Critical Holism:

A New Development Paradigm Inspired by Gross National Happiness?

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I feel that there must be some convergence among nations on the idea of what the primary objective of development and progress should be – something Gross National Happiness seeks to bring about.

- His Majesty Jigme Khesar Namgyel Wangchuck, the Fourth King of Bhutan, then the Crown Prince, during the Closing Speech at the First International Conference on Gross National Happiness, Thimphu, Bhutan, February 2004.

At the start a new candidate for paradigm may have few supporters, and on occasions the supporters' motives may be suspect. Nevertheless, if they are competent, they will improve it, explore its possibilities, and show what it would be like to belong to the community guided by it (Kuhn, 1962).

Abstract

In this paper we try to give a provisional sketch of an awareness-expanding process that is emerging in Thailand from a series of conferences on Gross National Happiness (GNH) since 2004. This paper is offered for discussion at the start of the GNH Movement Project that provides follow-up to the third GNH conference held in Nongkhai and Bangkok provinces, Thailand, in November 2007. The aim of the paper is to draft a 'landscape' for comparison and synthesis between Gross National Happiness and resonating concepts, in particular Sufficiency Economy in Thailand, which we expect will ultimately result in a framework for multi-stakeholder action and research focusing on

converging development goals in the coming decade. The question will be explored how consensus may grow towards a 'new development paradigm' and aims to be a contribution to the Global GDP Debate.

The International Conference on Gross National Happiness

In November 2007 we had the great privilege to organize the 3rd International Conference on Gross National Happiness (GNH3) in Thailand. It turned out to be a colourful week-long event involving farmers, community leaders, academics, business people, spiritual leaders, policy makers, and youth.

Our involvement as organizers, in partnership with a variety of groups and persons, left us with the challenging legacy of producing a synthesis of the great diversity of ideas, initiatives and research projects gathered in the 3rd GNH conference. In the 'GNH of movement'-workshop series a group stakeholders development will explore the concepts of happiness and social transformation; principles of effectively shaping multi-stakeholder dialogue; research on alternative indicators; concrete programme initiatives in the areas of (1) ICT and the media, (2) sustainable agriculture and the urban-rural divide' as well as (3) capacity building in the Mekong region. In particular the possible role of Thailand in the *Global GDP Debate* will be explored as well as, from the point of the GNH movement, the potential synthesis between a diversity of transformative streams including Buddhist Economics and Sufficiency Economy. Subsequent recommendations building and development all capacity policy stakeholders are expected to result from this process.

Understanding Gross National Happiness

The Four Pillars

The concept of Gross National Happiness (GNH) originated from a statement of the Fourth King of Bhutan that 'Gross National Happiness is more important than Gross National Product.' The King made this statement soon after he ascended the throne at 17 in

1972. Foreign consultants and development organizations rushed to knock at the door to sell development concepts, proposals, and programmes to isolated Bhutan, and classified it as a Least Developed Country by UN standards. Bhutan instead decided to carve out its own development model. Gradually GNH gained global recognition as a critique of GDP- driven economic growth and concurrent development policies. However, the principle of 'Gross National Happiness' was officially presented to the international community in 1998 though the so-called 'four pillars'. The 'Four Pillars' of Gross National Happiness are (1) cultural preservation and promotion, (2) good governance, (3) equitable and economic development, and (4) environmental conservation. The Centre for Bhutan Studies has developed nine research domains (psychological wellbeing, health, time use and education, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards) for developing a GNH Index.

In this paper we will focus on the question how the four pillars of GNH may reveal principles of social transformation that can guide consorted action and research in Thailand and abroad towards sustainable development and genuine progress.

GNH as national philosophy of Bhutan

2008 is a very auspicious year for Bhutan as it saw the first democratic elections and adoption of the Constitution. GNH is embedded in the Constitution and all ministries have GNH commissions. 2008 also witnessed the centenary celebration of the Wangchuck Dynasty and the Coronation of the Fifth King. His Majesty Jigme Khesar Namgyel Wangchuck is fully committed to Gross National Happiness and democracy.

GNH as an 'initiator' concept towards re-thinking development

For people living outside Bhutan, GNH can be taken up, with due respect, as a concept initiating awareness and capacity-building processes in a diversity of circumstances. In some cases efforts will be made to re-enact the GNH process as it grew in Bhutan and is nearing its fulfilment. In other cases GNH provides a starting point for locally or more universally grounded processes beyond GNH in its particular Bhutanese form. In this paper we take the liberty to follow the second route and we offer our efforts for feedback to our Bhutanese colleagues and for open debate. Creative and critical exploration by outsiders may contribute to preventing GNH from becoming a rigid ideology or totem of nationalism.

Happiness: a multi-dimensional overview

Before systematic quantitative research can be taken up in order to provide policy makers with evidence based information, a more general exploration and tentative mapping process of what happiness *is* should be undertaken. The following chart tries to provide a general overview of the multi-dimensional nature of the 'happiness' phenomenon.

Happiness

Goal in itself						
Happiness as Cause		Experience in here and	d	Happiness as Result		
(driving force)		now		(reward)		
Inner Happiness	Dependent from outer conditions			uter conditions		
Spiritual Criteria	Self Evaluation		Social Criteria			
(genuine happiness)	("overall positive quality of my		f my	(the costs of		
		life")		happiness)		
Collective Happiness	Iı	ndividual Happiness	l Happiness Happiness as a Public Good			
Scientific Reflection and Research						
"Lessons from a new science"						

Policy Development by Stakeholders

A general survey of academic literature, books and media products will learn that 'happiness research' is no longer an effort of a small, bemused, minority. In particular, in addition to the introduction of Gross National Happiness, the launching of the *Happy Planet Index* (nef, 2006) by the new Economics Foundation, UK and *Happiness*. *Lessons from a new science* by Richard Layard (2005) have been milestones in the recognition of this field of studies. Interest of students in the subject has been growing significantly in the last decade.

In Thailand several branches of 'happiness research' have been explored, but there is no central platform for systematic professional and academic exchanges yet.²

Happiness can be perceived as a goal in itself (without any other purpose than its own fulfilment) (Ricard, 2003) and also as a driving force towards an action ('to act out of happiness'), an experience of effortless synchronicity ('Flow') (Csikszentmihalyi, 1990), or as a reward resulting from an action ('happy ending').

Whether happiness should be considered as a utility, as in mainstream economics which strives for the fulfilment of happiness, or as a "capability to respond to the challenges of life", happiness as a driving force, is a crucial question that should be discussed in more depth – a debate that also takes shape within the framework of the *capability approach* of Amartya Sen and Martha Nussbaum.³ A paradigm shift within economic theory from happiness as utility towards happiness as capability would probably have profound consequences.

Inner happiness can be distinguished from happiness dependent on external conditions. This difference may point at a possible link with Sufficiency Economy which not only promote to be less dependent from external economic factors, but by emphasizing 'moderation' guides us to turn to inner happiness. Diverse judgments can be made about the foundations of someone's happiness. Spiritual teachers will explain *genuine* happiness as different from satisfaction, pleasure, joy or euphoria. In mainstream sociological research happiness will be defined by self-evaluation: the way persons give a score to the "overall positive quality of my life" leaving it to the subject only how to make the estimate.⁴ However, judgments can be made from the point of view of social or ecological responsibility as in the *Happy Planet Index* where life satisfaction + longevity are *divided* by ecological footprint. Here the question is 'at what cost' a person acquires his or her happiness. In other words how efficiently resources are used to achieve wellbeing.

In-depth understanding of happiness and the principle of social responsibility are important because if any happiness index is based on uncritical self-evaluation only, there is no demarcation point for the quality of the happiness (e.g. people can feel happy about violence) nor whether happiness has been derived at the costs of others (e.g. a successful theft). In addition, as the self-evaluation is based on an overall estimate, while individual data will be added up and averaged again to an index claimed to represent a population, the risk is that we end up with derivative happiness indexes that show similar deficiencies as GDP measuring economic growth without distinction.

A mainstream academic assumption is that happiness is an exclusively individual phenomenon, or can be measured from individual response only. But Bhutanese researchers will state that 'collective happiness' or 'happiness as a public good' are realities. The question is whether the conventional method of processing data does justice to collective, or inter-subjective, experience where added value, new dimensions result from interrelations. Critical research should – apart from the question whether samples are truly representative – address the basic principle of 'holistic development': *the whole is more than the sum of the parts.*⁵

Given the multi-dimensional nature of happiness, fundamental reflection on mainstream academic approaches to define and measure happiness will be needed. Richard Lanyard's references to 'new psychology' in his book *Happiness* are only a beginning for further research. Success, victory, competitive benefit may not be considered to lead to happiness in some cultures.

The perception of happiness as a goal in itself, mentioned above, is connected with the quality of *contentment*, *equanimity* or, in Pali, *upekkha*. Here the 'golden rule' of Buddhism applies:

Victory breeds hatred, for the conquered are unhappy. Those who have given up both victory and defeat are content and happy (Dhamma-pada Verse 20).

Recent happiness studies in Thailand explore the assumption that contentment is (still) a vital element of Thai culture. The article *The determinants of happiness among Thai people. Some evidence from Chai Nat and Kanchanaburi* (Gray, 2008) concludes:

While the effect of income on happiness is inconclusive, the most important predictor is a feeling of being not poor compared to neighbors which is self interpreted as a feeling of contentment with what one has. The policy of training one's mind of contentment accompanying with working hard through fair and righteous means, which is a Buddhist teaching of Blessings of Life, should lead to real well-being and peace not only for Thailand but for other countries if adopted.

The research exemplifies the cultural foundations of Sufficiency Economy in Thailand, as well as its inherent global mission.

The conclusion also shows the limitations of happiness research in Thailand so far. It seldom addresses the relation to the fairness, or the meaningfulness, of the socio-economic system of which the 'hard work' is a constituting part. It usually focuses on 'neighbors' as peers in the self evaluation. Would the prevailing economic system be an accomplished state of Sufficiency Economy, one could welcome contentment as happiness. Within the reality of a neoliberal market economy resulting in growing discrepancies between rich and poor, and damage to the common good of natural resources, the feeling of injustice, at a certain level of emerging critical social awareness, will challenge contentment. The question is whether policy development responses to this challenge will lead to

allowing and even stimulating 'moderate' citizens to claim a share in the consumerist targets of life, by incentives for consumption to boost economy ("populist policies"). Or whether policies will be developed to strengthen capabilities of social movements and persons, civic commitment, to tackle the discrepancies in society that put contentment under pressure: "empowerment policies" to restore or constitute fair balance in society under which conditions contentment can bring real and ongoing happiness.

Definition of happiness

The above tentative overview and the preliminary considerations on the multi-dimensional nature of happiness are important to be taken into account, where inspired *recommendations for policy development* are expected from happiness research by the stakeholders involved. Without in-depth reflection and research – including reflections on science itself – policy recommendations will not reach beyond prevailing routine and will rather re-cycle the same arguments.

In conclusion, in this paper we provisionally define happiness as below. All aspects of happiness represented in the chart are part of human reality and should be included in one way or another in the definition. However, in light of recommendations for policy development, certain aspects ask for a choice. Our definition emphasizes the capability nature of happiness.

If we allow the unique cultural context of Gross National Happiness to inspire our definition of happiness, the following description of the recent adoption of the Constitution in Bhutan, typically bestowed with *blessings*, may provide some additional foundation:

The Constitution was placed before the people of the 20 dzongkhags (districts) by the King and each word had, therefore, earned its sacred place with the blessings of every citizen in our nation. This is the People's Constitution, His Majesty said. The uniqueness and the unprecedented nature of the introduction of democracy in Bhutan were symbolized in the words of His Majesty the King as he signed the Constitution. Today, through this my Hand and Seal, I affix on the Constitution of the Kingdom of Bhutan, the hopes and prayers of my people (Dorji et al, 2008).

Tentative definition of happiness:

Happiness is experienced when a person, group or organization can realize its capabilities to respond meaningfully to the challenges of life without causing damage fulfillment is implicit in the efforts, and inner evidence of 'blessings' occurs on the results for others and oneself

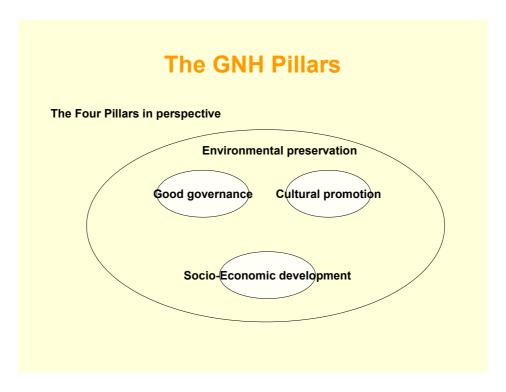
This tentative definition implies that happiness is related to "meaning" as supported by collective world views.

Gross National Happiness in perspective

3.1. Social Evolution

GNH in perspective: Brainstorm on Social Evolution

By placing the 'Four Pillars' in a brainstorm-like reflective perspective of social evolution in Asia and Europe, a framework may light up allowing us to perceive gradually an emerging new paradigm for development. Including subsequent principles for an appropriate decision-making infra-structure towards shaping the future of humanity.



As a first step we propose to arrange the pillars in a (human-made) triangle of Cultural promotion – Good Governance – Equitable or Socio-Economic development with Environmental preservation as an overarching principle, referring to Nature of which the human organism is part (see chart above).

From this birds-eye perspective we will look for resonating principles in a diversity of contexts.

Social evolution in Asia and Europe can be briefly characterized by taking Thailand and Bhutan as examples. Thailand nearly has the same size as France while Bhutan's geography and size can be compared to Switzerland. The population of the whole country of Bhutan, however, is below 1 million.

Asia

In Thailand it was King Chulalongkorn, Rama V, who started – after visits to Europe – the process of modernization around 1850. The process was intensified by King Rama VI and accelerated into the 20th century. In 1932 absolute monarchy was overthrown by a revolution which eventually resulted in the present system of

constitutional monarchy. The genius behind the revolution Pridi Banomyong, later regent of the present King, died in exile in France.

In Bhutan, only in 1907 autonomous districts consolidated in a unified state under an absolute monarch, the first King of Bhutan. Absolute monarchy in Bhutan was intentionally abolished by the former and fourth King resulting in the first democratic elections in 2008. Thus, Gross National Happiness has now been democratically accepted as the national philosophy of Bhutan. The fifth King, still the Crown Prince during the 2004 First International Conference on Gross National Happiness, in Thimphu, Jigme Khesar Wangchuck, is fully committed to democracy as an important element of the 'Good Governance' pillar of Gross National Happiness.

Thailand and Bhutan are both, increasingly multi-cultural, but 'Buddhist countries'.

In Thailand industry has, irreversibly it seems, overtaken agriculture in terms of contribution towards GDP. Urbanization not only concentrated by now the majority of the population in cities, but also penetrated lifestyle in traditional rural communities. Balanced community life around the Buddhist temple used to be the foundation of Siam's unique culture, albeit ruled by aristocracy and elites overseeing persistent forms of slavery.⁶ Agriculture, its patterns of cultivation, processing and trade, by now has been industrialized, commercialized and globalized almost completely.⁷ The economy thrives on export.

The present King of Thailand, H.M. Bhumibol Adulyadej, has introduced the concept of *Sufficiency Economy* to guide people, communities, companies towards immunity against the ill-effects of globalization. In May 2006 the King received the UNDP inaugural Human Development Lifetime Achievement Award.

In Bhutan the royal gift of 'Gross National Happiness' may become more than a safety net. It aspires to ignite vision for the future. Parallel with these two remarkably resonating royal development concepts, grass root movements and Non-Governmental Organizations (NGO's) in Asia have been producing enormous efforts to change the unsustainable course of events. Many of these groups gathered in 1997 during the groundbreaking *Alternatives to Consumerism* conference organized by Sulak Sivaraksa, Thai social critic and prominent guide of 'engaged buddhism'⁸ – Buddhism addressing 'structural violence'⁹ in society.

Europe

In Europe, the process of liberating the mind from dogma through modern science started with the 'Copernican revolution' in 1543 and later the conviction of Galileo by the Church. Galileo insisted and confirmed with facts the new paradigm that the Sun is the centre of the planetary system and not the Earth¹⁰. However this liberation not only caused a schism between science and religion, it eventually divided reality into spirit and matter. While modern science produced a wide range of new technologies and the Industrial Revolution, spirit was more and more eliminated from reality (Wildiers, 1998).

In his book *Reinventing the Wheel. A Buddhist Response to the Information Age,* Peter D. Hershock (1999) argues that Europe not only colonized the Earth, justified by 'we-thou' dualism and discrimination, but the development of 'liberating' modern science ultimately colonized the mind and induced instrumental, materialistic and fragmental thinking, reducing the human being to an empty 'black box'.

One of today's most crucial questions is whether the Information Age will consolidate this world view or whether new opportunities for human development are emerging from ICT innovation¹¹.

Parallel with scientific discoveries and paradigm shifts, the impulse towards *social liberation* culminated into the French Revolution, 1789. The revolution, triggered by financial crisis, made an end to the French monarchy and to oppression of farmers and bourgeoisie by a

powerful aristocracy. However soon new forms of imperialism and dictatorship emerged. Colonialism persisted until after World War II and social critics argue that until today 'development' is in many ways a new stage of colonialism based on the dualistic, materialistic, possessive world view of the powers to be (Sachs, 1999).¹²

Since science departed from religion, religion became by and large a ritualistic institution, often justifying mundane empire building in order to remain a majority voice.

After the French Revolution the global process of democratization could not be stopped, notwithstanding new waves of imperialism. Citizens' movements all over the world have changed the world and equal voting rights for all are nearly universally accepted – with some important exceptions where choices are limited to a single party.

Today, at the present stage of social evolution we have to admit that 'modern science' and 'formal democracy' seem not to be enough to create a just and sustainable world.

Here the concept of Gross National Happiness may help us to rethink development.

Life

In science the emergence of attention for 'life' challenged the deeply entrenched dualism between matter and spirit. Biology became a new science around 1800 and Darwin and others started understanding the dynamics of evolution of life forms. Bergson, Rudolf Steiner (initially based on his studies of the scientific works of Goethe), Teilhard de Chardin, Ilya Prigogin and more recently James Lovelock, Fritjof Capra, Rupert Sheldrake, Brian Goodwin worked on inclusion of the mystery of life in the construction of more holistic world views.

The 15th century Renaissance made a gesture back to tap the resources of the ancient Greek and Latin philosophers in order to innovate a breakthrough through prevailing dogma. Some perceive

in the trends in science and the civil movements of the *Social Revolution of the 1970's* an 'Eastern Renaissance'¹³. New exchanges between East (spirituality) and West (materialism) became constituting elements of *cultural globalization* with contradictory effects of homogenisation as well as cultivating diversity. Materialistic colonization of the mind, strengthened by the homogenisation trend, is still conquering the world and 'life' is under threat.

Therefore the GNH pillar 'environmental preservation' – and in that line *deep ecology* and the recent *Planet Diversity*¹⁴ movement – indeed may be perceived as the overarching principle towards redefining progress. Primarily the principle of interconnectedness guides policy development in this field.

3. 2. A Buddhist perspective

A 21st Century Renaissance?

The emerging 'renaissance' of the 21st century can not just refer back to antique wisdom from whether East or West. We have to reinterprete relevant ancient concepts from a contemporary perspective and with anticipation of the future. In other words, a step back in order to leap-frog conventional thinking and current paradigms.

Contemplation is important in all religions and many philosophies. The universalization of GNH will require an all-inclusive, cross-cultural, perspective.¹⁵ As a first step however, let us concentrate on a Buddhist perspective.

Probably the most generally accepted concept in Buddhist philosophy, by now, is interconnectedness (co-dependent origination) or *pratitya-samutpada*. This implies that no phenomenon exists or came into existence on itself, everything is interrelated to everything. Striking is that not only interdependence is, more and more, recognized as an interesting idea, a moral concept or an opinion, but as an overall scientific paradigm, a law.

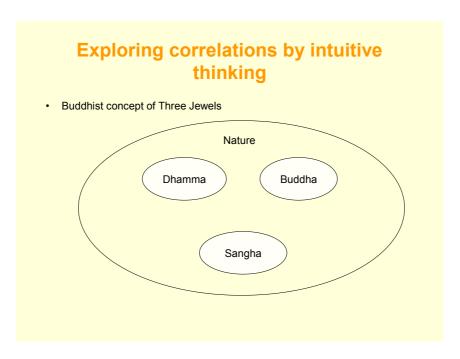
The principle of interconnectedness in social life implies that it is (no longer) possible to escape responsibility by declaring limits to individual, group or corporate liability. We are now bound, in the words of Satish Kumar, founder of Schumacher College in U.K., to a universal 'Declaration of Interdependence (Kumar, 2002).

Full recognition of interdependence or interconnectedness provides the logic foundation for 'collective happiness': individual happiness or suffering can not be separated from happiness for all. Mahayana Buddhism cultivates the *Bodhisattva ideal* or the postponement of possible individual enlightenment until all sentient beings are liberated from suffering. In secular terms this quality refers to *altruism*.

The principle of interdependence is an intrinsic quality of the *whole* and thus so all-embracing that we may need to find additional ordering principles that shape our cosmic and social universe, a world view that addresses human scale challenges and initiates ways to operationalize universal responsibility in concrete situations.

The Three Jewels

One of the cornerstones offered in the Buddhist teachings is the concept of the Three Jewels, Triple Gem, *Triratna* (Sanskrit), *Ratnatraya* (Pali) or Three Refuges. The Three Jewels are the *Buddha*, the *Dhamma* and the *Sangha*: *Buddha*, the Awakened one; *Dhamma*, the Teachings or the Law; and *Sangha* the Order of monks and nuns. These three factors together and in dynamic harmony bring genuine Buddhism into life.



An unauthorized lay person's exploration of a conceptual broadening of the Three Jewels¹⁶ leads to the possible discovery that these ancient Buddhist principles, as in social reality, may also be hidden in the 'Four Pillars' of Gross National Happiness.

The principle of awakening, liberation, freedom as personified in the biography of Prince Siddhartha who attained enlightenment and became *the Buddha*, may be seen as central in the first GNH pillar of Cultural Promotion.

Dhamma refers to the teachings providing insight in the universal laws of nature and moral conduct, and the laws of *karma* or the course of life. In modern jargon we summarize the guiding principles for a fair and just regulation of social and political life in the term: Good Governance.

While *Sangha*, according to Vietnamese teacher Thich Nhat Hanh, not only refers to –narrowly interpreted – the formal body of monks and nuns but to *community spirit* in general. What binds communities together is their livelihood, their common means of support. In Buddhist culture this is expressed in the symbiotic relationship between lay communities and the *Sangha* body: monks

and nuns fully depend on the daily food offerings provided by the surrounding lay communities.

The three above overlapping but fundamentally distinct domains together are the essential principles of Nature, the environment, life of which human reality is part. Within the great picture of Nature, our cosmos, the law of whole *interconnectedness* becomes self-evident. The caring attitude needed to sustain our natural source of living as a common good is what the overarching fourth GNH pillar, Environmental Protection, is addressing.

Although probably only implicitly intended by the architects of Gross National Happiness, there are good reasons for undertaking the exercise to discover and develop possible parallels between GNH as an impulse for re-newing development, and this particular threefold ordering principle as known from ancient Buddhist wisdom.

Buddhism and new paradigms in science

Ancient concepts of Buddhist philosophy are actually lived today. Among many examples, this can be concluded from the Mind and Life dialogues between His Holiness the Dalai Lama and top western scientists. The *Dharamsala dialogues* of the Mind and Life Institute offer genuine two-way traffic between Buddhist philosophy and modern western science. Both sides learn and innovate.

Within this stream of dialogue between western science and Buddhism Alan B. Wallace initiated the concept of 'contemplative science' pointing at contemplation as a credible source of scientific knowledge.

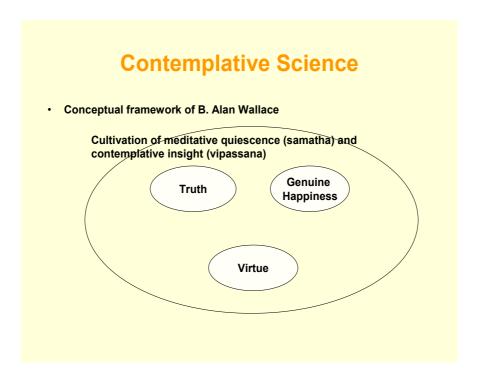
With the modern dissolution of the medieval fusion of religion, philosophy and science, there has occurred a similar disintegration of the pursuits of genuine happiness, truth and virtue – three elements that are essential to a meaningful life. The contemplative science I have in mind seeks to reintegrate these three pursuits in a thoroughly empirical

way, without dogmatic allegiance to any belief system, religious or otherwise (Wallace, 2007).

For a full understanding of the potential towards social innovation of Gross National Happiness, we are invited to include this contemplative dimension in our scientific and professional explorations. In the words of Dasho Karma Ura: we need a *Third Eye* to fully understand Gross National Happiness.¹⁷

Matthieu Ricard, a French physicists and monk of Tibetan Buddhism, draws three conclusions from the first explorations in the new stream of contemplative science

- 1. The level of meditative activity can be measured. However, although it may help to convince conventional scientists that elevated states of consciousness are now recordable by neuroscience technology, that is not a major point. It can even lead to misconceptions about the brain as mistaken centre of consciousness and to attempts towards 'mind engineering' if this knowledge is not placed in broader frameworks as described by B. Alan Wallace.
- 2. Compassion (close to 'happiness as driving force') and undisturbed perception can be learned. Ricard refers to happiness as 'life's most important skill'.¹⁸
- 3. Meditative perception (contemplation) is an accurate, systematic and thus scientific, way of acquiring information, understanding of reality and truth.



The contemplative perception does not imply at all total rejection of modern science. In the words of B. Allan Wallace:

Science has provided multiple conceptual revolutions in our way of viewing reality, but these have had little impact on the cultivation of genuine happiness or virtue. The contemplative traditions of the world have provided multiple experiential revolutions in ways of viewing reality, which have directly altered the hearts, minds, and lives of those who have acquired such contemplative insights and indirectly influenced their host societies. But contemplative inquiry has left humanity in the dark about many truths pertaining to the physical world, and has yielded no advances in technology. In short, these two approaches to understanding appear to be fundamentally complementary, rather than incompatible.

A step further than complementary positions may have to be made. The term *contemplative science* itself already points at a possible synthesis between contemplation and science where the rule of holistic development that 'the whole is more than the sum of the parts', if applied profoundly, will lead towards an approach that is more than two parallel, but separate, streams.

We may need to come back to the concept of 'engaged buddhism' as pioneered by Sulak Sivaraksa and others. And if we open up the scope of the Buddhist perspective towards more secular streams in 'development theory', the concept of 'critical holism' may be reinvigorated.

Buddhism and the French Revolution: Dr. Ambedkar

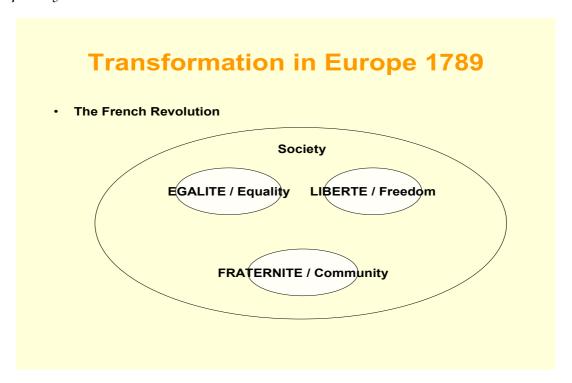
The challenge of interpreting the Four Pillars towards a creative synthesis universally inspiring social transformation as needed in response to radically unsustainable economies may have to lead us to another creative thought experiment.

In order to find new correlations, unusual catalyzing ideas have to be discovered. Starting from our initial intention to engage in intercultural comparison between Thailand and France as to find a trace towards new paradigms in development, we may discover a key to a new correlation between Gross National Happiness, the Three Jewels in Buddhism and France's unique social capital through Dr. Ambedkar (1891–1956), the chief architect of the Indian Constitution. Dr. Ambedkar was born a Dalit, 'untouchable', in India. He converted to Buddhism which liberated him from the cast system. He compared the teachings of Buddhism at several instances with the principles of the French Revolution.¹⁹ In contrast with the French Revolution *he strictly adhered to non-violence*.

Dr. Ambedkar is the pioneer of an "engaged buddhist" emancipation movement towards equal rights for all citizens of India, irrespective cast or religion. He was the first law minister of independent India and the Chairman of the Constitution Drafting Committee. Social movements promoting emancipation from the cast system in India still find inspiration in his legacy. According to Dr. Ambedkar 'enlightenment' is not only an individual realization process but as much addresses liberation from 'structural violence' in society. This revolutionary potential of Buddhist practice made him perceive the parallels with the French Revolution.

Parallel with scientific discoveries and paradigm shifts, briefly described above, the impulse towards *social liberation* culminated in France into the Revolution of 1789. The French Revolution brought

about the three basic values of *Liberte, Egalite et Fraternite* or *Freedom, Equality and Brotherhood*.



The revolution made an end to the French monarchy and to oppression of farmers and bourgeoisie by a powerful aristocracy. However, soon new forms of imperialism and dictatorship emerged. French colonialism persisted until after World War II.

The worldwide process of democratization however could not be stopped, notwithstanding new waves of imperialism. Citizens' movements have changed the world and equal voting rights for all are nearly universally accepted – with important exceptions where choices are limited to a single party.

Is this French 'national philosophy' – like Gross National Happiness in Bhutan – offering a leading image, a vision guiding the struggle towards sustainable development in France today?

Comparisons between the Four Pillars (Bhutan), the three qualities of contemplative science (B. Alan Wallace), the Three Jewels in Buddhism and with the principles of the French Revolution, may lead to the discovery of significant similarities. The exercise of cross-

cultural comparison, in a perspective of social evolution, may cast new light on our search – where Gross National Happiness is an important inspiration – for converging ordering principles that may help shaping transformation movements that are up to the problems humanity faces.

4. The Global GDP Debate

The Sarkozy Commission

A remarkable – maybe historical – step has been undertaken by enigmatic President Sarkozy of France in January 2008. The French President commissioned Dr. Joseph Stiglitz (Chair, USA) and Dr. Amartya Sen (India), both Nobel Prize laureates in economics, to advise on the way France calculates progress. Prominent economist and government advisor Dr. Fitoussi (France) is the Coordinator of the Commission on the Measurement of Economic Performance and Social Progress.

President Sarkozy said: 'we must change the way we measure growth' and argued that thought had to be given to the way Gross National Product was calculated to take account of the quality of life in France. New indices would improve the impression of growth performance among French people 'who can no longer accept the growing gap between statistics that show continuing progress (in growth) and the increasing difficulties they are having in their daily lives'²⁰

The organizers of the Third International Conference on Gross National Happiness published an open letter in which they urge Dr. Stiglitz and Dr. Sen "to using your influence to broaden the initiative of the French President towards a global effort."

We recommend to include visions, experiences and best practices from developing countries, in particular smaller and 'least developed' countries, as well as from NGO's and community based organizations, in the crucial exercise to redefine growth.²¹

While the philosophy of Gross National Happiness in Bhutan is a lively issue challenging the global economic growth obsession, there is no signal that the conceptual framework embedded in France's 'national philosophy' plays a role in the redefining growth debate.

However, a recent statement of Dr. Joseph Stiglitz in response to the October 2008 Financial Crisis makes our comparisons between historic transformations less remote.

The fall of Wall Street is for market fundamentalism what the fall of the Berlin Wall was for communism.²²

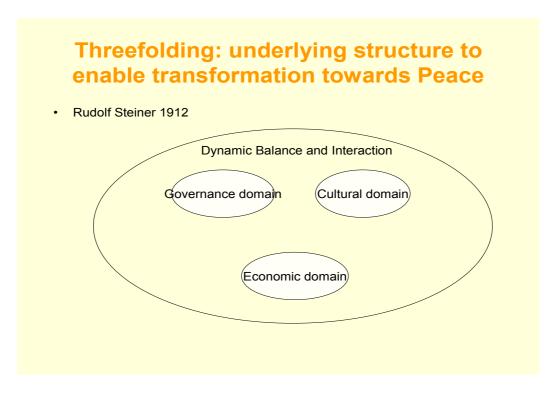
Gross National Happiness and the 'Global GDP Debate' are concepts gaining momentum in a context of the need for fundamental change.

5. Transformation

Three folding

The attempt to investigate the cultural and spiritual foundations of our current perception of growth and progress, in various countries and in a perspective of social evolution, leads us to another, equally unusual trace towards the comparison, and possible synthesis between conceptual frameworks that may clarify impulses towards social transformation.

The philosopher Rudolf Steiner (1861-1925), after his work was made impossible in Germany, established in Switzerland a remarkable cultural centre named the Goetheanum. In Europe Switzerland stands for unique autonomy and decentralized governance, comparable to Bhutan.



Rudolf Steiner's study of the scientific works of Goethe²³ led him the way, from a western perspective, to the development of a 'spiritual science', a practical approach that would reconcile, beyond convention, utility-driven processing of matter, with carefully cultivated spirituality and moral imagination. He held it as important that ideas would be transformed into ideals.²⁴

In the early 20th century he formulated ideas to prepare a way out of the deeply entrenched conflicts between Germany and France, England etc. pertaining after World War I and eventually leading to World War II.

In his attempts to shape a Peace initiative to prevent another war, he referred back to the French Revolution. He introduced Liberte, Egalite and Fraternite not only as core social values but as distinct dimensions, self-governing domains, in society that each should develop autonomously, in order to constitute a dynamic, creative, peaceful impetus giving direction to society²⁵.

In the cultural domain the diversity of uninhibited and unique individual intuitions, wisdom, creativity and moral understanding would produce – through responsible association – the quality of *freedom*.

In contrast governments should treat persons as *equal* and bind citizens to the law. Governments should provide sweeping rules and regulations, guarantee justice, facilitate but interfere as little as possible into the domain of culture, in particular into education.

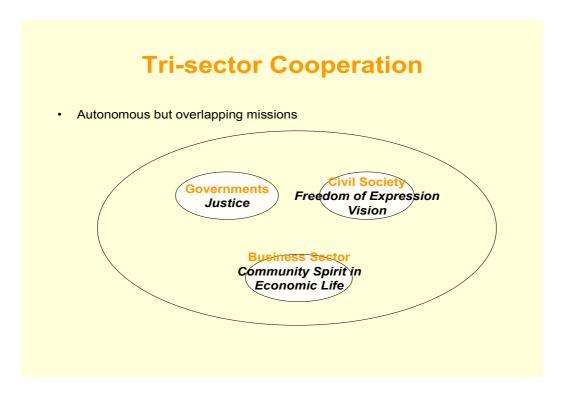
While business should be performed as mutual service to each other in a cooperative setting, in a spirit of *fraternity*. Culture, Government and Business should be self-governing but interconnected 'sectors' guided by distinct values, principles and 'missions'.

It was Steiner's belief that if the threefold order of social life – as is the *Trias Politica* for political life separating the legislative, executive and judiciary powers – would be accepted internationally, conflicts could be settled in a framework of critical consensus on common care for the Earth.

Steiner was disappointed about the way his *threefolding* ideas were put into practice, if not ignored completely. He kept his efforts on hold temporarily and instead ignited social life of post-War I Europe with a strong creative impulse for independent 'alternative education'. The first model-school was realised for the children of the labourers at the Waldorf-Astoria factory near Stuttgart, Germany.

'GNH Movement'

Later, at the turning point of the 20th to the 21st century Nicanor Perlas, founder of the Centre for Alternative Development Initiatives (CADI), advanced Steiner's ideas by shaping the groundbreaking *Agenda 21 programme* of the Philippines²⁶.



Nicanor Perlas received the Right Livelihood Award (alternative Nobel Prize) for his work. He argues that finally a 'third sector', safeguarding culture, is emerging from the diversity of NGO and civil society movements. This 'third sector', from its inner strength though in a minority position, can bring together the domains of culture, governance and business in a critically approached, dynamically balanced or negotiated 'tri-sector' consensus: a multistakeholder movement towards sustainable development (Perlas, 2000).

Perlas refers extensively to Fukuyama's *The End of History and the Last Man*.

The ruling powers of the world want the "End of History" because that would mean the perpetuation of a view of the world where human beings and culture are mechanistic and controllable. They will never be able to achieve their "End of History" however, because a New History is being created by civil society right before their eyes. For civil society is demonstrating that human beings and culture can never be repressed for long, and they will always find a way to subvert the mechanistic and materialistic designs of the world powers behind elite globalization (Francis, 1992).

And he continues:

Fukuyama missed out on the fact that civil society was behind the collapse of the Berlin Wall and the subsequent demise of communism. (...) And it will be civil society again that will re-write the script of the New Histor (Perlas, 2000).

Transformation: new economics

This paper attempts to draft a tentative outline for a possible new development paradigm, inspired by GNH. The Four Pillars of GNH may well resonate with elements of Buddhist philosophy and subsequent contemplative science as well as the principles of the French revolution as revitalized in the first half of the 20th century by Rudolf Steiner, re-interpreted from the perspective of strict *non-violence* by "engaged Buddhist" Dr. Ambedkar in India, and at the turning point towards the 21st century by Nicanor Perlas.

Global networking inspired by Gross National Happiness may address the need to strengthen new modes of engagement between the three sectors, contributing to shaping public fora for multistakeholder communication, critical negotiations and innovative cooperation.

However – at present and in general – governments play hand in glove with the corporate sector and civil society is a minority factor in current, economically dominated, globalization. The concoction of governments with big business is strongly backed up by utilitarian science. The cultural sector is constantly being bombarded by endless advertisements and propaganda; the media are governed by business. Education usually is in the hands of the state.

As major erratic symbol of progress of societies within this framework, growth expressed in terms of Gross Domestic Product (GDP) is now under fire.

The search for a new paradigm for societal progress set in motion by the King of Bhutan in 1972 and increasingly confirmed by a great diversity of researchers²⁷ is that growth of GDP, beyond a certain level, does not result in growth of happiness.

The claim that GDP growth leads to improved well-being in lesser developed economies should also be analyzed with utmost criticism, because if economic growth would have been guided by indices for sustainable – or GNH consistent – development from the beginning, results for the economies and its peoples in question could well have been much better.

The King of Bhutan made his pronouncement simultaneously with the launching of *Limits to Growth* by the Club of Rome in Europe. And the publication of *Small is Beautiful. Economics as if People Mattered* by E.F. Schumacher: the initiation of the modern understanding of 'Buddhist Economics'.

This wave of transformative impulses in the early 1970's did not lead to the changes hoped for.

Happiness. Lessons from a New Science by Richard Layard and other publications finally created a new momentum at the dawn of the 21st century, for a public debate on the fact that economic growth guided by GDP – and equally growth of personal income beyond certain levels – does not make people happier.

It is significant to realize that these research findings not only refer to 'environment', 'natural resources', 'development goals' etcetera, but touch our feelings, perceptions of quality of life and deepest spiritual aspirations, our genuine happiness.

Seen from this perspective it is overly clear that much of economic growth is pure waste and destruction. Only through fundamental transformation sustainable development can be realized.

Therefore David Korten proposes a 'mindful market' economy (Korten 1999).

Towards a new development paradigm?

Although, according to Thomas Kuhn, there is no ground for application of the word paradigm in social sciences, we may use the term in a flexible way without devaluing it to meaningless language. In development theory there have been continuous paradigm shifts. Nederveen Pieterse in his book Development Deconstructions/Reconstructions describes: Modernization, Neo-liberalist Dependency theory, development, economic Alternative Development, Human Development and Antidevelopment (Pieterse, 2001).

'GNH consistent' development may be best understood as part of the *Alternative Development* school. While the chapter in his book titled *Critical Holism and the Tao of Development* offers a key for construction of a more articulated branch of thought within this stream. But let us first have an unconcerned closer look at conventional development and the movement centered on happiness:

The dominant conventional development paradigm can be characterized as follows:

The economy has to make the people happy (and minorities have to make sacrifices for it)

So the prevailing paradigm is: the fulfillment of the happiness of people primarily depends on economic conditions. This implies that

the paradigm is maintained by a utility-centered definition of happiness predominantly development strategies concentrate on changes in the material world with assumed subsequent social implications.

even strategies with social or cultural aims primarily follow utilitarian methods (e.g. social engineering) and are held to comply with criteria for results measured by indicators based on conventional (materialistic and reductionist) science.

ultimately development programmes (including development-related policy research) are evaluated from a monetary point of view.

An alternative development paradigm is:

People are willing to share their happiness together and create living economies

New paradigm: happiness is primarily a driving force for participatory change towards sustainability and justice for all.

This implies that

the paradigm is maintained by a capability-centered definition of happiness

development movements start from inspiration, social networking and voluntary sacrifice

methods are based on inter-human communication between all stakeholders, spiritual exercise and commitments to mutual social responsibility

development is continuously monitored with transparency among stakeholders and guided by consensual decision making, celebrating success and failure within a 'no victory – no defeat' framework.

6. Development Theory

Critical Holism

In *Development Theory* Jan Nederveen Pieterse describes the genesis of the term *Critical Holism*. The Irish scholar and development practitioner Vincent Tucker made an effort to bring together approaches of personal holistic healing at one hand and 'sociological informed holism' as 'developed by Marxist political economy and radical development theory'.²⁸

Jan Nederveen Pieterse, a visiting professor at the International Development Studies programme, Chulaongkorn University, Bangkok, makes the following comments:

Critical holism is an uncommon synthesis. Criticism and holism refer to different modes of cognition. This makes it a welcome synthesis: without a critical edge, holism easily becomes totalizing, romantic, soggy. Without holism, criticism easily turns flat, sour.

In spite of the opportunity to provide a response to a dichotomy that many development practitioner experiences, the school of thought on 'critical holism' did not come very far until now²⁹. Pieterse himself shows some ambiguity on the concept in his article. More in particular he makes the following critical comment:

A trend in local and increasingly also in large-scale development is towards partnerships across sectors, or synergies between different development actors – government, civic associations and firms. This is a marked departure from times when development was seen as either state-led, or market-led, or civil society led (...). This might be considered a holistic approach, but not a critical approach because talk of partnership in unequal relations of power is clearly apolitical (...).

In the 'stream' of critical holism we would like to propose in this paper, we assume that it *is* possible to engage in critical partnerships and negotiate consensus building, even from a minority position. Whether this is a valid statement should be verified in a well-designed Action Research programme in the years to come.

The weakness of the concept 'critical holism' as described by Pieterse, however, in the first place is the limited maturity of the synthesis between holism and criticism.

Critical Holism	
Holism	Criticism

For real synthesis the emergence of a new dimension is needed to create a 'whole', a new 'Gestalt'. Putting two contrasting contents in one box does not automatically result in synthesis.

Therefore we propose to amend the concept with a third additional factor in order to create a 'threefold' model of critical holism. The third factor would be an 'alternative economics' dimension as described by David C. Korten: a 'mindful market economy' which can be understood as a new dimension of development arising from

both a holistic world view as well as from fundamental criticism of western societies and economies.

'amended' Critical Holism				
Mindful markets				
Holism	Criticism			

In a secular context, *Critical Holism* could be an appropriate term to provide the 'genuine' happiness-based development paradigm a scientific denominator.

Coming back to the Buddhist context, the construction tentatively would look as here:

Boddhisatva Ideal				
Engaged Buddhism				
Buddhist Economics, Sufficiency Economy				
Meditation practice, insight	Social responsibility, activism			

The new paradigm of *Critical Holism* including *dynamic critical consensus-building* and *'tri-sector' or multi-stakeholder cooperation* is possibly – after debate would result in its confirmation – to become a vital stream in development theory and practice that could help bring secular philosophy and interfaith spirituality towards synthesis.

Mindful market economies

After the early signal of the King of Bhutan and, at other fronts, strenuous work of pioneers like Hazel Henderson, the Genuine Progress Index for Atlantic Canada (GPI Atlantic) and the New Economics Foundation (nef) with its Happy Planet Index, significant movements are now gaining momentum including the OECD project 'measuring progress of societies' and the 'Beyond GDP' programme of the EU. Conferences are attracting crowds of high level policy makers and academics. But how is the business sector involved?

Parallel with the emergence of the 'third sector', of civil society as a potentially equal force in relation to governments and the business sector, important changes in the business world have taken off and are trying to break through. However, there is strong resistance based on conventional thinking and financial interests.

Corporate Social Responsibility, Socially Responsible and Sustainable Investment, Socially Responsible Reporting and other trends; the UN Global Compact Initiative and the ISO 26000 social responsibility standard all point at changes in the way we do business. Apart from cosmetic changes what is the core challenge, what is the transformation needed?

The financial crisis of September 2008 adds a dimension of immediate urgency to this question.

When considering insights rooted in Gross National Happiness as a contemporary expression of Buddhist philosophy, as well as arising from unconventional secular reflections on the history of science, social revolutions and visions for the future, we could assume that in essence it is *community spirit* that is to permeate the business sector. Within the wider perspective of inescapable interconnectedness 'community spirit' or 'fraternity' is to guide our common business efforts to fulfill the real needs of all.

This implies that business operations should not only be valued by financial criteria of profit and loss, but (eventually in the first place!) by their extractions from and contributions to the common good: what do they give and what do they take.

Edy Korthals Altes³⁰, a high ranking diplomat, the Netherlands, alumnus of the Rotterdam School of Economics and formerly one of the Presidents of the World Conference on Religion and Peace (*Religions for Peace*), with insights based on long term engagement in inter-faith dialogue and cooperation, comes to the following definition of economics:

The purpose of economics is the responsible use of the limited means at man's disposal in order to promote the common and individual wellbeing of present and future generations. Production, distribution and consumption of goods must be oriented towards a just and sustainable society in which the limits of nature are strictly respected.

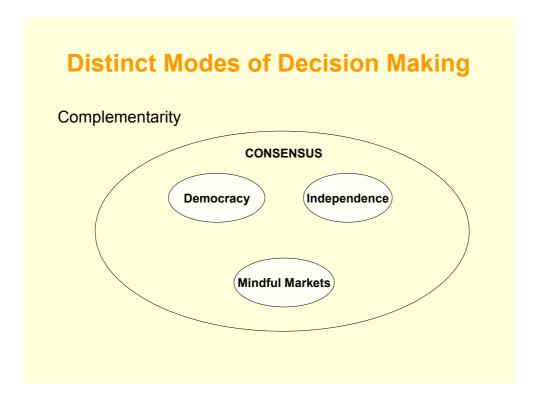
Within these limits economic development becomes a reliable ally for civil society and enlightened governments. David C. Korten characterizes a Mindful Market Economy as follows:

Consider the possibility of a planetary society in which life is the measure of value and the defining goal is to assure the happiness, well-being and creative expression of each person. Well-being and progress are evaluated on the basis of indices of the vitality, diversity and productive potential of the whole of society's living capital, human, social, institutional and natural. These indices are monitored as carefully as we now monitor GDP and stock prices. Any sign of decline evokes prompt corrective action. Leaders are trained and selected for their highly developed community and planetary consciousness (Korten, 2000).

7. Consensus building

Consensus building and a Global Reform Platform

Economic cooperation based on *community spirit* needs a different mode of decision making than in the government sector where *democracy* prevails. Also a different mode of decision making arises from the *free flow of communication* as required for a healthy, independent civil society sector. More and more they will be bound together by new structures of critical consensus building, which enable the distinct decision making modes to flourish in their own nature. For the future economic sector contributing to *consensus building by means of 'mindful markets'* is the new business leadership paradigm that will steer the economic sector to optimal conditions for the growth of happiness.



Consensus has to be negotiated and does not exclude fair activist and creative social pressure from all sides. Negotiations start with co-creating the conditions for a fair consensus building forum.

In order to be successful in light of the common good, clear insight in the various modes of decision making is needed. Gradually the 'rules of the game' of global consensus building will gain clarity, and trust across differences will grow.

The challenge for a global development approach is to bring separate and opposing interests and constituencies together as part of a world-wide bargaining and process approach. Together with proposals for reform of the UN system and strengthening the international legal order, this adds up to a global reform platform (Pieterse, 2001).

8. Conclusions

In an informal setting the 3rd International Conference on Gross National Happiness was an – unfinished – experiment in multistakeholder communication. Follow-up is undertaken in Thailand with support of the Thailand Research Fund and Thai Health/TGLIP.

Departing from the 3rd International Conference on Gross National Happiness and based on literature review we tentatively formulated a definition of multi-dimensional happiness. The 'Four Pillars' of GNH were explored and a concept of contemplative science was introduced. Within the framework of overall interdependency, the Three Jewels of Buddhism were offered for comparison with three of the GNH four pillars.

In this context the notion of *contemplative science* was briefly explored in response to the evolution of science and the need to consider new scientific approaches appropriate to "genuine happiness".

A further step led to critical investigation of the principles of the French Revolution, and how they were revitalized in the first half of the 20th and at the dawn of the 21st century, with civil society, the power of culture, expected to play a major role in "writing the script of a 'New History'".

This creative modeling revealed to a certain extend remarkable resonance among a diversity of transformative concepts and led to distinction of three decision making modes essential for happiness driven social transformation.

Democracy enforced from the domain of governments; free flow of communication and initiatives facilitated in civil society; and operating mindful markets as the guiding decision making principle in the business domain, supplement each other and together define ultimate consensus on the course society as a whole has to be steered.

The growing insight that these ideas have to be put into motion is not so much based on a wish or urge to 'do well' as a surplus of mindlessly acquired benefits. Transformation movements in the 21st century will be rather based on a new *paradigm*: on accurate logic; understanding of a law required to be observed towards survival and towards making the Earth a place of happiness and love.

A tentative analysis resulted in an amended appreciation of the stream in Development Theory characterized as Critical Holism. Critical Holism was proposed as a candidate for a GNH inspired new development paradigm.

This string of thoughts on Gross National Happiness is offered as an element of an Action-Research programme of cooperation towards a *Global Reform Platform,* between partners in Bhutan and Thailand, and including partners from the Mekong sub-region, Asia and other parts of the world:

In summary this international partnership programme may include:

- Networking among academics and students
- Drafting a theoretical framework and synthesis towards global consensus
- Exploring new paradigms in science
- Building an operational model for multi-stakeholder cooperation; policy recommendations
- Capacity building and curriculum development
- A longer term cross-cultural Action-Research Plan
- A common multi-media communication programme

Notes

in 2006.

¹ H.M. King Bhumipol of Thailand introduced the concept of Sufficiency Economy to address the problem of indiscriminate economic growth. He received the UNDP Lifetime Achievement Award

² For example National Economic and Social Development Board, Thai Department of Mental Health, ABAC University Poll. Also see the special issue of Thammasat Economic Journal, Volume 26, Number 2, June 2008.

³ See www.capabilityapproach.com

- ⁴ Ruut Veenhoven World Database of Happiness: Continuous register of research on subjective appreciation of life
- ⁵ This statement originates from *Metaphysica*, Aristotle, and later became the leading thought behind the *Gestalt theory* of Max Wertheimer and *Synergetics: Explorations in the Geometry of Thinking* by Buckminster Fuller (Wikipedia). It has been taken up in modern public policy research as from the Economic and Social Research Council (ECRS) of the United Kingdom: "In the same way that neurons connect to produce the brain's exquisite functionality, the (Public Services) Programme's three elements funded research projects, sponsored events and networking activities coalesce in dynamic ways such that the whole equals more than the sum of its parts." www.publicservices.ac.uk
- ⁶ *Discovering Ayutthaya* by Dr. Charnvit Kasetsiri, Toyota Foundation, 2003.
- ⁷ The percentage of organic agriculture in Thailand was 0.07% in 2003; Greennet.
- ⁸ Sulak Sivaraksa founded the International Network of Engaged Buddhists (INEB) in 1988.
- ⁹ Term originally introduced by Johan Galtung.
- ¹⁰ The Structure of Scientific Revolutions by Thomas S. Kuhn, Chicago, 1962.
- ¹¹ See www.paradiso-fp7.eu
- ¹² The period of development after the Second World War fits into that (colonial) history. Viewed with the space-trained eyes of the West, numerous cultures appeared as backward, deficient and meaningless. The globe looked like a vast homogeneous space, waiting to be organized by universally applicable programmes and technologies. And the developmenalists did not hesitate. They went about transferring the Western model of society to countries of a great variety of cultures. *Planet Dialectics. Explorations in Environment & Development* by Wolfgang Sachs, London 1999.
- ¹³ De Oosterse Renaissance. Kritische reflecties op de cultuur van nu, Han Fortmann, 1970 (in Dutch)
- ¹⁴ Movement co-founded by Vandana Shiva www.planet-diversity.com ¹⁵ This was an important point made by Dr. Surin Pitsuwan at the GNH3 conference.

- ¹⁶ I made an initial presentation at the conference of INEB (International Network of Engaged Buddhists) in Taiwan, 2007.
- ¹⁷ Dasho Karma Ura at the 3rd International Conference on Gross National Happiness, Bangkok, November 2007.
- ¹⁸ Sheldon Shaeffer at the GNH3 conference proposed "the fifth pillar" of the Delors Report on Education: Learning to Transform.
- ¹⁹ Dhammachari Lokamitra during his presentation at the GNH3 panel *Towards Global Transformation: Making Change Happen* 28 November, 2007.
- ²⁰ AFP, January 8, 2008.
- ²¹ Open Letter to Dr. Joseph Stiglitz and Dr. Amartya Sen in 'Business&Society' issue 13/14, February 2008.
- ²² Interview with Nathan Gardels, 16 September 2008.
- ²³ The Theory of Knowledge Based on Goethe's World Conception Rudolf Steiner, 1886 (originally in German).
- ²⁴ Knowledge of the Higher World and Its Attainment Rudolf Steiner, 1904 (originally in German).
- ²⁵ *Threefolding, A Social Alternative* Rudolf Steiner (English edition London 1980).
- ²⁶ Philippine Agenda 21 Handbook Nicanor Perlas c.s., CADI, 1998.
- ²⁷ See also Hazel Henderson, IPS, 2007 in *New Scorecards for Real National Progress:* "First a look back. Economist Simon Kuznets, who developed GNP/GDP never saw it as an overall scorecard of a country's progress: "The welfare of a nation can ... scarcely be inferred from a measurement of national income" (1932 testimony before U.S. Congress). This money measured index came into full use during World War II as a way to measure war production, adding up all the production of tanks, airplanes, automobiles and all the other goods and services exchanged in a nation's cash economy."
- ²⁸ Vincent Tucker, 1997, as quoted by Jan Nederveen Pieterse.
- ²⁹ However a lively discussion was staged at the Symposium *Holistic Education and the Sciences. Are holistic approaches un-scientific?* with Vandana Shiva, Sulak Sivaraksa, Jan Nederveen Pieterse, Surichai Wung'aeo, Ramu Manivannan and others at Chulalongkorn University, Bangkok, 3 December 2001.

³⁰ Spiritual Awakening. The Hidden Key to Peace and Security, Just and Sustainable Economics, A Responsible European Union. Leuven – Paris – Duley M.A. 2008.