

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/227111671>

Gross National Happiness

Chapter · January 2011

DOI: 10.1007/978-90-481-9310-3_7

CITATIONS

3

READS

196

1 author:



[Sander G. Tideman](#)

Erasmus University Rotterdam

9 PUBLICATIONS 11 CITATIONS

SEE PROFILE

Chapter 7

Gross National Happiness

Sander G. Tideman

The concept of Gross National Happiness (GNH) was first expressed by King of Bhutan in the 1980s in response to western economists visiting his country who said that they regarded Bhutan to be a “poor” country by standards of Gross Domestic Product (GDP). While acknowledging that Bhutan may score low on the scale of conventional indicators for a nation’s economic performance, he claimed that his country, secluded in the Himalayas, would score high on an indicator measuring happiness. But GNH is more than a counterpoint to GDP. This essay takes the perspective that GNH can be regarded as the next stage in the evolution of economic indicators for sustainable development, going beyond merely measuring values that can be expressed in money, such as in GDP. GNH is an attempt to develop an indicator that accounts for all values relevant to life on this planet, including the most subtle and profound: happiness. Moreover, by taking happiness as objective, GNH serves as an important yardstick for a framework of Buddhist economics.

The search for alternative indicators of economic progress is critically important at the time that contemporary world faces a growing threat of ecological collapse due to climate change, and ecosystem loss, and rapidly depleting natural resources. We can no longer rely only on measurements such as GDP that only measures material and financial capital while ignoring natural and social capital. This is increasingly understood, also by western economists (Layard 2005; Stern 2006; Krugman 2009; Stiglitz 2009). In fact, Nobel Prize Winner in Economics Joseph Stiglitz (2009) recently called for adjusting GDP to measure other influences on the well-being of a nation aside from the turnover of goods and money, including national happiness and environmental conservation. “GDP has failed to capture the factors that make a difference in people’s lives and contribute to their happiness, meaning security, leisure, income distribution and a clean environment”.

The definition of happiness has until recently been absent from conventional western scientific research, on which modern economic theory is based. In fact, conventional economics and its indicators such as Gross National Product (GNP),

S.G. Tideman (✉)
<http://www.globalleadersacademy.com>
e-mail: stideman@xs4all.nl

deliberately leave phenomena such as human happiness outside its spectrum, tacitly assuming “maximum utility”, that is the notion that material development, as measured by GNP and income per capita growth, is positively correlated to human well-being. Further analysis of the relationship between material development and human psychology has been outside the scope of economic theory.

Yet this is changing: breakthrough research – in quantum physics, medicine, biology, behavioral science, psychology and cognitive science – is now making the science of the mind relevant to economics. Conversely, from within the profession of economics, attempts are being made to broaden the scope of economics into the domain of psychology, which led to the emergence of schools such as behavioral- and neuro-economics. This essay will explore what Buddhist psychology and philosophy, which inspired the Buddhist King of Bhutan to conceive of GNH, have to offer to the shift in economic thinking.

Buddhism

Buddhism is based on the teachings of Gautama Buddha who lived 2500 years ago in ancient India. One of his key teachings was that suffering is caused by the way we perceive ourselves and the world around us. Because things appear to us through our senses as if they have the power to provide us lasting happiness and comfort, we become attached to them and crave to have more of them. But this craving is a result of ignorance about reality. The reality of things is that they are transient, impermanent, and therefore cannot produce the lasting happiness that we expect from them.

Thus, Buddha made it very clear: real happiness does not come from acquiring or consuming material things. Happiness is an experience derived from a state of mind, and mind/consciousness is distinct from matter. Thus, Buddhism considers the path of mental or spiritual development superior to that of material development. What really matters is to mentally detach oneself from matter, and strive for a state of what is called “liberation” or “enlightenment”, which is considered the ultimate state of happiness and fulfillment. This is achieved by the cultivation of one’s mind, which along with enhanced well-being brings about kindness, compassion, tolerance and wisdom.

It is important to note that Buddhism does not reject matter and wealth as inherently evil, but considers them useful. First, material wealth prevents us from poverty and, second, it allows us to practice generosity, which causes “merit” or positive karma, and ultimately a more happy society for all. Among the eight main requirements of the Buddha’s path, the Noble Eightfold Path, is the practice of Right Livelihood, which has been defined as follows:

One should abstain from making one’s living through a profession that brings harm to others, such as trading in arms and lethal weapons, intoxicating drinks, poisons, killing animals, cheating, etc., and one should live by a profession which is honorable, blameless and innocent of harm to others.

A true Buddhist person not only seeks wealth lawfully and spends it for the good, but also enjoys spiritual freedom. He does not have to renounce the material world all together: the Buddhist Pali Canon states that a Buddhist acts in the world as follows (Phra Rajavarukmi 1990):

1. Seeking wealth lawfully and unarbitrarily
2. Making oneself happy and cheerful
3. Sharing with others and doing meritorious deeds
4. Making use of one's wealth without greed and longing, possesses of the insight that sustains spiritual freedom

Right Livelihood is based on Right View, the most important guideline set forth by Buddha, which refers to the correct understanding of how the phenomenological world exists and operates. Thus, by definition, Right View includes a perspective on the world of business and economics. These guidelines for living provided the ground for authors to define the concept of *Buddhist economics* (Schumacher 1973; Payutto 1992; Bubna-Litic 2000).

But Buddhism is more than a set of moral guidelines. The Dalai Lama has said that Buddhism has three dimensions: it can be seen as a religion, a science and a philosophy (2005). The part of Buddhism which can be called an “inner science”, deals with questions such as: How does the mind work? How does the mind create and experience suffering and well-being? How can we create well-being for others? The Mahayana (or Northern) tradition of Buddhism, in particular, emphasizes the fundamental interconnectedness of humanity – we are intrinsically connected among each other and to nature. Given this interrelated and interdependent nature of reality, Buddhists are concerned with the world around them; you cannot work on developing your own minds while not trying to find ways to diminish suffering in our world, even if this seems remote and difficult to change. So from this viewpoint – the Mahayana viewpoint – Buddhism has a role to play in tackling the many global problems and challenges we are facing, not just by overcoming our own afflictions but also by taking an active role in society, business and government.

From this perspective there is more than the individual dimension of the Eightfold path that is important to Buddhist economics. We can live wisely (Right View, Right Thought), act responsibly (Right Speech, Right Action and Right Livelihood) and lead a contemplative life (Right Effort, Right Mindfulness and Right Concentration) and still suffer by being witness to an economic and political system that creates suffering for many, for example by ignoring the value of ecosystems and overvaluing short-term profits at the expense of longer term and common interests. The Thai Buddhist thinker Sulak Sivaraksa (1992) has distinguished three levels of violence: inner, outer and structural. Inner violence – our mental afflictions such as ignorance, attachment and hatred – is considered the most fundamental cause of suffering and should therefore be abandoned. Likewise, outer violence – harmful behavior, which is the expression of inner violence – should be avoided as well. The concept of *structural violence* refers to violence imposed on others through structures, systems and culture, says Sivaraksa. At this time and

age, we can observe that the predominant growth-obsessed economic system carries an element of structural violence. It is also to this point – the collective, structural aspects of violence and suffering – that Buddhism is relevant to economics.

Thus, Buddhism offers more than a set of practices for mental development at an individual level: it provides a philosophical framework for creating happiness for society at large (Thurman 1997; Dalai Lama 2000; Loy 2003) and therefore naturally intersects with economics. Let's explore the philosophical origins of economics and its contemporary application, before attempting to bridge Buddhism and economics.

The Roots of Economics

Economics has its roots in ancient Greece (the term is derived from *oikonomikos*, literally meaning “household management”), and now is commonly defined as “a science that studies human behavior as a relationship between ends and scarce means with alternative uses” (Robbins 2002). In this discussion, it is important to note that economics defines ends and means primarily in *material* terms, which moreover can be quantified in monetary terms. Immaterial and non-monetary values are considered subjective and therefore outside its scope. Further, by stating that economic means are naturally limited and scarce, economic theory accepts a natural element of competition for these resources.

In addition to assuming that we naturally compete for scarce and limited material resources, economic textbooks assume that well-being is achieved by consumption of these resources. Happy is the one who consumes, unhappy is the one who does not. Classical economics tell us that it makes no sense to exert time, effort or expense on non-consuming activities, such as maintaining values, if money can be made by ignoring them. Intangible values don't really count (Robbins 2002).

The assumptions underlying the so-called “economic laws” were developed at a time when religion was being separated from science, the accepted worldview became secularized, and the sacred was substituted by belief in matter. Economic theory was affected by great scientific discoveries in physics, biology and psychology, and economic laws were presented with the same authority as laws of nature. Newton and Descartes described reality in terms of a more or less fixed number of “building blocks”, of “things”, subject to measurable laws such as gravity and, put together smartly, operating like a big machine. The world of matter was regarded as a mere machine, to be used by man, his reason and free will.

When Adam Smith, in his famous work “The Wealth of Nations” (1776), introduced the “invisible hand” of the market, by which the things and building blocks can be exchanged efficiently on the basis of each individual's self interest, we extended these laws into the realm of economics. 19th century economists such as Malthus and Ricardo, added the notion that economies are closed systems, bound

by fixed quantities of material goods. No matter how large economies become, they remain closed, thus limited. This has led to an important premise underlying classical economics: scarcity is a natural state. Hence it is believed that competition for scarce resources, or even war, is natural too. We forgot that Adam Smith wrote in his earlier work, “The Theory of Moral Sentiments” (1982) that markets could not function without ethics and morals. We have come to believe that greed and selfishness is what economies are all about.

This worldview was solidified when Darwin described human beings as a relatively intelligent species evolved from primitive apes motivated by lusts and aggression (as Freud would confirm later in psychology). Our intelligence has taught us to behave socially, but fundamentally we are selfish beings subject to the law of “survival of the fittest”. Even though this worldview is now no longer recognized as scientific but as a belief system now called “scientific materialism” (Wallace 2007), it still holding sway over our economic thinking.

E.F. Schumacher observed in his landmark book “Small is Beautiful” that the idea of competition, natural selection and the survival of the fittest, which purports to explain the natural and automatic process of evolution and development, still dominates the minds of educated people today. Schumacher argues that

These ideas, combined with the belief in positivism, have wrongly been given universal validity. They simply do not stand up to factual verification. But since they conveniently relieved us from responsibility – we could blame our immoral behavior on ‘instincts’ – these ideas have retained a prominent place in the consciousness of modern man (Schumacher 1973).

In fact, over the last two centuries these principles of competition and expansion have been firmly enshrined in our capitalist legal systems, first domestically and more recently also internationally. For example, the international laws governing the main multilateral agency for international trade, the World Trade Organization, are based on Ricardo’s concept of “comparative advantage”, the idea that nations, by specializing yet keeping their borders open, will all benefit from unfettered competition. This belief arose from 17th century Europe, which had invented the nation state to better deal with the opportunities provided by colonialist expansion. The idea that there could be limits to competition and growth did not occur to the policymakers of that time.

Likewise, with the emergence of the nation state, monetary systems and policies were developed based on the notion of scarce money supply, linked to gold and silver, the value of which was controlled by the nation. The artificial measurement of money scarcity, when the churches relaxed their restrictions on interest bearing lending (considered “usury” for many centuries), introduced an official element of competition among those in need of funding (Rowbotham 1998; Lietear 1999; Anielski 2007). In contrast, those with money could set rules on how the scarce resources should be invested. These rules favor those with wealth over those who have not, the vast majority. Nonetheless, because they created stability, the rules

have been canonized as the central feature of our corporate and banking laws, forming the basis of what we know as “capitalism”. The majority has been locked in a competitive cycle for scarce capital ever since.

What Do We Measure?

Late 19th century economists like Jevons and Walras, who were inspired by the mathematical approach of the natural sciences, made economics into a measurement and forecasting tool. These inventions enabled us to develop indicators to measure the well-being of our society in terms of growth. We measure things that can be quantified by assigning monetary weightings, which means they measure primarily money-based or economic phenomena. Thus, they exclude qualitative distinctions.

Yet over the last decades it has appeared that it is exactly the qualitative factors that are crucial to our understanding the ecological, social and psychological dimensions of economic activity. For example, economic calculations ignore the value of things such as fresh water, green forests, clean air, traditional ways of life, democratic process, human rights, to name but a few – simply because they cannot be easily quantified. We regard these phenomena as “public goods” for which we don’t use economic valuations. This partial blindness of our current economic system is increasingly recognized as the most important force behind the accelerating destruction of the global environment (Van Dieren 1997; Stiglitz 2009). For what cannot be measured, cannot be properly managed either.

The most basic measure of a nation’s economic performance is called Gross National Product (GNP) calculated on the basis of all quantifiable economic transactions recorded in a given period. GNP was developed during World War II to keep track of contributions to the war. After the Second World War, governments started to use GNP as a measure for economic progress. Yet GNP statistics are inherently flawed. In calculating GNP, natural resources are not depreciated as they are being exploited. Buildings and factories are depreciated, as well as machinery, equipment, trucks and cars. Why are forests not depreciated after irresponsible logging and farming methods turn them into barren slopes causing erosion and landslides? The money received from the sale of logs is counted as part of the country’s income for the year. Further, the national statistics would show that the country has gone richer for cleaning up landslides. The funds spent on the chain-saws and logging trucks will be entered on the expense side of the project’s accounts, but those to be spent on the supposed replanting will not. Nowhere in the calculations of this country’s GNP will be an entry reflecting the reality that millions of trees are gone forever.

Our system also fails to account for all the associated costs of what is called consumption. Every time we produce and consume something, some sort of waste is created, but these costs are usually overlooked. From the economic viewpoint these costs are considered “externalities”. For instance, for all the fuel we consume in a given day, we do not account for extra CO₂ emission in the atmosphere. Since we equate an increase in consumption with an increase in “standard of living”, we encourage ourselves to produce more and also waste more.

Discounting the Future

Our national accounting standards also contain questionable assumptions about what is valuable in the future as opposed to the present. In particular, the standard discount rate that assesses cash flows resulting from the use or development of natural resources assumes that all resources belong totally to the present generation. As a result, any value that they may have to future generations is heavily discounted when compared to the value of using them up now (Gowdy 2009). Likewise, by discounting the future value of money on the basis of interest rates, we have accepted that a dollar spent today is more valuable than a dollar spent tomorrow. This has caused a dangerous short-term mentality among fund managers who control increasing amounts of investment funds, which can be moved from one country to another at the speed of online digital communication (Dixon 2003). It also provided a whirlpool-like force behind the expansion of our financial markets, which have come to grow to such an extent that national authority can no longer control them as the 2008 financial crisis has shown.

The financial markets, in particular, with the daily turnover of more than US\$2.3 trillion on foreign currency markets worldwide, are now setting the pace for continued growth and expansion. Money should be moved in order to make more money. Short-term rewards are more important than long-term, sustainable investments. Increases in stock prices are equated with economic success, and conversely, a drop is regarded as an economic failure with immediate divestment as a result. This has had already disastrous results, as is shown by the repeated crashes of emerging markets, the Internet bubble, corporate scandals and most recently in the subprime crisis which led to the implosion of financial markets. Many blamed this entirely on weak and ineffective governance, while only few recognize that the global financial system itself is at fault. It should, of course, be quite obvious that preoccupation with growth at all costs cannot but lead to disaster, but the supertanker of short-term capitalism seems unstoppable (Anielski 2007; Foster 2009).

By concentrating on the mere statistics of monetary indicators, we fail to distinguish between the qualitative aspects of growth: healthy or unhealthy growth, temporary or sustainable growth. We do not question what growth is actually needed, what is required to actually improve the quality of our life.

As long as governments view GDP growth as their overall objective, its populations will be locked into a cycle of increasing consumption at the expense of societal and ecological health. As long as industrial institutions are designed to make profits as their prime purpose, and financial markets reward and punish them solely on this basis, they will continue to extract value from the planet at unsustainable rates. Creating sustainable economics now means more than a gradual adjustment of policies. It means reinventing new economic, financial and business models, not only leapfrogging to environmentally sound technologies and infrastructures, but also shifting established norms and changing the “rules of the game” that are currently biased against the future. This requires us to look at our collective beliefs.

We first have to revisit the assumptions that underlie our current models. Are the economic laws really uncontrollable? Modern physics, cognitive sciences,

Buddhism and most of the world's spiritual teachings tell us that we make up reality, so likewise it must be us who make up the economy. So let's have a closer look at who we are and how we live.

Spiritual Views Rediscovered

Twenty-first century physics is describing reality in terms rather different from traditional economic theory. While the latter are primarily concerned with a fragment of human behavior, namely "economic" actions defined as those that can be quantified in terms of money, the former approach holistically, incorporating all actions – and even thoughts – that make up our world. While Newton, Descartes and classical economics define the world in things, of separate building blocks, the new sciences point out there is really no independent *thing* there, and that the focus on things will miss the relations and the whole context that make the thing possible. In economic textbooks human beings are isolated consumers and producers interacting at markets driven by monetary gains. Modern sciences now tend to agree with age-old spiritual traditions such as Buddhism, by viewing humans as being part of a larger whole.

This holistic viewpoint is based on insights from modern quantum and astrophysics, which postulate that the universe consists of unified patterns of energy (Laszlo 2004; Goswami 2000). According to one of Einstein's favorite epigrams, the field generates the object, not vice versa. That is, whole systems give rise to specific things, not the other way around. While in the Cartesian worldview we can only know reality by knowing specific parts, Einstein discovered that in order to know things, we need to know the whole from which they originate. In other words, we are not isolated hard and fast physical things but more like "light beings" or "energy-flows" continuously interrelating and changing. Thus, we are more like "intangibles" – exactly that which cannot be measured in classical economic models.

The new understanding of reality is a systemic understanding, which means that it is based not only on the analysis of material structures, but also on the analysis of patterns of relationships among these structures and of the specific processes underlying their formation. This is evident not only in modern physics, but also in biology, psychology and social sciences. The understanding of modern biology is that the process of life essentially is the spontaneous and self-organizing emergence of new order, which is the basis of life's inherent abundance and creativity. Moreover, the life processes are associated with the cognitive dimension of life, and the emergence of a new order includes the emergence of language and consciousness (Capra 1992).

In contrast, most economic strategies are built around the possession of scarce material things such as land, labor and capital. What counts is how much real estate we own, how much money we have and how many hours we work. This thinking is based on the assumption that land, labor and capital are all there is, that the real world is a closed end system. Physics and biology now state the opposite, pointing

to the openness and interrelatedness of all things, particularly of that which lives. Buddhism and most spiritual traditions recognize the unlimited potential in every sentient being – the potential to be whole and enlightened. Our minds create and pervade everything; hence physical reality is open for the spiritual.

The key in the modern economy is that what counts here is not merely material possession, but know how and creativity, the domain of the mind. Hence the term “knowledge economy”. As many of companies have found out, a company cannot “own” the knowledge that resides in the heads of the employees. Research has shown that most successful business strategies focus less on things but more on how to manage them. It is commonly accepted that all technical and social innovation is based on what is now phrased as “intellectual capital”. And unlike ordinary capital, intellectual capital is not subject to physical limits.

So what does all this tell us? Clearly, the 19th century mechanistic “matter only” worldview has been turned on its head. And thus we should revise long-held axioms. First, the traditional concept that we are simply competitive beings chasing scarce material resources is incorrect. Second, intangible values are equally important for our well-being. These intangibles are stored in the mind, free from physical constraints and therefore potentially of unlimited supply. Third, happiness is not merely determined by what we have, how much we consume, but also by what we know, how we can manage and how we can be creative, ultimately by who we are – so not by having, but by being. We are human *beings* after all.

Human Nature and Motivation

Since these findings seem to correspond with Buddhist axioms, it is conceivable that common ground between Buddhism and economics may emerge. Let us therefore examine this “being” side of our existence more deeply. What kind of beings are we? Happy or unhappy? Altruistic or selfish? Compassionate or competitive? Modest or greedy? Driven to seek short-term pleasure, or seeking meaning, a higher purpose, a longer-term state of happiness? At first glance economic theory and Buddhism seem to hold different views on these questions.

Economists have accepted the principles of selfish individualism: the more the individual consumes, the better off he will be. And he consumes out of perpetual needs, which – if unmet – make him innately unhappy. Economic growth is achieved when individuals consume more and more so that demand and output are boosted. This leaves no room for altruism, where an individual may incur costs for no conceivable benefit to himself. This approach reduces the meaning of cooperation to a mere reciprocal arrangement among individuals: individual sacrifices on behalf of the community can only be seen as an insurance policy, for it will ensure the individual that the community will help him in the future.

We can understand the need for values such as altruism because of mutual dependence in this increasingly smaller and interconnected world. But Buddhism points to another, more profound and personal dimension of altruism and compassion.

Buddhist practitioners make altruism the core of their practice, not only because it is the cheapest and most effective insurance policy for their future, but also specifically because the *real* benefit of compassion is that it will bring about a transformation in the mind of the practitioner. It will make them happy.

How can this be done if our real nature is selfish? Compassion can only work if our nature is receptive to having an altruistic attitude, if somehow compassion is in harmony with our essence, so that we can actually *enjoy* being compassionate. If we were inherently selfish, any attempt to develop an altruistic attitude would be self-defeating.

Buddhism explains that there is no real independently existing self that is either good or bad. Our selfish motives are based on an illusionary belief in an independent self, separating us from others. We do have selfish traits, they may even dominate us at times, but they can be removed by mental practice. What remains is our true nature, our Buddha-nature, which is a state of mind recognizing the interconnectivity with all that lives. Since we are so connected to the world, since there is no disconnected self, the practice of kindness and compassion is the most effective.

Altruism has also been found to be more efficient than market exchange in spheres such as health care and education (Titmuss 1970) and various other experiments in economics have confirmed the role of altruism in economics (Güth 1982; Fehr and Gächter 1999). Several modern scientific disciplines, such as psychology, neuro-physiology and medical science, have started to study the effects of empathy on the human mind, body, health and relationships. Not surprisingly, they have ascertained that compassion is of tremendous help to our well-being. A compassionate frame of mind has a positive effect on our mental and physical health, as well as on our social life, while the lack of empathy has been found to cause or aggravate serious social, psychological and even physical disorders (Varela 1991; Goleman 1997; Singer 2001). In a recent experiment with experienced contemplatives, the neuroscientist Richard Davidson of the University of Wisconsin found that meditation on compassion affects brain structures, a phenomena called “neuro-plasticity”(Davidson 2004; Schwartz and Begley 2002) indicating a positive correlation between compassion, well-being and health.

Other recent research on stress shows that people who only seek short-term pleasure, are more prone to stress and burn out than those who seek a higher purpose, who seek meaning rather than pleasure (Seligman 2002). Meaning generally is derived from a higher purpose or values such as serving others, going beyond short-term selfish needs. The fact that disregarding short-term selfish needs is actually a source of longer-term happiness turns the classical economic notion of selfish individualism upside down. As economist Stanislaw Menchikov observes:

The standard, neoclassical model is actually in conflict with human nature. It does not reflect prevailing patterns of human behavior. [. . .] If you look around carefully, you will see that most people are not really maximizers, but instead what you might call ‘satisfiers’: they want to satisfy their needs, and that means being in equilibrium with oneself, with other people, with society and with nature. This is reflected in families, where people spent most of their time, and where relations are mostly based on altruism and compassion. So most of our lifetime we are actually altruists and compassionate (Tideman 2002).

What does all this mean for the way we manage our economy? Here we are entering uncharted territory. But some things are clear. The debate is not simply on government versus markets. As noted earlier, I believe it is about deeper questions related to the mind, our consciousness. Economic thinking is primarily focused on creating systems of arranging matter for optimal intake of consumption. It assumes that the main human impulses are competition and consumption, and it has sidestepped moral and spiritual issues because it would involve a qualitative judgment on values and other intangibles that goes beyond its initial premises. But by assuming that the more we consume, the happier we are, economists have overlooked the intricate working of the human mind and human society.

At the root of this belief in the market lies a very fundamental misconception, or what Buddha would have called “Wrong View”. That is, we have not really understood what makes us happy – our mind. Blind faith in classical economic theory has led us to believe that the market will bring us all the things that we want. We cling to the notion that contentment is obtained by the senses, by sensual experiences derived from consuming material goods. This feeds an emotion of sensual desire. At the same time, we are led to believe that others are our competitors who are longing after the same, limited resources as we are. Hence we experience fear, the fear of losing out, the fear that our desire will not be satisfied.

So we can observe that the whole machine of expanding capitalism is fuelled by two very strong and mutually reinforcing emotions: desire and fear. They are so strong that they appear to be permanent features of our condition. Yet Buddha taught that since these emotions are based on ignorance, a misconception of reality, they can be removed by the understanding of reality, which is the prime object of spiritual practice. According to all religions, happiness is an inner experience, available to anyone, regardless of wealth or poverty. Further, fundamentally there is nothing that we lack. By developing the mind, our inner qualities, we can experience perfect wholeness and contentment. Finally, if we share with others, we will find that we are not surrounded by competitors. Others depend on us as we depend on them and it is precisely these social interactions that provide us with pleasure and meaning (Gintis 2000; Seligman 2002).

It was in recognition of these principles that Buddha created the monastic community, the Sangha, which in many countries exists into the present day. By creating the Sangha he offered an escape from the *structural nature of desire and fear*. He may even have foreseen the extent to which this would grow until our entire global society would be locked in an addictive cycle of consumption, both driven by and driving greed and anxiety.

I believe that if Buddha would be alive today, in addition to creating the Sangha and offering moral guidelines for Right Livelihood, he would create economic theory based on a correct and complete understanding of what is a human being and what makes him/her happy – in other words: a contemporary and expanded version of Right View. Buddha would understand that as long as economics is based on a partial or wrong image of man and his reality, it will not produce the results we need.

Towards a New Paradigm for Economics

But change is upon us: we are gradually shedding the “wrong views” of economics in order to explain the persistent tension between economic theory and practice. Old assumptions are being reviewed in various sub-schools of economics.

The field of behavioral economics has arisen over the last 30 years based on empirical findings from many experiments involving real people. It has gotten considerable traction thanks to the financial crisis that erupted in 2008 and the subsequent economic depression, which made it obvious that classical notions of rationality and equilibrium of markets were mere theoretical constructs and had little to do with how financial markets behave in reality. Several recent publications have popularized these new insights (Akerlof and Schiller 2008; Ariely 2009; Sunstein and Thaler 2009). A central insight of behavioral economics is that of fairness and trust as prime human drivers (Camerer 2004). Neuro-economics is another emerging school that explores the same territory of real behavior, founded by Daniel Kahneman who received the 2003 Nobel Prize in Economics for his studies on intuitive judgment and decision-making. The significance of his work lies in its ability – for the first time in the history of economics – to describe the neuro-biological basis of economic behavior. This work is bridging the heretofore-distinct disciplines of psychology and economics (Kahneman 1979; Glimcher 2009).

The new neuro- and behavioral science is revelatory because it provides empirical evidence derived from a biological basis for the notion that human nature is *not* driven by greed and egoism alone; at least equally important are principles of fairness, cooperation and altruism. Since neoclassical economics consider itself to be a science concerned with “hard data”, the fact that there is hard biological basis for these principles helps to uproot the long held yet untested assumptions of classical economics on selfishness and rationality (Beinhocker 2006; Gowdy 2008). The wiring of the human brain indicates that motives of fairness and degrees of altruism are more natural to the human mind than selfishness and individuality. Most significantly, neuro- and behavioral economics have established that the so called “rational self-regarding actor model” needs to be replaced by a framework that accounts for our irrational, emotional and pro-social behaviors (Gintis 2000; Beinhocker 2006; Gowdy 2008).

By extension, our view of markets as a neutral mechanism that efficiently processes our collective rational choices into collective well-being and a state of equilibrium has become obsolete. Buddha understood that our untamed minds are constantly influenced by emotional up- and downswings. We now know that the minds of market players are continuously subject to emotional and social influences (Zak 2008). Thus, the theory of market equilibrium needs to be replaced by a view of markets as a dynamic, evolutionary process that is both shaped by our choices and shaping our choices, mostly on an unconscious basis.

The new paradigm is that many stakeholders of the market are all partners in a continuous process of dynamic co-creation, with the human mind not as independent (or objective) witness but as active (subjective) co-creator determining the quality and direction of this process. Quantum physics and neurobiology have observed

that the human mind creates the reality that it perceives: hence markets must be creations of the mind as well. It is moreover a proven scientific fact that the human mind has the capacity to observe and alter itself – a phenomena called “mindsight” by Dan Siegel (2009). Neuro-science experiments have indicated that the mind (through dedicated mental effort) can even alter physical brain structures (Schwartz and Begley 2002; Davidson 2004). The mind can no longer be exclusive identified with the brain. These findings constitutes a paradigm shift in our thinking about consciousness and the brain, and have put the mind, relegated as “unscientific” by Descartes, back at the center of our worldview (Damasio 2002). Importantly, these facts allow for the possibility of a new, mind-based paradigm for economics too.

The new economic schools have in common that they try to incorporate intangibles values such as (un)conscious choice, emotions, relationships, culture and eco-systems into their models. Nobel Prize winning economist Douglass North, a founder of institutional economics, says:

The theory employed, based on the assumption of scarcity and hence competition, is not up to the task. To put it simply, what has been missing [in economic theory] is an understanding of the nature of human coordination and cooperation (North 1992).

The 1998 Nobel Prize in Economic Science was awarded to Amartya Sen, who defines economic development in terms of freedom of basic necessities such as education and healthcare. He observed that as long as the contemporary world denies elementary freedoms to the majority of the world population, planning for economic development is of no use. In doing so, he has restored an ethical dimension to the discussion of development. Sen (1998):

Along with the working of markets, a variety of social institutions contribute to the process of development precisely through their effects on enhancing and sustaining individual freedoms. The formation of values and social ethics are also part of the process of development that needs attention.

The subjective dimension of economics was already clear to economic historian David Landes, who concludes in his review of two millennia of economic history “The Wealth and Poverty of Nations”: “If we learn anything from the history of economic development, it is that culture makes all the difference” (1998). Just because markets give signals does not mean that people respond timely, rationally or well. Some people do this better than others, depending on their culture, and culture is nothing but the aggregation of values.

George Soros, the Hungarian born financier discovered these flaws in market exchanges firsthand. After making fortunes from speculating on what he saw as market inconsistencies, he now passionately campaigns for a more social face of capitalism. In 2000 he stated:

Economic theory presupposes that each participant is a profit center bent on maximizing profits to the exclusion of all other considerations. But there must remain other values at work to sustain society – indeed human life. I contend that now market values have assumed an importance that is way beyond anything that is appropriate and sustainable. Markets are not designed to take care of the common interest.

It is increasingly understood that in order to preserve the common interests, we need a new model of economic governance, globally and locally. Currently the commons of air, water, forest, fishery and biodiversity have no market value; hence we think they are “free”. Governments have sought to protect these commons by either keeping them off-limits to economic exploitation (nature parks, limits, caps) or by pricing them in the hope that their increased scarcity will lead to less demand. But this does not seem to work in practice. While clean water is increasingly scarce globally, it is still cheaply available to most in the west. Yet for more than 2 billion people in the south who lack clean water there is no way to buy it. The 2009 Nobel Prize in Economics was awarded to Elinor Ostrom, who spent her life studying the economics and governance of commons. She advises: “It is better to induce cooperation with institutional arrangements fitted to local ecosystems than to try to command from afar”(2009). At the same time “the systems from above” – governments, law, international bodies – can be critically important in empowering and facilitating the commons. But for doing this, they need a commons perspective inscribed into their measurements and polity architecture as well.

Towards GNH Indicators

A whole range of economists is busily developing models that account for the more intangible common factors affecting our economies. One of the first was Herman Daly, who asserted in “For the Common Good” that a country’s growth has both costs and benefits – not just the benefits that contribute to GDP (1989). He said that, in some situations, expanded production facilities damage the health, culture and welfare of people. Growth that was in excess of sustainable norms (e.g. of ecological yield) had to be considered to be *uneconomic*. These efforts paved the way for the creation of the Genuine Progress Indicators (GPI), which has found application in various local jurisdictions, especially in Canada (Anielski 2007).

The World Bank has issued a “Wealth Index“, which defines the wealth of nations to consist for 60% of “human capital” (social organization, human skills and knowledge), 20% of environmental capital (nature’s contribution) and only 20% of built capital (factories and capital). Swiss economists Bruno Frey and Alois Stutzer (2002) integrate insights from the emerging field of happiness psychology and economics, by measuring the degree to which unemployment and inflation nurture unhappiness. The UK Government has shown interest in creating a new indicator set focused on well-being, inspired by the Happy Planet Index from The New Economics Foundation (2008). The French President Sarkozy commission a report on alternative indicators, which upon its release generated substantial media attention (Stiglitz 2009).

The most visionary model comes from the Buddhist Kingdom of Bhutan. After hosting the first Gross National Happiness Conference in 2004; the Himalayan country is working on making GNH into a genuine tool for policymaking and economic planning (Ura and Galay 2004). Bhutan’s leaders define GNH in terms of four

pillars: economic development, good governance, cultural preservation and nature conservation. By including governance and culture into its measurements, Bhutan not only follows the trend in global economics of incorporating the qualitative dimension into its models but can also be a pioneer among nations.

In contrast to GDP, which is based on easily quantifiable data such as production and consumption, GNH should incorporate intangible values for which there are no commonly accepted definitions at present. The appeal of the conventional economic indicators has been that they are based on money, which can be subjected to mathematical logic and discipline. GNH and other sustainability indicators are based on more complex factors associated to life, which is much more difficult to measure.

Buddhist philosophy can help us in this endeavor. Buddha set forth a path of spiritual development with various levels of insight and accomplishment along the path. Some Buddhist schools emphasize the possibility of “instant enlightenment”, but the majority of Buddhists advocates a gradual process, in which the worldview of the practitioner gradually evolves. Likewise, the practitioner experiences evolving degrees of happiness. While beginners may be attached to short-term, sensory well-being, they gradually learn to appreciate and strive for long-term happiness. Buddha did not state that these levels of happiness are mutually exclusive – you need to evolve from one stage to another. This gradual, evolutionary approach is in accord with the concept of “hierarchy of needs” developed by psychologists such as Maslow and more recently Seligman (2002), founder of “Positive Psychology”, who have observed that people have the natural ability to learn and grow to higher degrees of fulfillment. It also corresponds to insights from post-Darwinian evolutionary biology, which has ascertained that life itself can be described as an evolutionary process of organisms coping in increasingly complex environments by gradually developing higher levels of intelligence and consciousness (Capra 1992).

We can extend this evolutionary and axiological logic to the relationship between GNP and GNH. GNP represents the material viewpoint, in which material consumption is considered instrumental for achieving happiness, while GNH represents a worldview in which material needs have been met and the objective has become to develop mental or spiritual happiness. In this reasoning GNH is an indicator of a higher order viewpoint than GNP.

Khenpo Phuntsho Tashi and Diederik Prakke were among the first to create a Buddhist framework for measuring GNH (Galay 1999). They took the Eightfold path of Buddhism as a basis and drew parallels with evolutionary psychology. A comparable evolutionary approach has been taken by Richard Barrett (2006), who developed a model which measures seven levels of consciousness based on a corresponding hierarchy of values which he observed in the culture of organizations and nations. Barrett’s model corresponds to the eightfold path approach as presented by Khenpo Puntsho Tashi and Prakke. By explaining the hierarchical relationship between values, Barrett’s model enabled me to match the Eightfold path to Bhutan’s four-pillar definition of GNH. The following synthesizes these approaches in one framework (Table 7.1).

The benefit of this model is that it includes both GDP – the “lowest” level bottom line – while complementing it with “higher level” components that collectively

Table 7.1 Bhutan's four-pillar definition of Gross National Happiness

Buddha's eightfold path	Values/levels of consciousness	Maslow hierarchy of needs	GNH components
8. Right meditation	Transcendence/freedom	Service	Monastic well-being; Religious freedom and flourishing
7. Right mindfulness	Identity	Contribution	Culture Development; Leadership education
6. Right view	Creation	Responsibility	Social welfare; Sustainable development
5. Right effort	Idleness	Internal cohesion	Nature and resource preservation; Culture preservation
4. Right concentration	Participation	Transformation	Political participation
3. Right speaking	Affection/understanding	Self esteem	Education; Culture; Media
2. Right action	Protection	Relationships (community, family)	Governance; Judicial system; norms
1. Right livelihood	Subsistence	Survival	GDP; Economic opportunities; markets

constitute GNH. This model helps us to see how we can combine efforts to generate financial capital alongside with policies to generate social, environmental and cultural capital.

It can also serve as a tool for policymaking when confronted with conflicting interests. Typically, political decisions are made on the basis of trade-offs. For example, when faced with the choice between providing employment versus the preservation of environment, most governments would choose the former. The above GNH model shows that this trade-offs should be made in the context of a certain hierarchy of values. Otherwise policymakers will continue to sacrifice higher values for lower values, longer term interests for shorter term interests, and causing investments in sustainable development to be put off. If GNH can be developed into a comprehensive tool incorporating all relevant values for a happy life, it will free governments from defaulting to economic decisions on the narrow paradigm of materialism.

The holistic nature of GNH will also allow for market forces to remain active. In fact, as long as we treasure the freedom and opportunities that the market economy provides, GNH will have to include principles of competition and market

forces – but only as a supportive force for higher valued well-being. Competition is so much valued in our capitalist economies because it has proven to be an effective incentive for bringing out the best of our selves. That is why capitalism has “defeated” communism. But competition without a higher moral dimension is like an elephant gone wild – it will destroy the very earth it depends on. At the same time, the failure of Marxism has shown us that values such as compassion or cooperation can never be more than guidelines for individuals or groups who remain free to make their own choices – it cannot be turned into an ideological system.

In sum, GNH is congruent with what is known as a “mixed economy”, the idea that market forces could do many things well – but not everything. This will require government and all actors in the economy to reclaim responsibility for their lives and start defining economic objectives in more human terms. The neoclassical principle of “laissez faire” has wrongly created a mentality of taking things for granted and we have become enslaved by the market and its monetary values. The alternative is not a return to rigid central planning and closing one’s border, but rather the development of an alternative economic model tailor-made to suit the condition of our own society and life itself.

What would an economic model look like if it were to allow, in the spirit of Buddhism, the prospect of happiness for all being to inform our collective behaviors? Clearly, as we discussed earlier, our current models have not taken this notion into account. Let’s first have a look at our largest, macro-economic models. Recalling the original Greek meaning of economics, and now knowing that we are all part of one global system, we may ask: how should we manage our planetary household?

In the last century we have experimented with the two extremes of economic modeling: central planning under communism and free market capitalism. The latter functions on principles of self-regulation, self-organization, and creativity and so on, while communism is based on a central point of intelligence. Capitalism clearly allows better for the emergence of individual happiness, yet when we look more carefully, we can observe that neither of the extremes is optimal. The fostering of happiness is not limited to mere self-expression and seeking short-term happiness for oneself alone, but rather involves a long-term perspective of meaningful fulfillment for the collective. As extensive research has shown, true happiness is a function of integral belonging to a larger whole (Seligman 2002). Hence happiness relates to sustainability and equity, exactly those aims that are put at jeopardy by the current form of global capitalism.

There are now many ways to show that both capitalism and communism are systems that, when taken to an extreme, are self-destructive. Governments who see themselves to be owner of the economy tend to over-promise and over-spend. Their politicians express rhetoric and fail to take measures towards sustainable development, as these would require longer-term investments beyond their elected office tenure. Conversely, if governments, considering markets supreme, fail to provide effective market guidance and regulation, business ends up controlling the economy. This is what has happened in the last decades, as business is increasingly holding governments hostage over the promise to be the nation’s employment and

tax generator. Business, designed to focus on short-term financial profits for its shareholders as its primary objective, is now dominating governments' longer-term agendas. Under such a scenario no significant investments in sustainable development can be expected either. More likely is the collapse of the entire system (Foster 2009). The financial crisis of 2008 gave us a taste of what may lie ahead.

What is needed is a "middle way" approach: the notion that we need efficient markets *and* central leadership. Middle way does not mean a compromise or settling for second-best. Rather, it means proactively creating an attitude of responsibility of all actors in the economy by which synergetic alliances with win-win outcomes are naturally achieved. Thus, Buddhist economics is congruent with what is known as a "mixed economy", the idea that market forces could do many things well – but not everything. Economic history has shown that healthy economies and in fact healthy societies generally had such a mixed economy, in which markets and governments work together in a dynamic equilibrium. The challenge we now face is to create an economic system that fosters sustainability and well-being for all.

While this may be a distant ideal, we can be inspired by a fact of historic significance: the new emerging scientific paradigm of non-material interconnectedness – everything being an integral part of the larger whole, with human consciousness at its source – is in agreement with central tenets of Buddhism. As Buddha has taught, once we fully understand the implication of the interdependent nature of reality, breakthrough insights will emerge. These will indicate the best way forward for managing our planetary household, which triggers hope for our future. The economic models of the future will no doubt account for a reality much closer to the totality of the human experience. They will be more aligned with mankind's deeper aspiration, in which the mind, emotions and other intangible values play such an important role.

By being so aligned to the emerging scientific worldview, the philosophy of Buddhism can play an important role in this endeavor. It takes the inner experience as starting point of the inquiry into reality, as opposed to conventional science, which takes outer reality as starting point. The power of the Buddhist approach is that it does not intend to exclude the conventional scientific approach, but expands it. The reverse is more difficult. By expanding the outward oriented approach of science, and taking a more holistic, inclusive and systemic approach to understanding reality, Buddhism can help defining and explaining a comprehensive understanding of human life, human experience, human motivation and human behavior. In addition, Buddhism has also much to say how we can free ourselves from the systemic, structural violence that mainstream economics is bringing about.

All this is part of the Buddhist notion of Right View as antidote to Wrong View or ignorance. H.H. the Dalai Lama stated that there are two kinds of ignorance: one is not knowing, the other is wrong knowledge (2005). There is no reason why we would limit these kinds of ignorance to refer to our inner internal world only, such as the nature of our "self" et cetera. After all, society and economy are "man-made" phenomena – or better: mind-made phenomena. And because they are mental constructs, an understanding of human nature will be indispensable for understanding the outer world as well.

Buddhist economics is more than subscribing to individual mental practice and Right Livelihood. As soon as we enter the market place, and buy products produced by a system that destroys environmental and social integrity, we may actually breach Right Livelihood – we may add to structural violence. To say it differently, as long as the assumptions behind our current economic system contradict the wisdom of Right View, we cannot expect the system to encourage Right Action from the people who operate within the system.

References

- Akerlof, G.A., and R.J. Schiller. 2008. *Animal spirits, how human psychology drives the economy and why it matters for global capitalism*. Princeton, NJ: Princeton University Press.
- Anielski, M. 2007. *The economics of happiness: Building genuine wealth*. British Columbia, Canada: New Society Publishers.
- Ariely, D. 2009. *Predictably irrational, the hidden forces that shape our decisions*. New York, NY: Harper Collins Publishers.
- Barrett, R. 2006. *Building values-driven organizations – A whole systems approach to cultural transformation*. Amsterdam: Elsevier.
- Beinhocker, E. 2006. *The origin of wealth*. Cambridge, MA: Harvard Business School Press.
- Bubna-Litic, D. 2000. 'Buddhism returns to the market-place. In *Contemporary Buddhist ethics*, ed. D. Keown, 183–212. London: Curzon Press.
- Camerer, C. 2004. Behavioral economics: Past, present, future. In *Advances in behavioral economics*, eds. C. Camerer, G. Loewenstein, and M. Rabin, 3–52. Princeton, NJ: Princeton University Press.
- Capra, F. 1992. *The hidden connections; Integrating the biological, cognitive, and social dimensions of life into a science of sustainability*. New York, NY: Random House.
- Dalai Lama, H.H. 2000. *Ethics for the new millennium*. New York, NY: Penguin Putnam Inc.
- Dalai Lama, H.H. 2005. *The Universe in a single atom*. New York, NY: Random House.
- Daly, H. 1989. *For the common good*. Boston, MA: Beacon Press.
- Damasio, A. 2002. *Descartes' error: Emotion, reason, and the human brain*. New York, NY: Putnam Publishing.
- Davidson, R.J. 2004. *Proceedings of the National Academy of Sciences, US*, 16 Nov 2004. (For further information on Davidson's work on neuroscience see also: www.mindandlife.org).
- Dieren, W. van. (ed.) 1997. *Taking nature into account – Towards a sustainable national income. A report of the club of rome*. The Netherlands: IMSA.
- Dixon, F. 2003. Total corporate responsibility; Achieving sustainability and real prosperity. *Ethical Corporation Magazine*. December 2003.
- Fehr, E., and S. Gächter. 1999. Cooperation and punishment. *American Economic Review*. Field, A. 2001. *Altruistically inclined?* Ann Arbor, MI: University of Michigan Press.
- Foster, J.B. 2009. *The great financial crisis: Causes and consequences*. New York, NY: Monthly Review Press.
- Frey, B., and A. Stutzer. 2002. *Happiness and economics: How the economy and institutions affect well-being*. Princeton, NJ: Princeton University Press.
- Galay, K. (ed.) 1999. *Gross national happiness – A set of discussion papers*. Thimphu, Bhutan: The Centre for Bhutan Studies.
- Gintis, H. 2000. Beyond homo economicus: Evidence from experimental economics. *Ecological Economics* 35:311–322.
- Glimcher, P. 2009. *Neuroeconomics: Decision making and the brain*. London: Academic.
- Goleman, D. (ed.) 1997. *Healing emotions*. Boston, MA: Shambhala Publications.
- Goswami, A. 2000. *The visionary window – A quantum physicist's guide to enlightenment*. Wheaton, IL: Quest Books.

- Gowdy, J. 2008. Behavioral economics and climate change policy. *Journal of Economic Behavior and Organization* 68:632–644.
- Gowdy, J. 2009. *Economic theory old and new: A students' guide*. Palo Alto, CA: Stanford University Press.
- Güth, W. 1982. An experimental analysis of ultimatum game bargaining. *Journal of Economic Behavior and Organization* 3:367–388.
- Kahneman, D. 1979. Prospect theory: An analysis of decision under risk. *Econometrica* 47:263–291.
- Krugman, P. 2009. *The return of depression economics*. New York, NY: W. W. Norton.
- Landes, D. 1998. *The wealth and poverty of nations*. New York, NY: Little Brown & Co.
- Laszlo, E. 2004. Cosmic vision – The dawn of the integral theory of everything. *Souls of Distortion*.
- Layard, R. 2005. *Happiness: Lessons from a new science*. New York, NY: The Penguin Press.
- Lietear, B. 1999. *The future of money, a new way to create wealth, work and a wiser word*. London: Century.
- Loy, D. 2003. *The great awakening: A Buddhist social theory*. Boston, MA: Wisdom Publications.
- New Economics Foundation. 2008. *National accounts of well-BEING*. London: New Economics Foundation.
- North, D.C. 1992. *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- Ostrom, E. 2009. *Governing the commons: The evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Payutto, P.A. 1992. *Buddhist economics; A middle way of the market place*. Bangkok.
- Rajavarukmi, P. 1990. Foundation of Buddhist social ethics. In *Ethics, wealth, and salvation*, eds. R.F. Sizemore and D.K. Swearer, 110–129. Columbia, SC: University of South Carolina Press.
- Robbins, L. 2002. quoted In *The Pinguin history of economics*, by Roger E. Backhouse. London: Penguin Books.
- Rowbotham, M. 1998. *The grip of death: A study of modern money, debt slavery and destructive economics*. Oxfordshire: Jon Carpenter.
- Schumacher, E.F. 1973. *Small is beautiful; economics as if people mattered*. New York, NY: Harper & Row.
- Schwartz, J.M., and S. Begley. 2002. *The mind and the brain: Neuro-plasticity and the power of mental force*. London: Harper Perennial.
- Seligman, M. 2002. *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York, NY: Free Press.
- Sen, A. 1998. *Development as freedom*. New York, NY: Alfred Knopf.
- Siegel, D. 2009. *Mindsight, the new science of personal transformation*. New York, NY: Random House.
- Singer, T. 2001. Understanding others: Brain mechanisms of theory of mind and empathy. In *Neuroeconomics: Decision making and the brain*, 251–268. Amsterdam: Elsevier.
- Siveraksa, S. 1992. *Seeds of peace: A Buddhist vision for renewing society*. Berkeley, CA: Parallax Press.
- Smith, A. 1982. *The theory of moral sentiments*. Indianapolis, IN: Liberty Classics.
- Soros, G. 2000. *Open society: Reforming global capitalism*. New York, NY: Public Affairs.
- Stern, N. 2006. *The economics of climate change: The Stern review*. Cambridge: Cambridge University Press.
- Stiglitz, J. 2009. *Report by the commission on the measurement of economic performance and social progress*. See www.stiglitz-sen-fitoussi.fr/en/index.htm.
- Sunstein, C.R., and R.H. Thaler. 2009. *Nudge. Improving decisions about health, wealth and happiness*. London: Penguin Press.
- Thurman, R. 1997. *Inner revolution, life, liberty, and the pursuit of real happiness*. New York, NY: Riverheads Books.
- Tideman, S. (ed.) 2002. *Compassion or competition – Dialogues on business and economics with H.H. the Dalai Lama*. Amsterdam: Dutch Buddhist Federation.

- Titmuss, R. 1970. *The gift relationship: From human blood to social policy*. New York, NY: Pantheon Books.
- Ura, K., and K. Galay (eds.). 2004. *Gross national happiness and development*. Thimphu, Bhutan: Center of Bhutan Studies. See also www.grossnationalhappiness.org.
- Varela, F. 1991. *The embodied mind: Cognitive science and human experiences*. Cambridge, MA: MIT Press.
- Wallace, B.A. 2007. *Contemplative science: Where Buddhism and neuroscience converge*. New York, NY: Columbia University Press.
- Zak, P. 2008. *Moral markets: The critical role of values in the economy*. Princeton, NJ: Princeton University Press.