



Foro de Educación
ISSN: 1698-7799
jlhuerta@mac.com
FahrenHouse
España

Salonen, Arto O.; Konkka, Jyrki
An Ecosocial Approach to Well-Being: A Solution to the Wicked Problems in the Era of
Anthropocene
Foro de Educación, vol. 13, núm. 19, julio-diciembre, 2015, pp. 19-34
FahrenHouse
Cabrerizos, España

Disponible en: <http://www.redalyc.org/articulo.oa?id=447544537003>

- Cómo citar el artículo
- Número completo
- Más información del artículo
- Página de la revista en redalyc.org

redalyc.org

Sistema de Información Científica
Red de Revistas Científicas de América Latina, el Caribe, España y Portugal
Proyecto académico sin fines de lucro, desarrollado bajo la iniciativa de acceso abierto

An Ecosocial Approach to Well-Being: A Solution to the Wicked Problems in the Era of Anthropocene

Un enfoque ecosocial del bienestar: Una solución a los graves problemas del Antropoceno

Arto O. Salonen

e-mail: arto.salonen@metropolia.fi

Helsinki Metropolia University of Applied Sciences. Finland

Jyrki Konkka

e-mail: jyrki.konkka@metropolia.fi

Helsinki Metropolia University of Applied Sciences. Finland

Abstract: Modern Western states have a history of the thinking tradition, where the development of human societies is seen as independent from ecological constraints. Our thinking is a social construction, a product of the human mind. It can be changed. In this article we describe a new approach to well-being called an Ecosocial Approach to Well-Being (EAW). It is a holistic and multidisciplinary approach to well-being that will facilitate the analysis and management of the world's complexity from a socio-ecological perspective. The EAW is based on the fact that without the well-functioning biosphere there can be no society and without a society there can be no societal functions, including an economy. Fundamentally all wicked problems in the era of Anthropocene are global and have social and environmental backgrounds. A more holistic and multi-disciplinary systems thinking is needed to analyze and manage the causal complexity of the world in which we live. The EAW asks us to focus on post-material values because they are only loosely coupled with resource consumption. On the finite planet that is the question of what is enough and what is good for us. The EAW leads us maximizing psychological well-being and nurturing social harmony and cohesion. The EAW holds promise not only for solving social and ecological problems but also for helping people to be happier. It emphasizes human relationships and the meaningfulness of people's unique lives. If people properly reflected on their values, especially what is ultimately good for those they care about, most of the wicked problems would be resolved.

Keywords: wicked problems; climate change; sustainability; psychological well-being; happiness; sustainable development; anthropocene; values.

Resumen: Los estados occidentales modernos tienen una tradición de pensamiento que contempla el desarrollo de las sociedades humanas como independiente de las limitaciones ecológicas. Pero nuestro pensamiento es una construcción social, un producto de la mente humana. Puede ser cambiado. En este artículo describimos un nuevo enfoque del bienestar, denominado «Ecosocial Approach to Wellbeing (EAW)» – «Enfoque Ecosocial del Bienestar (EEB)» –. Está basado en el hecho de que sin una biosfera que funcione correctamente no puede haber sociedad; y sin una sociedad no puede haber funciones sociales, incluyendo la economía. Básicamente, todos los graves problemas de la actual era,

conocida como Antropoceno, son globales y tienen fundamentos sociales y ambientales. Es necesario un pensamiento más holístico y sistémico, multi-disciplinario, para analizar y gestionar la complejidad causal del mundo en que vivimos. El EEB propugna que nos centremos en valores post-materiales; porque el bienestar psicológico solo vagamente está relacionado con el consumo de recursos. En un planeta finito, como es el nuestro, la pregunta clave es qué es suficiente y qué es bueno para nosotros. El EEB nos llama a maximizar el bienestar psicológico, promover la armonía y la cohesión social. Pretende no sólo resolver los problemas sociales y ecológicos sino también ayudar a las personas a ser más felices. Para ello enfatiza las relaciones humanas y el significado que tiene la vida de las personas, única e irremplazable. Si las personas consideraran sus valores adecuadamente, especialmente aquello que es bueno para las personas por las que se preocupan, la mayoría de los graves problemas se resolvería.

Palabras clave: sostenibilidad; enfoque ecosocial del bienestar; cambio climático; bienestar psicológico; felicidad; desarrollo sostenible; Antropoceno; valores post-materiales.

Recibido / Received: 30/05/2015

Aceptado / Accepted: 02/07/2015

1. Towards a new theory of well-being

Modern Western states are based on a long history of intellectual tradition, where the development of human societies has been seen as independent from ecological constraints (Pattberg, 2007). In the era of Anthropocene human activities affect the face of earth more than natural forces do (Crutzen, 2002; Williams *et al.*, 2015). The most alarming wicked problem is that «human activity is putting such strain on the natural functions of earth that the ability of the planet's ecosystems to sustain future generations can no longer be taken for granted» (Millennium Ecosystem Assessment, 2005, p. 5; also Rockström *et al.*, 2009). Another very alarming wicked problem with many negative consequences is growing inequality (The Royal Society, 2012; UNDP, 2011; Stiglitz, 2015; Wilkinson & Pickett, 2010). According to World Economic Forum, severe income disparity is the top global risk 2013–2023 (Howell, 2013). Seven out of ten people live in countries where economic inequality has increased in the last 30 years. The bottom half of the world's population owns the same as the richest 85 people in the world, and almost half of the world's wealth is owned by one percent of its population (Fuentes-Nieva & Galasso, 2014).

According to the popular economic view consumerism is the way to happiness and development is dependent on economic growth (Max-Neef, 2010, p. 201, pp. 203-204). Such views are backed by conative, or if you like, desire theories of well-being, especially the revealed preference approach. According to that view, if a person desires that some state of the world obtains, and the state of the world does obtain, then it directly benefits the person in question (Sumner, 1996, p. 113; Raibley, 2012). Revealed preference approach is attractive since it holds that well-being is tied to a person's own concerns. Such theories have a firm psychological basis. Furthermore, the value of getting what one wants is easy to measure with economical tools when welfare is tied to GNP and its growth. However, despite its popularity, the view faces several problems. Not everything

that people desire and get is for their benefit. Sometimes people desire things that are even harmful for them. And often people do not even care about what would be their own benefit (Kraut, 2007; Haybron, 2008). Furthermore, market choices and their value is not the whole story. There are plenty of things that people find valuable and what they care about that have no consumerist market value whatsoever.

Well-being is not just a descriptive matter. It is tied to what is good for human beings. Therefore it is tied to our values, and as such we need our theory of well-being to give reasons for our choices and actions. That is, the theory needs to be normatively adequate. It must tell us what is good and why (Kraut, 2007). Wayne Sumner's (1996) test of adequacy gives us usable guidelines for assessing a suggested theory of well-being. Thus, the theory must be descriptively and normatively adequate. In other words, the theory must be faithful to our ordinary conceptions of well-being, and it must apply to different sorts of welfare assessments. That is, we need a theory of well-being that measures the level of and changes in well-being. Furthermore, we want that our theory explains why something is beneficial or harmful for some one. In addition we want our theory to include a large variety of welfare-objects. That is, we need to be inclusive about what to accept as values that track well-being. These factors test the descriptive and empirical adequacy of our theory (also Tiberius, 2014).

A basic dividing line between alternative theories of well-being is on the question whether the theory is subjective or objective. Subjective theories hold that well-being depends on person's (actual or hypothetical) attitude towards certain situation (Sumner, 1996, p. 38). Conative theories, such as the revealed preference approach mentioned above is a typical example of subjective theories. Objective theories deny this dependence. They accept that some things may be valuable even if a person does not care about it. We are not taking sides on this dispute. Our view is that a sophisticated subjective theory and an advanced objective theory will both deliver us the goods that suit our purposes in this article.

In this paper we describe what kind of view of well-being we need to adopt in order to be sure that future generations will be proud of us. We want to reconstruct an approach that takes into account people's concern on just and sustainable future for ourselves, our children, grand-children, and generations yet to come. A holistic and multidisciplinary approach to well-being will facilitate the analysis and management of the world's complexity from a socio-ecological perspective.

2. The world of interdependences

The ultimate development goal is to provide all people with the necessary external conditions to live a good life (Di Giulio *et al.*, 2014, p. 51). The survival of humankind depends on its ability to achieve greater social equity and economic security in ways that reflect the biophysical reality (Rees, 2014, p. 193). Multidisciplinary thinking is needed in order to create systems that can manage the causal complexity of the world (EEA, 2013, p. 40).

Wicked problems often have both ecological and social backgrounds (Ehrlich & Ehrlich, 2013). Socio-ecological systems are interconnected. For example climate change is not only ecological challenge; it is also one of the biggest global challenges of social justice (World Bank, 2012). This is the reason why we need a shift toward an understanding of the human-nature relationship – an orientation integrating social and ecological concerns (Hirvilammi & Helne, 2014; Norton, 2005).

Humans live on the finite planet. Thus we suggest that the integration and hierarchy of ecological, social and economic aspects of well-being is as follows:

1. Thriving ecosystems and sustainable use of natural resources.
2. Physical and psychological health.
3. Human rights, social justice, dignified living.
4. Robust economy.

The hierarchy of ecological, social and economic aspects of well-being is a base for the proposed Ecosocial Approach to Wellbeing (EAW). The hierarchy means that humans are fully dependent on life-support systems (the ecosystem services), which take care of provisioning, regulating and supporting of absolutely necessary benefits such as fruitful soil, crop pollination, purification of water, and control of both climate and disease (Millennium Ecosystem Assessment, 2005). It is paramount to remain within planetary boundaries. If the natural life-support systems collapse, the foundation of human subsistence also breaks down.

Social systems are related to ecological systems on which social systems depend (Adger, 2000, p. 350). Without the well-functioning biosphere there can be no society, and without society there can be no societal functions, including economy. The economy is a sub-system of larger but finite planet Earth (Max-Neef, 2010, pp. 203-204). These dependencies may look like that a value-based subjectivist approach to well-being is in fact incorrect, since our well-being depends so much on matters that have nothing to do with whether we value or care about them or not. The basis of our well-being is ecological, or if you want, biological. What is good for plants and (non-human) animals surely is good for

human beings. By this we mean nothing more than that the concept of being good for (or beneficial for) does not change when we are talking about plants, animals or human beings (Foot, 2001, p. 27; Kraut, 2007, p. 88). However, our approach is not committed to any sort of eudaimonistic approach nor conative approach, as such. We want to point out that there are good candidates for conative approaches to well-being from which we should learn when discussing human well-being (Cf. Tiberius, 2014; Raibley, 2012).

3. Value-based approach

Well-being is considered as a prudential value in the most general sense. It is something that human beings think to be «to the advantage of» or «beneficial for» themselves or to those they care about (Kraut, 2007, p. 95; Darwall, 2002). Or, it is something that is «in the interest of» them. As any other values, well-being is something we care about. Values are something that we are motivated to pursue and promote. We also have at least some positive attitude toward the things we value (Tiberius, 2014, p. 406). Without going into deep metaphysical questions about what values are, we will assume that they are entirely a product of human mind (Haybron, 2013, p. 89). Values are part of human psychology. This does not mean, however, that we are infallible with what our values are. We make mistakes. We do not always succeed in recognizing what is good for us. But with a more reflective attitude toward what we are and what we are capable of doing or what is wise for us to promote, we may learn what is in fact beneficial for us and our flourishing (Tiberius, 2008). In fact, we believe that if people are reflective enough they may realise better what is more important and truly advantageous for them.

Fortunately, we do not need to retreat to philosophical armchair speculations about values and their nature. There are a lot of empirical research that start with a similar conceptual framework aiming at finding out what people all over the world value. These empirical findings provide a test for the descriptive adequacy of the approach suggested in this article as well (Sumner, 1996, p. 10). For instance World Values Surveys provide a comprehensive measurement of different areas of human concern (Inglehart, 2008). In other studies participants were asked to rank values in terms of their importance as guiding principles in their lives, and in terms of what are desirable goals that motivate their action (Schwartz and Bilsky, 1987; Schwartz, 2006). The data provided by these studies and surveys point that people care very much about personal relationships and family as well as security in these relationships and time spent with their family and friends. Notably, people also cared about environmental and ecological matters (Tiberius, 2008, p. 47). What is remarkable, consumeristic values do not

have the emphasis assumed by the basic revealed preference approach. GNP and its growth do not play such a big role in human well-being after all. (We do not want to claim, however, that it does not have any role whatsoever. Our hierarchy of well-being aspects shows its place in our values).

Besides social relations, people value their health, both physical and psychological. And, as we all know, it is very hard to put a price tag to one's health. Psychological well-being can be measured by non-monetary measures such as subsistence, protection, affection, understanding, knowledge, participation, leisure, creation, identity and freedom, as well as establishment of civil rights and personal expression (Alkire, 2002; Costanza, 2014, p. 76; Diener & Seligman, 2004; Jackson, 2009, p. 143, pp. 181-182; Nevarez, 2011, p. 39).

Human beings achieve happiness – psychological well-being – through living with and for other people (Helliwell, 2014, p. 81). People get primary value from making decisions that are equitable (Zaki & Mitchell, 2011). For example, children choose altruistic acts irrespective of rewards (Warneken & Tomasello, 2009), and they are happier when they give rather than receive (Aknin *et al.*, 2012). In contrast, people who prioritise prosperity and goods tend not to be satisfied with their lives (Boyle *et al.*, 2008). Moreover, weakening of social relationships can drive people to work and consume more (Bartolini, 2014). Paradoxically increased opportunities to spend more cause an inability to enjoy the things that are obtained with money (Quoidbach *et al.*, 2010).

Focusing on material wealth tends to neglect the new well-being problems, such as stress and fast pace of life, depression, loneliness, and ecologically destructive behaviour (Bartolini, 2014). People who prioritize money, image, and status experience less happiness and life satisfaction, have fewer pleasant emotions such as joy and contentment, and more unpleasant emotions such as anger and anxiety. They also tend to be more depressed and anxious. Even physical problems like headaches, stomach-aches, and backaches as well as use of substances are associated with a strong focus on material values (Kasser, 2002 and 2014). These people also care less about the environment and other species (Kasser, 2011b).

There are objective needs to be fulfilled before one can reflect on one's personal values. Objective needs refer to universally valid elements of the good life. They are ends themselves, as opposed to subjective desires, which are not related to universal elements of the good life. They can be ethically questioned (Di Giulio *et al.*, 2014, p. 51). This raises a question of what is enough and what is good for us (Sachs & Santarius, 2007, p. 161). A general answer to that question is that things like unpolluted environment and good health are not enough for human flourishing. They may be, and for the most part are, necessary, though. But good life and human flourishing requires more than that. This is shown in

the hierarchy of ecological, social and economic aspects of well-being presented in the previous section. The importance of material things decreases when people can fulfil their basic needs and achieve more social capital. The paradigmatic shift is described by Abraham Maslow (1954 and 1962), Erik Allardt (1976), Ronald Inglehart (1977) and Shalom Schwartz (1992). Post-materialistic aspects of well-being highlight altruism, dedication, ties to other people and society, egolessness and self-transcendence (Maslow, 1962, p. 118). These factors of well-being cannot be traded in markets and are not captured by monetary measures (Stiglitz *et al.*, 2009, p. 63). Post-material values are growing fastest in countries where «a given generation grows up under conditions that permit it to take survival for granted» (Inglehart, 2008, p. 145). Great-Britain is a good example of this value shift (The Values Revolution, 2015).

Emphasizing a list of needs, however, is not a theory (Sumner, 1996). A list as such does not pass the test of descriptive adequacy, since it fails to explain why the items on the list are on the list in the first place. Something more is required. Fortunately, there are many options for the task (e.g. Haybron, 2008; Kraut, 2007; Hurka, 1993). These options present a form of eudaimonism. That is, well-being is explained in terms of nature fulfilment. Haybron (2008) explains human flourishing in terms of self-fulfilment, which consists of three main determinants: 1) physical health or vitality, 2) success in relation to the commitments that define one's identity (and values), and 3) emotional health. According to Richard Kraut's (2007) theory, developmentalism, humans flourish by developing properly and fully, that is, by growing, maturing, making full use of the potentialities, capacities, and faculties that under favorable conditions they naturally have at any early stage of their existence. It is clear that to fully develop, or succeed in self-fulfilment, the conditions need to be favorable. Natural environment must be such that it supports an organism's fulfilment of its nature.

In a post-materialistic society citizens' importance of owning things and prosperity is decreased, services are used instead of goods and renewal of goods is motivated by real needs (Salonen & Åhlberg, 2013). This value shift means a fundamental change from greed and competition to solidarity, cooperation, and compassion (Max-Neef, 2010, pp. 200-204). This suggests that we need to be inclusive on what counts as values. They may be, among others, personal relationships, aims, ideals and states of the world. Basically, however, they are commitments that are relatively stable and they give us normative reasons to act in order to promote whatever we are aiming at. One may ask how our values differ from our desires. Desires after all provide us motivation to promote the desired aims. However, fulfilment of our desires is not always beneficial for us, and often we do not care about the thing desired after we succeed in getting it. In contrast to mere desires, however, our basic values are stable. They do not change much.

They may change, though, but usually we change with them. Furthermore, we are emotionally committed to our values. If they are frustrated somehow, we are hurt. That is not the case with our everyday desires.

In a sense our basic values seem to have a sense of objectivity despite the fact that they are a product of human mind. We think that it is safe to say that values tend to pass a test of sustainability by reflection (of course, reflection is not a panacea. We do make mistakes). Some things we value after reflection, other things we don't (Tiberius, 2008). Finally, a simple test will be helpful in recognizing what we really care about. Just ask what kind of environment would you want for your children.

4. From individualism to social harmony

Modern Western society puts many challenges on our well-being. On the one hand we value authenticity and importance of being ourselves. That is, we value individualism. Increased individualism is related to the pursuit of one's own interests and material life goals (Kasser, 2011a, p. 207). However, it is hard to be as independent as individualism seems to require. We are products of our culture, and clever marketing strategies use the idea of authenticity to sell us products we do not need (Frank, 1997). On the other hand, individuality is not always valued as much as we would like (Elliot, 2003). That is, our attention and energy is pulled in many directions (Tiberius, 2008, p. 60). Individualism is also linked to separation from society and a lack of solidarity (Ginsborg, 2005, p. 51). Even if individualism correlates with an accumulation of material goods (Hofstede *et al.*, 2010), it is an inefficient way to achieve psychological well-being because even though we work harder and harder, we never seem to get anywhere (Haque, 2011; Kahneman *et al.*, 2006). Furthermore, by working harder in the competitive capitalist society we alienate ourselves from those social relations we value the most (Markling, 2008; Schwartz, 2006).

Community is the basis of human existence, which is about relationships. Community brings individuals together in united awareness and feeling. Together they share time, energy and information. The relationships occur through conversation, dialogue and participation (Vasquez, 2005, pp. 37-38). People feel that they have responsibilities towards each other. Mutuality and sharing represent «a recognition of our ultimate interdependence that is the ultimate substance of social peace» (Graeber, 2011, pp. 96-103). Social harmony and cohesion is a core goal for communities and nations.

Human cooperation is based on nurturing of integrity and trust (Gert, 2004). Cooperation moderates competition (Speth, 2014, p. 186; also Marglin,

2008). A fairer distribution of economic resources will be possible when people are less status-oriented, then also becoming more caring and less grasping (Speth, 2014, p. 186). Job sharing, for instance, can improve self-actualization because of improved work-life balance (Rees, 2014, pp. 197-198). The deepest essence of development is a convergence of poor and rich people, because confidence and shared responsibility among citizens form a foundation for society.

5. The Ecosocial Approach to Well-Being (EAW)

Global wicked problems are difficult to solve but they can be solved. We have already stopped the ozone depletion (Sachs, 2008, pp. 112-114). Even climate change can be stopped because it is mainly the man-made phenomenon (Randers, 2012). Adopting the EAW helps us to maintain both the human and the non-human world and to understand their interdependences. According to the EAW there is a hierarchy between ecological, social and economic aspects of well-being. If the natural life-support systems collapse, the foundation of human subsistence also breaks down. There is also a link between the wicked problems and our life styles. On the finite planet overconsumption, driven by desires, poses a threat to human well-being (Ehrlich and Ehrlich, 2004, p. 115; Munasinghe, 2014; Stiglitz *et al.*, 2009, p. 10). Economy has instrumental value for human being but it is not an end itself. Implementing an equity-oriented economic contraction requires a shift in our values from competitive greed and narrow self-interest towards cooperation and common surviving with dignity (Rees, 2014, p. 194). As a summary, differences between the popular thinking tradition and the EAW are illustrated in Table 1.

Table 1. Differences between the popular and the proposed Ecosocial Approach to Well-Being

	Popular view	The Ecosocial Approach to Well-being
GOOD LIFE	material consumption, individualism, needs of our generation	non-material consumption, sharing and caring, needs of future generations
ECONOMY	competition, «more», maximizing of owners' profits, rich and poors	cooperation, «better», benefits of society, equality of opportunity
TIME	short-termism, intra-generational equity	long-term orientation, intra-generational and inter-generational equity

Life is global, individual freedom requires responsibility to the community, and well-being is more than achieving economic growth and material goods (Layard, 2006; Max-Neef, 2010; Randers, 2012). Just and sustainable world with greater equality of opportunity can be reached by shifting the focus of human activities towards creating, maximizing and nurturing social cohesion (Stiglitz, 2015). Nurturing people-to-people and human-to-nature relationships enhances socio-ecological resilience (Peeters, 2012). This invites reconsideration of the notion of emancipation, the meaning of citizenship, and meaningful participation in society. The pursuit of happiness pushes us to adopt a more interactive life orientation (Graham, 2011). Activating post-material values and behaviour can cause a beneficial bleed-over, leading people to support the larger community of people, other species, and future generations (Kasser, 2014, pp. 331-335).

It is notable that egoistic and altruistic life goals can be combined. For instance, healthier diets and lifestyles will not only save resources and combat wicked problems – such as climate change – but will also improve quality of life. Moreover, strategies to increase natural resource productivity and to decrease pollution are policies of peace (Sachs, 2008). In the era of Anthropocene local solutions have global outputs and ecological things are linked to social outcomes. For instance Beijing will close its last four coal-fired power stations within a year in order to reduce local air pollution (Shen, 2015). This will bring benefits for the global climate too which is linked to survival of poorest poor people in Global South. In fact burning fossil fuels seems to be a crime against humanity, as it has multiple irreversible and negative consequences. It seems to be against what we value and what is good for us and future generations.

In the era of Anthropocene, a more reflective value-based approach to well-being is needed. That is, we need a view that reflects better on what people actually value and what is good for them. Human thinking and behaviour in accordance with the EAW maintain current human capabilities and opportunities and supports their expansion so that future generations will have equal opportunities. The EAW holds promise not only for solving social and ecological problems but also for helping people to be happier. It emphasizes human relationships and the meaningfulness of people's unique lives. Ideally, if people properly reflected on their values, especially what is ultimately good for those they care about, most of the wicked problems would be resolved. There are, however, many ifs. For instance power, political, economical, is unevenly distributed. Those who lack power may find it hard to reflect on one's values, not to mention promoting them.

6. References

- Adger, N. (2000). Social and ecological resilience: are they related. *Progress in Human Geography*, 24(3), pp. 347-364.
- Aknin, L., Hamlin, J., & Dunn, E. (2012). Giving leads to happiness in young children. *PLoS ONE*, 7(6), e39211.
- Alkire, S. (2002). Dimensions of Human Development. *World Development*, 30(2), 181-205.
- Allardt, E. (1976). Dimensions of welfare in a Comparative Scandinavian Study. *Acta. Sociology*, 19, pp. 227-239.
- Bartolini, S. (2014). Buying alone: how the decreasing American happiness turned into the current economic crisis. In Hämäläinen, T. and Michaelson, J. (Eds.), *Well-being and Beyond – Broadening the Public and Policy Discourse* (pp. 144-181). Northampton: Edward Elgar Publishing.
- Boyle, D., Cordon, C., & Potts, R. (2008). *Are you happy? New economics past, present and future*. London: The New Economics Foundation.
- Costanza, R. (2014). A Virtual Visit to a Sustainable 2050. In Costanza, R. and Kubiszewski, I. (Eds.), *Creating a Sustainable and Desirable Future* (pp. 73-84). London: World Scientific.
- Crutzen, P. (2002). The effects of industrial and agricultural practices on atmospheric chemistry and climate during the Anthropocene. *Journal of Environmental Science and Health, Part A*, 37, pp. 423-424.
- Darwall, S. (2002). *Welfare and Rational Care*. Princeton, NJ: Princeton University Press.
- Di Giulio, A., Fischer, D., Schäfer, M., & Blätter-Mink, B. (2014). Conceptualizing sustainable consumption: toward an integrative framework. *Sustainability: Science, Practice, & Policy*, 10(1), pp. 45-61.
- Diener, E., & Seligman, M. (2004). Beyond Money. *Psychological Science in the Public Interest*, 5(1), pp. 1-31.
- EEA (2013). *Late lessons from early warnings: science, precaution, innovation*. Summary. Volume II. EEA Report No. 1. European Environment Agency. Luxembourg: Publications Office of the European Union.
- Ehrlich, P., & Ehrlich, A. (2004). *One with Nineveh: Politics, Consumption, and the Human Future*. Washington DC: Island Press.
- Ehrlich, P., & Ehrlich, A. (2013). Can a collapse of global civilization be avoided? *Proceeding of the Royal Society*, 280(1754), pp. 1-10.

- Elliot, C. (2003). *Better than Well: American Medicine Meets the American Dream*. New York: W.W. Norton & Co.
- Foot, P. (2001). *Natural Goodness*. Oxford: Oxford University Press.
- Fuentes-Nieva, R., & Galasso, N. (2014). *Working for the few. Political capture and economic inequality*. Oxford: Oxfam International.
- Frank, T. (1997). *The Conquest of Cool: Business Culture, Counterculture, and the Rise of Hip Consumerism*. Chicago: University of Chicago Press.
- Gert, B. (2004). *Common morality. Deciding what to do?* New York: Oxford University.
- Ginsborg, P. (2005). *The Politics of Everyday Life. Making Choices Changing Lives*. London: Yale University Press.
- Graeber, D. (2011). *Debt. The First 5000 Years*. Brooklyn, NY: Melville House.
- Graham, C. (2011). *The pursuit of happiness. An economy of well-being*. Washington: Brookings Institution Press.
- Haque, U. (2011). *Betterness: Economics for Humans*. Harvard: Harvard Business Press.
- Haybron, D. (2008). *The Pursuit of Unhappiness - The Elusive Psychology of Well-Being*. Oxford: Oxford University Press.
- Haybron, D. (2013). *Happiness - A Very Short Introduction*. Oxford: Oxford University Press.
- Helliwell, J., & Barrington-Leigh, C. (2011). How much is social capital worth? In Jetten, J., Haslam, C. & Haslam, S. (Eds.), *The Social Cure* (pp. 55-71). London: Psychology Press.
- Helliwell, J. (2014). Social norms, happiness, and the environment: closing the circle. *Sustainability: Science, Practice, & Policy*, 10(1), pp. 78-84.
- Hirvilammi, T., & Helne, T. (2014). Changing Paradigms: A Sketch for Sustainable Well-being and Ecosocial Policy. *Sustainability*, 6(4), pp. 2160-2175.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations, Software of the Mind. Intercultural Cooperation and its Importance for Survival*. London: McGraw-Hill.
- Howell, L. (2013). *Global Risks 2013*. Eighth Edition. An Initiative of the Risk Response Network. World Economic Forum.
- Hurka, T. (1993). *Perfectionism*. New York: Oxford University Press.
- Inglehart, R. (1977). *The silent revolution, Changing values and political styles among the Western Public*. Princeton: Princeton University.

- Inglehart, R. (2008). Changing Values among Western Publics from 1970 to 2006. *West European Politics*, 31(1-2), pp. 130-146.
- Jackson, T. (2009). *Prosperity without growth. Economics for a finite planet*. London: Earthscan.
- Kahneman, D., Krueger, A., Schkade, D., Schwarz, N., & Stone, A. (2006). Would you be happier if you were richer? A focusing illusion. *Science*, 312(5782), pp. 1908-1910.
- Kasser, T. (2002). *The High Price of Materialism*. Cambridge: MIT Press.
- Kasser, T. (2011a). Cultural values and the well-being of future generations: a cross-national study. *Journal of Cross-Cultural Psychology*, 42(2), pp. 206-215.
- Kasser, T. (2011b). Ecological challenges, materialistic values, and social change. In Biswas-Diener, R. (Ed.), *Positive Psychology as Social Change* (pp. 89-108). Dordrecht: Springer.
- Kasser, T. (2014). A Values-Based Set of Solutions for the Next Generation. In Costanza, R. & Kubiszewski, I. (Eds.), *Creating a Sustainable and Desirable Future* (pp. 331-340). London: World Scientific.
- Kraut, R. (2007). *What is Good and Why - The Ethics of Well-Being*. Cambridge, MA: Harvard University Press.
- Layard, R. (2006). Happiness and Public Policy: A Challenge to the Profession. *The Economic Journal*, 116(510), pp. 24-33.
- Marglin, S. (2008). *The Dismal Science. How Thinking Like an Economist Undermines Community*. London: Harvard University.
- Maslow, A. (1954). *Motivation and Personality*. New York: Harper & Brothers.
- Maslow, A. (1960). *Toward a Psychology of Being*. Blacksburg: Wilder Publications.
- Maslow, A. H. (1962). *Towards a psychology of being*. Princeton: Van Nostrand Company.
- Max-Neef, M. (2010). The World on a Collision Course and the Need for a New Economy. *Ambio*, 39(3), pp. 200-210.
- Millennium Ecosystem Assessment (2005). *Living beyond our means: natural assets and human well-being*. Statement from the Board. Retrieved from www.maweb.org/documents/document.429.aspx.pdf
- Munasinghe, M. (2014). Millennium Consumption Goals MCGs. at Rio+20: A Practical Step Toward Global Sustainability. In Costanza, R. & Kubiszewski, I. (Eds.), *Creating a Sustainable and Desirable Future* (pp. 255-262). London: World Scientific.

- Nevarez, L. (2011). *Pursuing Quality of Life. From the Affluent Society to the Consumer Society*. New York: Routledge.
- Norton, B. (2005). *Sustainability: A philosophy of adaptive ecosystem management*. Chicago: University of Chicago.
- Pattberg, P. (2007). Conquest, Domination and Control: Europe's Mastery of Nature in Historic Perspective. *Journal of Political Ecologies*, 14(4), pp. 1-9.
- Peeters, J. (2012). The place of social work in sustainable development: Towards ecosocial practice. *International Journal of Social Welfare*, 21(3), pp. 287-298.
- Quoidbach, J., Dunn, E., Petrides, K. V., & Mikolajczak, M. (2010). Money Giveth, Money Taketh Away: The Dual Effect of Wealth on Happiness. *Psychological Science*, 21(6), pp. 759-763.
- Raibley, J. (2012). Health and Well-Being. *Philosophical Studies*, 165(2), pp. 469-489.
- Randers, J. (2012). *2052 – A global forecast for the next forty years*. Vermont: Chelsea Green Publishing.
- Rees, W. (2014). The Way Forward: Survival 2100. In Costanza, R. & Kubiszewski, I. (Eds.), *Creating a Sustainable and Desirable Future* (pp. 191-200). London: World Scientific.
- Rockström, J., Steffem, W., Noone, K., Persson, Å., Chapin, S., Lambin, E., Lenton, T., Scheffer, M., Folke, C., Schellnhuber, H., Nykvist, B., de Wit, C., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P., Costanza, R., Svedin, U., Falkenmark, M., Karlberg, L., Corell, R., Fabry, V., Hansen, J., Walker, B., Liverman, D., Richardson, K., Crutzen, P., & Foley, J. (2009). A safe operating space for humanity. *Nature*, 461, pp. 472-475.
- Sachs, J. (2008). *Common Wealth. Economics for a Crowded Planet*. New York: Penguin Press.
- Sachs, W., & Santarius T. (Eds.). (2007). *Fair Future. Resource conflicts, security & global justice*. London: Zed Books.
- Salonen, A., & Åhlberg, M. (2013). Towards sustainable society – From materialism to post-materialism. *International Journal of Sustainable Society*, 5(4), pp. 374-393.
- Schwartz, S. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25(1), pp. 1-65.
- Schwartz, S. (2006). Basic Human Values: Theory, Measurement, and Applications. *Revue française de sociologie*, 47(4), pp. 929-968.
- Schwartz, S., & Bilsky, W. (1987). Toward Universal Psychological Structure of Human Values. *Journal of Personality and Social Psychology*, 53(3), pp. 550-562.

- Shen, F. (2015). *Beijing to Shut All Major Coal Power Plants to Cut Pollution*. BloombergBusiness. Retrieved from <http://www.bloomberg.com/news/articles/2015-03-24/beijing-to-close-all-major-coal-power-plants-to-curb-pollution>
- Speth, J. (2014). A Vision of America the Possible. In Costanza, R. & Kubiszewski, I. (Eds.), *Creating a Sustainable and Desirable Future* (pp. 185-188). London: World Scientific.
- Stiglitz, J. (2015). *The Great Divide*. London: Penquin Random House.
- Stiglitz, J., Sen A., & Fitoussi, J-P. (2009). *The Measurement of Economic Performance and Social Progress Revisited. Commission on the Measurement of Economic Performance and Social Progress*. Retrieved from www.stiglitz-sen-fitoussi.fr/documents/overview-eng.pdf
- Sumner, L. W. (1996). *Welfare, Happiness and Ethics*. Oxford: Oxford University Press.
- The Royal Society (2012). *People and the planet*. The Royal Society. Science Policy Centre Report 01/12. London: The Royal Society. Retrieved from <http://royalsociety.org/policy/projects/people-planet/report/>
- The Values Revolution (2015). *GT Values Revolution Report*. London: Global Tolerance. Retrieved from <http://www.globaltolerance.com/wp-content/uploads/2015/01/GT-Values-Revolution-Report.pdf>
- Tiberius, V. (2008). *The Reflective Life - Living Wisely With Our Limits*. Oxford: Oxford University Press.
- Tiberius, V. (2014). Beyond the Experience Machine: How to Build a Theory of Well-Being. In Haug, M. (Ed.), *Philosophical Methodology: The Armchair or the Laboratory?* (pp. 398-415). London: Routledge.
- UNDP (2011). *Sustainability and Equity: A Better Future for All*. New York: United Nations Development Programme. Retrieved from <http://hdr.undp.org/en/reports/global/hdr2011/download/>
- Vasquez, G. (2005). Nurturance in the Andes. In Bowers, C.A. & Apffel-Marglin, F. (Eds.), *Rethinking Freire. Globalization and the Environmental Crisis* (pp. 31-47). London: Lawrence Erlbaum Associates.
- Warneken, F., & Tomasello, M. (2009). The roots of human altruism. *British Journal of Psychology*, 100(3), pp. 455-471.
- World Bank. (2012). *Turn Down the Heat*. A Report for the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics. Retrieved from <http://climatechange.worldbank.org>
- Wilkinson, R., & Pickett, K. (2010). *The spirit level. Why equality is better for everyone*. London: Penquin.

- Williams, M., Zalasiewicz, J., Haff, PK., Schwägerl, C., Barnosky, A., & Ellis, E. (2015). The Anthropocene biosphere. *The Anthropocene Biosphere*. doi: 10.1177/2053019615591020
- Zaki, J., & Mitchell, J. (2011). Equitable decision-making is associated with neural markers of intrinsic value. *Proceedings of the National Academy of Sciences*, 108(49), pp. 19761-19766.