Croom Helm – New York: Holmes and Meier).
- Boudon, Raymond; Bourricaud, Francois, 1989: *A Critical Dictionary of Sociology* [Selected and translated by Peter Hamilton] (London: Routledge – Chicago: Chicago University Press).

- Boudon, Raymond; Bourricaud, Francois, <sup>2</sup>1992: *Soziologische Stichworte. Ein Handbuch*, 2. (Opladen: VS-Verlag).
- Bourdieu, Pierre, 1972: *Esquisse d'une théorie de la pratique* (Genève: Droz).
- Bourdieu, Pierre, 1977: *Outline of a Theory of Practice* (Cambridge: Cambridge University Press).
- Bourdieu, Pierre, 1980: *Le sens pratique* (Paris: Minit).
- Bourdieu, Pierre, 1980a: *The Logic of Practice* (Cambridge: Polity Press).
- Bourdieu, Pierre, 1997: *Language and Symbolic Power* (London: Polity Press).
- Brauch, Hans Günter; Oswald Spring, Úrsula; Mesjasz, Czeslaw; Grin, John; Dunay, Pal; Behera, Navnita Chadha; Chourou, Béchir; Kameri-Mbote, Patricia; Liotta, P.H. (Eds.), 2008: *Globalization and Environmental Challenges: Reconceptualizing Security in the 21<sup>st</sup> Century*. Hexagon Series on Human and Environmental Security and Peace, vol. 3 (Berlin – Heidelberg – New York: Springer-Verlag).
- Brauch, Hans Günter; Oswald Spring, Úrsula; Grin, John; Mesjasz, Czeslaw; Kameri-Mbote, Patricia; Behera, Navnita Chadha; Chourou, Béchir; Krummenacher, Heinz (Eds.), 2009: *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts*. Hexagon Series on Human and Environmental Security and Peace, vol. 4 (Berlin: Springer-Verlag).
- Brauch, Hans Günter; Oswald Spring, Úrsula; Mesjasz, Czeslaw; Grin, John; Kameri-Mbote, Patricia; Chourou, Béchir; Dunay, Pál, Birkman, Jörn (Eds.), 2011: *Coping with Global Environmental Change, Disasters and Security. Threats, Challenges, Vulnerabilities and Risks*, Hexagon Series on Human and Environmental Security and Peace, vol. 5 (Berlin: Springer-Verlag).
- Brauch, Hans Günter; Oswald Spring, Úrsula, 2009: “Towards Sustainable Peace for the 21<sup>st</sup> Century”, in: Brauch, Hans Günter et al. (Eds.): *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts*. Hexagon Series on Human and Environmental Security and Peace, vol. 4 (Berlin – Heidelberg – New York: Springer-Verlag): 1295-1310.
- Brundtland Commission [World Commission on Environment and Development], 1987: *Our Common Future. The World Commission on Environment and Development* (Oxford – New York: Oxford University Press).
- Bueno de Mesquita, Bruce; Smith, Alastair; Siverson, Randolph; Morrow, James, 2003: *The Logic of Political Survival* (Cambridge, MA: MIT Press).
- César, Aimé, 1972: *Discourse on Colonialism* (New York: Monthly Review Press).
- De Buen, Odón, 2007: *Decarbonizing Growth in Mexico*. UNDP, Human Development Research Office 2007/21 (New York: UNDP); at: <[http://hdr.undp.org/en/reports/global/hdr2007-2008/papers/de%20Buen\\_Odon.pdf](http://hdr.undp.org/en/reports/global/hdr2007-2008/papers/de%20Buen_Odon.pdf)>.
- Dos Santos, Teotonio, 1968: *Imperialismo y dependencia externa* (México, D.F.: Era).
- Edenhofer, Ottmar; Carraro, C.; Hourcade, J.-C.; Neuhoff, K.; Luderer, G.; Flachsland, C.; Jakob, M.; Popp, A.; Steckel, J.; Strophschein J.; Bauer, N.; Brunner, S.; Leimbach, M.; Lotze-Campen, H.; Bosetti, V.; De Cian, E.; Tavoni, M.; Sassi, O.; Waisman, H.; Crassous-Doerfler, R.; Monjon, S.; Dröge, S.; van Essen, H.; del Río, P., 2009) *RECIPE: The Economics of Decarbonization – Synthesis Report* (Potsdam: Institute for Climate Impact Research).
- Faletto, Enrique, 1983: *La industrialización truncada en América Latina* (México, D.F.: Nueva Imagen).
- Falkner, Robert, 2007: *Business Power and Conflict in International Environmental Politics* (Basingstoke: Palgrave Macmillan).
- Fanon, Franz, 1969: *Los condenados de la tierra* (Mexico, D.F.: FCE).
- Fisher, Glen, 1988, <sup>2</sup>1997: *Mindsets: The Role of Culture and perception in International Relations* (Yarmouth, ME: Intercultural Press).
- Giddens, Anthony, 2009: *The politics of Climate Change* (Cambridge: Polity).

- Girardet, Herbert; Mendonca, Miguel, 2009: *A Renewable World: Energy, Ecology, Equality* (Dartington, Devon: Green Books); at: <[http://www.worldfuturecouncil.org/a\\_renewable\\_world.html](http://www.worldfuturecouncil.org/a_renewable_world.html)>.
- Habermas, Jürgen, 1995: *Problemas de Legitimación en el Capitalismo Tardío* (Buenos Aires Amorrortu Editores).
- Habermas, Jürgen, 1998: *Más allá del Estado nacional* (México, FCE).
- Habermas, Jürgen, 2000: *La constelación posnacional: ensayos políticos* (Barcelona: Paidós).
- Habermas, Jürgen, 2001a: *Kommunikatives Handeln und detranszendentalisierte Vernunft* (Stuttgart: Reclam).
- Harding, Sandra, 1988: *Is Science Multicultural? Postcolonialism, Feminism, and Epistemologies* (Bloomington, IN: Indiana University Press).
- Harding, Sandra, 1991: *Whose Science Whose Knowledge? Thinking from Women's Lives*, (Ithaca, NY: Cornell University Press).
- Heinberg, Richard, 2004: *Powerdown: Options and Actions for a Post-Carbon World* (Gabriola Island, BC: New Society Publishers).
- Hofstede, G., 1997: *Cultures and Organizations: Software of the mind* (New York: McGraw Hill).
- Hogan, Michael J., 1998: *A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954* (New York: Cambridge University Press).
- Longino, Helen, 1990: *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry* (Princeton, NJ: Princeton University Press).
- Marini, Ruy Mauro, 1974: *Dialéctica de la dependencia* (México, D.F.: Era).
- Menke-Glückert, Peter, 1994: "Gaia: Una Filosofía de Supervivencia para Todos", in: Oswald Spring, Úrsula (Ed.): *Retos de la Ecología en México* (Mexico, D.F.: Gobierno del Estado de Morelos – Miguel Ángel Porrua): 35-52.
- Mies, Maria, 1998: *Patriarchy and Accumulation on a World Scale* (Melbourne: Zed).
- NAS [National Academy of Science], 2001: *Our Common Journey: Transition Toward Sustainability* (Washington, D.C.: National Academy Press).
- Nelson-Pallmeyer, Jack, 1992: "National Security State Doctrine and the New World Order", in: Nelson-Pallmeyer, Jack: *Brave New World Order* (Maryknoll, NY: Orbis Books, 1992, paper)
- Oswald Spring, Úrsula, 2008: "Globalization from Below. Social Movement and Altermundism - Reconceptualizing Security from Latin America Perspective", in: Brauch, Hans Günter; Oswald Spring, Úrsula; Mesjasz, Czeslaw; Grin, John; Dunay, Pal; Behera, Navnita Chadha; Chourou, Béchir; Kameri-Mbote, Patricia; Liotta, P.H. (Eds.): *Globalization and Environmental Challenges: Reconceptualizing Security in the 21<sup>st</sup> Century*. Hexagon Series on Human and Environmental Security and Peace, vol. 3 (Berlin – Heidelberg – New York: Springer-Verlag): 379-402.
- Oswald Spring, Úrsula, 2008a: "Sustainable Development", en: Joe de Rivera (ed.). *Culture of Peace* (Berlin: Springer-Verlag): 211-227.
- Oswald Spring, Úrsula, 2009: "Food as a New Human and Livelihood Security Issue", in: Brauch, Hans Günter; Oswald Spring, Úrsula; Grin, John; Mesjasz, Czeslaw; Kameri-Mbote, Patricia; Behera, Navnita Chadha; Chourou, Béchir; Krummenacher, Heinz (Eds.), 2009: *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts*. Hexagon Series on Human and Environmental Security and Peace, vol. 4 (Berlin: Springer-Verlag): 471-500.
- Oswald Spring, Úrsula, 2009a: "A HUGE Gender Security Approach: Towards Human, Gender and Environmental Security", in: Brauch, Hans Günter; Grin, John; Mesjasz, Czeslaw; Krummenacher, Heinz; Chadha Behera, Navnita; Chourou, Béchir; Oswald Spring, Ursula; Kameri-Mbote, Patricia (Eds.): *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts*. Hexagon Series on Human and Environmental Security and Peace, vol. 4, chapter 91 (Berlin: Springer-Verlag):1165-1190.

- Oswald Spring, Úrsula; Brauch, Hans Günter, 2009: "Securitizing water", in: Brauch, Hans Günter; Oswald Spring, Úrsula; Grin, John; Mesjasz, Czeslaw; Kameri-Mbote, Patricia; Behera, Navnita Chadha; Chourou, Béchir; Krummenacher, Heinz (Eds.), 2009: *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts*. Hexagon Series on Human and Environmental Security and Peace, vol. 4 (Berlin: Springer-Verlag): 175-202.
- Oswald Spring, Úrsula; Brauch, Hans Günter, 2011: "Coping with global Environmental Change-Sustainable Revolution and Sustainable Peace", Brauch, Hans Günter; Oswald Spring, Úrsula; Mesjasz, Czeslaw; Grin, John; Kameri-Mbote, Patricia; Chourou, Béchir; Dunay, Pál, Birkman, Jörn (Eds.), *Coping with Global Environmental Change, Disasters and Security. Threats, Challenges, Vulnerabilities and Risks*, Hexagon Series on Human and Environmental Security and Peace, vol. 5 (Berlin: Springer-Verlag): 1487-1504.
- Palmer, Gary B., 1996: *Toward a Theory of Cultural Linguistics* (Austin: University of Texas Press).
- Parsons, Talcott, 1937: *The Structure of Social Action* (New York: McGraw Hill).
- Parsons, Talcott, 1951: *The Social System* (Cambridge, MA: Harvard).
- Reardon, Betty A., 1996: *Sexism and the War System* (New York: Syracuse University Press).
- Schumacher, E.F. [Ernst Friedrich], 1973: *Small is Beautiful* (Hamburg: Hermann Blume).
- Stern, Nicholas, 2006: *The Economics of Climate Change* (Cambridge: ambride University Press).
- Stern, Nicholas, 2009: *The Global Deal. Climate Change and the Creation of a New Era of Progress and Prosperity* (New York: Public Affairs).
- UN-SG [Secretary-General] 2009: "Climate change and its possible security implications" (A/64/350 of 11 September 2009)
- Weiss, Thomas G.: Thakur, Ramesh, forthcoming: *The UN and Global Governance: An Idea and Its Prospects* (Bloomington, IN: Indiana University Press).
- UNIFEM (2010). Annual Report 2009-2010, UNIFEM, New York.