

Gross National Happiness: Practice and Measurement

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Happiness, 24-26 November 2008

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Gross National Happiness: Practice and Measurement

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Contents

Introduction		<i>vi</i>
Keynote Address	<i>His Excellency Jigmi Y Thinley, Hon'ble Prime Minister of Bhutan</i>	1
Remarks	<i>Nicholas Rossellini, Resident Coordinator of UN System in Bhutan</i>	9

Measurement

1	Measuring Progress Towards GNH: From GNH Indicators to GNH National Accounts?	<i>Ronald Colman</i>	15
2	The Analysis of Results of Research into 'The Ideal Society' in Japan, Sweden and Bhutan – Using the Indicators of Human Satisfaction Measure	<i>Terue Ohashi</i>	49
3	The Global Project on Measuring the Progress of Societies: A global movement for a global challenge	<i>Jon Hall</i>	87
4	Creating National Accounts of Wellbeing; a parallel process to GNH	<i>Nic Marks</i>	102

Psychological Wellbeing

5	Can We Have Both Psychological and Ecological Wellbeing	<i>George Burns</i>	127
6	The Nature-Nurture Debate: New Evidence and Good News	<i>Ragnhild Bang Nes</i>	149

Time use

7	Time use and Happiness	<i>Karma Galay</i>	169
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Culture

8	Internalizing the Other–Cross Cultural Understanding in Arts and Education	<i>Ethel Lowen</i>	209
9	Role of meditation in promoting happiness	<i>Khenpo Phuntsho Tashi</i>	218
10	The Semantic Structure of Gross National Happiness: A View From Conceptual Metaphor Theory	<i>Carl Polley</i>	228

Community Vitality

- | | | | |
|----|---|-----------------------------|-----|
| 11 | Development and (Un)happiness: A case Study from Rural Ethiopia | <i>Dena Freeman</i> | 241 |
| 12 | Religious Institution Based Community-hood and Identity of a 'Muslim Community' in a 'Remote' Rural Village in Bangladesh | <i>Mohammed Kamruzzaman</i> | 257 |
| 13 | To Think Like an Island: Three-Capital Model in Pursuing GNH in Taiwan | <i>Juju Chin Shou Wang</i> | 276 |

Ecological Diversity and Resilience

- | | | | |
|----|---|-----------------------|-----|
| 14 | Institutional Challenges to 'Patience' in the Collective Management of Public Goods | <i>Ram Fishman</i> | 303 |
| 15 | Status Symbols, Ecosystems and Sustainability | <i>Arthur Fishman</i> | 331 |

Good Governance

- | | | | |
|----|--|--|-----|
| 16 | Good Organizational Practice and GNH: A Proposal for Organizational Performance Indicators | <i>Anne-Marie Schreven</i> | 331 |
| 17 | Between Earth and Sky: Formal Organizations as Instrument in Creating GNH | <i>John Nirenberg</i> | 351 |
| 18 | Do Information and Communication Technologies Further or Hinder Gross National Happiness? | <i>Jason Whalley and Kezang</i> | 368 |
| 19 | ICT Key Role in the Economic Development of Haiti: Lessons from Pilot Projects in Rural Haiti and Associated Directions of Contribution to the GNH Index | <i>Serge Miranda Frantz Verella, and Tahar Saiah</i> | 391 |

Health

- | | | | |
|----|---|-------------------------|-----|
| 20 | A Paradigm Shift in Health Care to Increase GNH | <i>Dr Chenchu Dorji</i> | 413 |
| 21 | Nature- Deficit Disorder and the Spirit of Wilderness | <i>Dave Augeri</i> | 436 |
| 22 | Dynamic Aging | <i>Ethel Lowen</i> | 456 |

Education

- | | | | |
|----|---|------------------------------|-----|
| 23 | Western Education, Socialization and Individualism | <i>Andrie Kusserow</i> | 467 |
| 24 | Gross National Happiness in the Classroom – A Teacher's Thoughts | <i>Meena Srinivasan</i> | 480 |
| 25 | Conceptualising Education for Constitutional Monarchy System: Meiji Japan's View and Approach | <i>Masanori Kakutani</i> | 487 |
| 26 | Schools in Rural Areas and GNH: Endogenous Actions of Small Communities in Japan and Sweden | <i>Michiyo Okuma Nystrom</i> | 503 |

Living Standard

- | | | | |
|----|---|---------------------------------------|-----|
| 27 | Shift in the Measure of Quality of Life viz-a-viz Happiness – A Study of Phongmey Gewog and Trashigang Town in Eastern Bhutan | <i>Vijay Shrotryia</i> | 525 |
| 28 | Japan's Paradigm Shift from Growth to Happiness: Slowing Down to Advance Wellbeing | <i>Junko Edahiro and Riichiro Oda</i> | 548 |
| 29 | Food Security and Gross National Happiness | <i>Akiko Ueda</i> | 568 |
| 30 | Optimal Condition of Happiness: Application of Taguchi Robust Parameter Design on Evidences from India | <i>Prabhat Pankaj and Deobra</i> | 582 |

GNH - The Way Forward

- | | | | |
|----|---|------------------------------|-----|
| 31 | The Future of Happiness as a National Pursuit | <i>Ross MacDonald</i> | 613 |
| 32 | Critical Holism: A New Development Paradigm Inspired by Gross National Happiness? | <i>Hans van Willenswaard</i> | 632 |
| 33 | GNH: Changing Views, a Label for Quality Information | <i>Nille van Hellemont</i> | 672 |

Contributor's biography

689

Introduction

The Fourth International Conference on Gross National Happiness was held in Thimphu, Bhutan, from 24 to 26 November 2008, against the backdrop of the global financial crisis. The conference which attracted 90 participants from 25 countries and five continents was attended by an average of 300 participants and observers. With the theme 'Practice and Measurement', the conference could not be held at a better place and time than Bhutan, the birthplace of GNH, and a time when the world is questioning the conventional growth model and its measurement system. At the national level, three historic events converged in 2008 for all Bhutanese to remember: the centenary celebration of the Wangchuck dynasty, and the coronation of the Fifth Druk Gyalpo, and the introduction of the constitutional monarchy through parliamentary election.

The structure of the conference consisted of a plenary session followed by three parallel workshops. A total of 48 papers (14 papers in five plenary sessions and 34 papers in nine workshops) were presented. Almost all papers have been categorised to fit into one of the nine domains of Gross National Happiness: i. Psychological Wellbeing; ii. Time Use and Balance; iii. Cultural Diversity and Resilience; iv. Community Vitality; v. Ecological Diversity and Resilience; vi. Good Governance; vii. Health; viii. Education; and ix. Living Standard. Papers related to measuring progress and development of alternative measure of wellbeing (Measurement), and those related to carrying the GNH forward into global network and development of innovative ideas for implementing GNH (The Way Forward) constitute two separate parts.

Excellency Jigmi Y. Thinley, the first democratically elected Prime Minister of Bhutan, in his keynote address said that the conference was "a special celebration of the timeless gift of GNH by His Majesty the Fourth King not only to the Bhutanese people but to

human society in general. Gross National Happiness as the goal and purpose of development is the fruit of his wisdom born out of his dedication to understand, articulate and fulfil the innermost desire of his subjects. It served as the main motivator and basis of all his policies and actions during a glorious reign of 34 years." He said that his "government has begun our spirited journey of combining democracy and GNH" and "have pledged to consolidate and strengthen the conditions that will enable each citizen to find happiness." Since GNH must be first made measurable to make it practicable, promoting the 'Practice and Measurement' of GNH, he said, is the theme of the conference, and asked the conference to ponder over questions:

Is it enough for us to know how to measure happiness and to hope that this will influence policy-making? Is making GNH policies and programmes enough? What of political will and capacity given the fact that these, in a democracy, are responses conditioned by popular demands and aspirations? So, if people do not understand and favour GNH based policies, will politicians dare? And if they do, would they succeed? How do we begin? How do we internalize, beyond intellectual enquiry and statements, the values that we speak of? How do we as academics, thinkers, scientists, leaders and concerned citizens change our own way of life and behaviour?

Contemporary vocabulary and architecture of governance, he said, are not in perfect harmony with governance for GNH, and the traditional government structures, objectives and administrative norms have to be aligned with practices based on GNH measurements. Application of tools and criteria for selecting projects and programmes, and criteria for governing budget allocation would ensure that the common good (happiness) is the intended outcome of the government expenditure.

Prime Minister said that while he has been encouraged by practice and measuring aspects of GNH in many local communities around the world, the governments' recognition of true progress and its measurement would come only when citizens and organizations act in unison, spurred by a new consciousness,

stimulated by the collaboration of research institutions, and supported by enlightened people and leaders.

There is a big challenge of convincing people that happiness is a collective goal, not an individual pursuit, the maximization of happiness lay in rejecting consumerism, and limitless growth in finite world is impossible:

How does one create an enlightened society within which the citizenry knows that individual happiness is the fruit of collective action and happiness – that lasting happiness is conditioned by the happiness of surrounding individuals and that striving for others happiness is the most certain path to fulfilling experiences that bring true and lasting happiness? How does one go about persuading people to adopt a new ethical paradigm that rejects consumerism? How do we convince them that the dogma of limitless productivity and growth in a finite world is not only unsustainable and unfair to future generations but that it squeezes out social, cultural, spiritual and aesthetic pursuits?

Economic growth for poverty alleviation is unjustifiable without an equitable redistribution, and the present belief in making more money to fix environmental problems is like “killing the patient to cure the disease”. The address ended with a hope that if GNH is to become a new world order, it is today when the relevance and sustainability of the prevailing old order is being tested by multiple global crises.

Nicholas Rosellini, UN Resident Coordinator in Bhutan, in his statement to the conference explained that UNDP’s human development index (HDI) was developed to fulfil the need for an alternative yardstick for measuring human progress. He said that the conference should discuss and refine GNH as alternative approach from international perspective given the fact that none of the methods which attempted to move beyond purely materialistic interpretations of human progress have gained broad acceptance among the academics and development practitioners. The GNH philosophy, he said, has strong credibility to rekindle global concern for the common interest and the public good,

especially today when many countries face severe economic problems, “caused at least in part by our own excessive preoccupation with profit and consumption.” In the face of global financial, food and fuel crises, the old development paradigm must be re-assessed and an alternative one found, and in this, GNH continues to give a refreshing perspective to development. He mentioned that some of the indicators of GNH developed by the Centre for Bhutan Studies would be relevant to the UNDP-Oxford initiative in understanding the missing dimensions of poverty, and are being suggested for consideration as additional dimensions of poverty and development.

Measurement

In “Measuring Progress towards GNH: From GNH indicators to GNH national accounts”, Ron Colman, Founder and Executive Director of Genuine Progress Indicator (GPI, Atlantic) discusses the operationalization of GNH and measuring progress towards GNH. The first essential step, he writes, is the GNH indicators the Centre for Bhutan Studies has developed followed by development of a set of GNH National Accounts, because GDP is not an indicator, but an accounting system, and a new accounting system that reflects the constituents and components of GNH is needed to replace the GDP-based accounting system. Ron suggests that,

GNH approach and practice not only offer highly positive potential solutions to the current global economic crisis, but its most effective agents and standard bearers are likely to be the younger generation whose stake in a sane, secure, sustainable, and balanced world is probably the greatest of any demographic group.

Terue Ohashi, in “The Analysis of Results of Research into ‘the Ideal Society’ in Japan, Sweden and Bhutan -- Using the indicator of Human Satisfaction Measure (HSM)”, introduces Human Satisfaction Measures (HSM) she has developed to study the sustainability of the society through social indicator which includes the triple bottom line (society, environment and

economy), categorised as labour, health, education, gender, environment and income. With her HSM questionnaires administered to Japan, Sweden and Bhutan, her study provides suggestions for pursuing sustainability of the society.

In “The Global Project on Measuring the Progress of Societies: A global movement for a global challenge,” Jon Hall shares the origins, findings, and plans of the Global Project on Measuring the Progress of Societies. This global project, hosted by OECD in cooperation with number of international agencies, NGOs, national governments and others, promotes a deeper and broader assessment and understanding of progress in societies around the world, and provides a forum and a focal point for international effort for discussing and exchanging ideas and the development of best practice of measures of societal progress. The Centre for Bhutan Studies is one of many global correspondents of the project.

Founder and President of nef (the new economics foundation), Nic Marks in “Creating National Accounts of Well-Being: A parallel process to GNH” draws a parallel between the development of GNH Index and a GNH-based new accounting system process and **nef**’s attempts to create new accounts of Well-Being. Nic argues that as a direct consequence of different governments collecting and analysing economic data (and social and environmental to lesser extent), much is known about the material conditions of people’s lives, but not about their actual lived experience and their sense of personal and social well-being. It is to address this need and gap that nef has a programme for the government to collect data on a regular and on-going basis for developing a set of indicator for measuring the population wellbeing, and ultimately developing and promoting the concept of National Account of Wellbeing. The project’s ambition, Nic mentions, is to convert some of the successes of **nef**’s Happy Planet Index into a mainstream policy tool.

Psychological Wellbeing

George Burns, in introducing the term 'Gross Natural Happiness', establishes links between nature and human well-being, in that the nature's positive benefits extends to the physical, psychological, social, and spiritual realms. Through extensive review of the research across various disciplines as well his many years of practical experience of using nature in psychotherapy, he argues that personal and ecological well-being, despite appearing to conflict with each other and are influenced by factors such as religion and culture, compliment each other. Human contact with nature enhances happiness, which in turn enhances ecological responsibility.

Ragnhild Bang Nes's "The Nature-Nurture Debate: New evidence and good news", opens the old debate by reviewing the new evidence from behaviour genetic studies on happiness and well-being. She also reviews the benefits from greater use of genetically informative designs due to their potential for advancing our understanding of both genetic and environmental risk and protective mechanisms, which is necessary for making better, more fully informed policy decisions.

Time Use and Balance

Karma Galay's "Time Use and Happiness", the only paper on Time Use and Balance, is the analysis of the Time Use domain of the GNH survey. Time use study data disaggregated at the level of gender, age, area of residence, employment status, family structure, income group, against various activities of work and non-work categories, he explains, is very useful for understanding the overall social transformation or change, as well as for designing comprehensive and balanced economic and social policies which would directly enhance well-being of societies through informed policy formulation. One significant finding from GNH's perspective is the time allocated for activities

(volunteerism and other unpaid work) uncounted in GDP, which, however directly enhances the wellbeing.

Culture

Sharon Lowen, a renowned artist of Odissi classical Indian dance, explores the role of culturally specific performing arts in connecting to 'other' in her paper, "Internalizing the Other: A cross cultural understanding in arts and education". Expanding out from within one's cultural background to those less familiar ('other') is essential in creating a global community, and the entry into the cultural space 'other' dissolves fear of the 'other' and creates a sense of security and the happiness, as a direct result of connecting, understanding, celebrating, and sharing a larger human landscape.

In exploring the role of meditation in achieving happiness, Khenpo Phuntshok Tashi, Director of the National Museum of Bhutan, in "Role of meditation in achieving Gross National Happiness", prescribes meditation as the key to finding happiness and peace to mind to the extent of introducing basic meditation practice in schools, colleges, community temples, and farm houses. One important egalitarian aspect of meditation is its accessibility to everybody and its low or no price. His paper explains the usefulness of meditation in destroying three root causes of suffering (desire, anger and ignorance) and providing anti-dote to three root causes of suffering and pride, jealousy, and miserliness; and its role in bringing happiness at individual, national and global levels. While everybody needs to practice meditation, leaders, decision-makers, and businessmen, desperately need meditation because they deal with many people and problems and make many decisions.

Carl Polley ("The Semantic structure of Gross national Happiness: A View from conceptual metaphor theory") studies how conventionalized metaphors of public discourse regarding Gross National Happiness shapes the semantics of development in

Bhutan, and propose ways in which the field of cognitive linguistics might contribute to planning and education for Gross National Happiness. The paper, using Conceptual Metaphor Theory which analyzes the patterns of meaning reflected in idiomatic figurative language, predicts that these semantic patterns can influence patterns of non-linguistic conceptual structure, including patterns of moral reasoning.

Community Vitality

Dena Freeman in “Development and (Un)happiness” presents an ethnographic case study of the impact of development project in rural Ethiopia. The project doubtlessly increased income, but not happiness. It rather brought in social and cultural changes which in turn destroyed the traditional community to the extent that the customary conflict resolution system was ineffective in dealing with the new social reality. Such impacts of development are not measured or noticed by the conventional development indicators. She suggests that any holistic wellbeing indicators, such as GNH, should involve detailed ethnographic study for understanding the real impacts of development on people’s wellbeing.

Mohammed Kamruzzaman’s paper “Religious Institution-based Community-hood and Identity of a ‘Muslim Community’ in a ‘Remote’ Rural Village in Bangladesh” is about a religious institution (mosque) and its role in constructing the notion of community and community-hood through an ethnographic study of a ‘Muslim community’ in rural Bangladesh. Using the Resource Profiles Approach (RPA) and Subjective Well-Being (SWB) to understand the cultural constructions of community-hood in relation to the perceived religion, he argues that the notion of community and community-hood in the contexts of rural Bangladesh is multi-dimensional and culturally rooted.

Professor Juju Chin Shou Wang of National Tsing Hua University, Taiwan, develops an island-oriented GNH model of “think like an island” by focusing on natural, cultural and social capital, in his

paper “Think Like an Island: Three-Capital Model in Pursuing GNH in Taiwan”. The outstanding feature of GNH, he argues, is its focus on the Eastern world-view to deconstruct the long-standing practice of viewing the world largely through Western perspective and measuring the quality of life using Gross National Product (GNP). The market’s “invisible hands” has become an “invisible feet” that trample on society, producing the phenomenon of “affluent poverty” at the environmental and social costs. GNP-oriented development in Taiwan has brought about three GNPs: Gross National Pollution, Garbage, Noise and Pollution, $GNP = NG(\text{Guns}) + NP(\text{Pollution})$.

Ecological Diversity and Resilience

Ram Fishman, Columbia University, in his “The excessive influence of impatience in the collective management of a natural or environmental resource” discusses institutional challenges to the practice of far-sighted, “patient” policies, in order to avoid future damages, be they environmental or social. These challenges arise from the excessive influence of “impatient” parties in a participatory decision process. Collective action is necessary to manage open access and shared natural resource and without cooperation, stakeholders would tend to under-invest in the future of the resource (because the benefits of this investment will be shared by others while the cost borne by themselves only – “the tragedy of the commons”). Ram formulates his above arguments in a formal economic game-theoretic model and explains through a situation of a community seeking to manage a natural resource collectively to avoid the “tragedy of the commons” in which its members value the future differently, more impatient community members (through time discounting leading to excessive social “impatience”) would have an upper hand over the patient members since the former have less to lose from failing to reach an agreement (and resulting the tragedy of the commons), and they lose comparatively less than patient agent, because the fruits of cooperation lie in the future, not in the present, and hence more highly valued by patient agents. In such case, Ram suggests one

form of institutional schemes to remedy this situation by providing immediate compensation to impatient agent in place of reduced preservation of the resource.

In “Status Symbols, Ecosystems and Sustainability” Arthur Fishman, Professor of Economics at Bar Ilan University, Israel, explains why many of the consumption goods such as ivory which are much valued and loved are ecologically degrading and results in ecologically unsustainable production levels that lead to extinctions and depletion of these resources. Of many complex and manifold reasons, he points that these goods have assumed a status symbol for elites in traditional societies and cultures (“produced by traditional technologies that were dominated by natural conditions”) because of their ecologically low supply. Despite the availability and use of technologies for increasing the rates of production of these goods, a long-standing perception as a status symbol still remains engrained into cultural norms, and its direct consequence is the inability of the production to meet increasing demand (despite no intrinsically valuable functionality), which results in increased production through exploitative and unsustainable means, far exceeding natural rates, and at a cost to ecological stability and in an unsustainable manner. Targeted education policies to uproot the entrenched perception of some of these products as symbols of status, and their cultural perception has been suggested as the remedy to the situation.

Good Governance

In the first paper on good governance (“Good Organizational Practice and GNH: A Proposal for Organizational Performance Indicators”), Anne-Marie Schreven, an Honorary Counsel of the Netherlands in Thimphu, Bhutan, who is an expert on organizational development, proposes a development of performance indicators for Bhutanese organisations to measure their contribution to GNH. Her paper builds on the nation-wide organizational development exercise carried out in 2007 to

strengthen the bureaucracy and good governance. While good organizational development, practiced and applied widely, is most often driven by self interest of the organisation or leader to sell well, in Bhutan good organisational practice must go beyond the organisation's self interest towards achieving the national vision of GNH or the wellbeing of the people.

In "Between Earth and Sky: Formal Organizations as Instrument in Creating GNH" John Nirenberg argues that to realize GNH through the lived experience of people in formal organisations, a compatible organisational infrastructure is required, and that one's organisational experience is a source of happiness or suffering. He contends that the success of GNH index as measure of wellbeing would depend on re-evaluation of three causal variables: prevailing mental models determining the worldview and the role happiness play; individual capacity for, and expectation of, happiness as a by-product of working in organizations, and requisite organizational structures and processes that stimulate the creation of both happiness and profit as outputs. First two causal variables, he argues, may be amenable to the realization of the practical application of GNH, but the development of a compatible organizational infrastructure that enables and nurtures the realization of GNH through the lived experience of people in formal organizations would be a challenge for Bhutan.

The theme of the next paper by Mr. Kezang (IT Park Project, Bhutan) and Jason Whalley (Strathclyde Business School, UK), as can be inferred from the title "Do Information and Communication Technologies Further or Hinder Gross National Happiness?" deals with the relationship between ICT and Gross National Happiness, and their inherent tension. ICT has a significant role in promoting a sustainable and inclusive development, and creating a knowledge-based GNH society by empowering rural communities. But the increasing geographical coverage of ICT infrastructure and increasing array of products and services raise a number of issues: the widening digital divide

that is accompanied by ICT growth and diffusion; the paradox of the economics of ICT development which favours centralisation and high population densities while GNH favour a more even-handed development process; and the impact of increasing diffusion and use of ICT on Bhutanese culture. The paper focuses on making ICT technologies available and affordable to reduce the digital gap.

“ICT Key Role in the Economic Development of Haiti: Lessons from Pilot Projects in Rural Haiti and Associated Directions of Contribution to the GNH Index” by Professor Serge Miranda of University of Nice Sophia Antipolis, France (with Frantz Verella and Tahar Saiah) discusses the ICT paradigm shifts of the last five years, which has benefited the developing countries, followed by the overview of a bottom up ICT approach in rural areas of Haiti adopted for sustainable economy conducted within a long term-strategy leading to the crucial role of mobile-learning platforms. Serge then discusses the development of four key coefficients as joint multi-disciplinary research for enriching the GNH index and other European contributions like Paradiso project.

Health

Despite significant improvement in health care services in Bhutan in recent decades, there is an enormous challenge facing the Bhutanese health sector due to resource constraints and increasing lifestyle- and stress-related disorders. Dr. Chencho Dorji emphasises the role of the Buddhist mindfulness and meditation in mitigating the effects of modernization and material desires in “Bhutanese Health Care Reform: A Paradigm Shift in Health Care to Increase Gross National Happiness”. He also explains the major shift from the doctor-centered “medical model” of treatment to a holistic, patient-centered bio-psychosocial approach to health care management, in addition to participation of the private sector in health care delivery for sustaining quality health care service in the country.

Dave M. Augeri of Denver Zoological Foundation, US, calls for the recognition by all disciplines and professions the health benefits of Nature. In his paper “Nature-Deficit Disorder and the Spirit of Wilderness”, he explains the findings of research in health, medicine and psychology which support the hypothesis that Nature has some inherently positive effects on physical and psychological well-being. He supports his proposition that “Nature has positive effects on our physical and psychological well-being, changes our body chemistry and makes humans healthier and happier, but physical and psychological illnesses are increasing with loss of Nature” with scientific research evidence. He explains that as the humans destroy and disconnect themselves further from Nature, the incidents of physical and psychological illnesses are increasing, and the instinctive bond and deep affiliation humans have with Nature is not just aesthetics; it is rooted in our biology.

At 92, Ethel Lowen is the oldest participant at the conference, yet she writes (in her CV) that she is 92 years young. In her paper “Dynamic Ageing” she expands on a perspective that not only provides for personal happiness in senior years but expands circles of connections and friendships beyond retirement years, adding to the happiness of others. She explains that as we grow older we become more aware of the importance of being genuinely interested in the problems of our fellows.

Education

The first paper on education domain deals with every day dilemma every Bhutanese student also faces between value systems of the Bhutanese homes and the schools. “Western Education, Psychologized Individualism and Home/School Tensions: An American Example” by Professor Andrie Kusserow of St. Michael’s College, Vermont, US, discusses the tension faced by children of the poor American families between how they are socialized at home (‘hard individualism’) and how they are socialized in school (‘soft individualism’). The American

education preschool system emphasizes psychologised individualism and its values such as self expression, self-confidence, self-pride, uniqueness, independence, individuality. However, these values are not taught at homes. The author discusses the ways of harmonizing socializing psychologized individualism that reflect and promote Western cultural values and beliefs, and a home-based socialization of Buddhist values in Bhutanese schools.

Meena Srinivasan's paper, "Gross National Happiness in the Classroom – A Teacher's Thoughts" is couched on ever increasing complex global problems today and the role GNH values can play in promoting an ethical and ecological outlook that has the potential to make our world a better place for all peoples. She discusses her personal and classroom experience of teaching GNH in the American Embassy School in Delhi where she is a teacher. In her school students participate in 'Happiness Lab' and 'Project Happiness', meditate on compassion, understand dependant origination, and learn about deep ecology at an organic farm in India. She suggests teaching compassion, patience, tolerance, forgiveness, contentment, harmony and social responsibility in schools.

In his paper "Conceptualising Education for Constitutional Monarchy System: Meiji Japan's View and Approach", Masanori Kakutani of Hiroshima International University, Japan, offers implication and suggestions for Bhutan as it introduces a constitutional monarchy. By examining the Meiji Japan (1868-1912), he explains the failures of the early national modernization, especially the borrowing of education ideas from the west. The failures, he contends, were due to pedagogical, financial and socio-political and cultural struggles. The Meiji introduced the constitutional monarchy to achieve national modernisation as well as to ease the political struggles among the three main forces: the Meiji government itself, traditional authority, and liberal forces. As a part of its education reform, a mission sent to Germany learned the significance of education to stabilise society. National

modernisation was possible after education was used as a basis for organising society by the Meiji Japan. The education reforms were made within the framework of establishing a constitutional monarchy system, not introducing West-inspired liberal ideas at the expense of traditional systems and values. He suggests Bhutan to consider Meiji Japan's case as a pilot example for using education reform.

Through case of two communities in Japan and Sweden Michiyo Kiwako Okuma-Nyström of Stockholm University ("Schools in Rural Areas and Gross National Happiness: Endogenous Actions of Small Communities in Japan and Sweden") discusses (within GNH framework) the community struggle for sustainability and wellbeing of the pupils, their parents, and the community itself, and thereby prevent the closure of schools. The intrusion of neo-liberalism and its associated market principles such as effectiveness, efficiency, and freedom of choice into the field of education has resulted in closure of schools due to the decreasing number of community members and students. The school closure results in loss of the community, the school itself and the centre of the community, which for a small community means the beginning of a long process towards the death of the community.

Living Standard

"Shift in the measures of Quality of life viz-a-viz Happiness - A study of Phongmey gewog and Trashigang town in Eastern Bhutan" by Vijay Kumar Shrotryia of North Eastern Hill University, India, presents quality of life study results of Phongmey gewog and Trahigang town. The measures of quality of life survey conducted in 2000-2001 and a follow-up survey in 2005-2006 compares the variations in opinions on the importance, and satisfaction of a wide range of quality of life variables. The findings reveal that the improvement in the variables is not leading to a corresponding increase in life satisfaction, thus pointing that the life quality or happiness is much more than mere physical development.

Junko Edahiro and Riichiro Oda in “Japan’s Paradigm Shift from Growth to Happiness: Slowing Down to Advance Wellbeing” discusses Japan’s mixed records of economic growth in enhancing people’s happiness while the price paid by society in forms of environmental and social costs is exacting. They emphasise the proper understanding of underlying structures and mental models, not merely events and patterns, and suggest a systemic view for understanding it. To shift focus from the problem of blind faith in infinite growth in a finite world towards pursuing and understanding what constitutes happiness, they present a new framework and a new set of indicators for a more holistic view of happiness, with cases from Japan, such as a company shifting its primary goal from sales growth to enhanced GCH (Gross Company Happiness) and the “Candle Night” movement co-initiated by one of the authors.

Akiko Ueda (“Food Security and Gross National Happiness”) looks at the concept of food security through Gross National Happiness prism, not the conventional understanding of food security. She explores various cases relating to people’s food security, including production, circulation and consumption, and examines factors which would affect GNH indicators. By comparing and contrasting the conventional concept of food security and GNH, she explains that the former focuses only on the question of ‘what’ and ‘how much’, that is what is produced, traded and consumed, but lacks a critical perspective on the question of ‘how’, that is how food is produced, traded, distributed, and consumed. She suggests that understanding and addressing these questions are important in considering sustainability of food security.

Prabhat Pankaj and Roma Mitra Debnath, who are both professors at ILM Graduate School of Management, Delhi, in “Optimal Condition of Happiness: Application of Taguchi Robust Parameter Design on Evidences from India” answers the pertinent question of which array of conditions make into an optimal condition for happiness by quantifying optimal condition of happiness,

measured in terms of subjective wellbeing (SWB), using Taguchi Robust Parameter Design. The optimization results suggest that among the domain facet, a marginal change in good family life and wellbeing, good inter-personal relationship, and good employment and job satisfaction would cause a large change in happiness. While for lifetime pursuit of happiness, most important sources are yoga and meditation, principles and responsibility, and cultural participation. Among the extra-domain sources pertaining to global experiences, factors such as responsible political leadership and low inflation have been found most important. The paper suggests that a prudent public policy could address these factors and also account for ways to improve them for achieving greater happiness for greater number of people.

GNH - The Way Forward

Relationship between Gross National Happiness, sustainability and international justice is the theme of Ross MacDonald's "The Future of Happiness as a National Pursuit". The heart of his analysis is the potential conflicts between the interests of the current national population on one hand and the needs of those who live beyond its borders, the future generations, and the other sentient beings on the other. He places GNH firmly in the context of a universalised ethical framework that would become increasingly necessary as we enter into a future of unprecedented inter-national, inter-generational and inter-species competition over collective resources and opportunities. Central to his argument is a claim that all understandings of national obligation would have to be radically expanded if harmony and happiness are to be genuinely secured.

In "Critical Holism: A New Development Paradigm Inspired by Gross National Happiness?" Hans van Willenswaard of Suan Nguen Mee Ma Corporation Limited discusses a new development paradigm inspired by Gross National Happiness. He provides a provisional sketch of an awareness-expanding process in Thailand through the series of conferences on GNH. Submitted

as a discussion paper at the start of the GNH Movement Project which resulted from the Third International Conference on GNH held in Nongkhai and Bangkok in 2007, the paper compares and synthesises Gross National Happiness and other resonating concepts like Sufficiency Economy in Thailand for developing a framework for multi-stakeholder action and research focusing on a range of common development goals in the coming decade. The ultimate result is a consensus on a 'new development paradigm'.

The last paper by Nille Van Hellemont, a historian and a graphic designer from Belgium proposes the development of a protocol for creating a GNH-label similar to the eco-label and criteria for well-being, in her paper "GNH: Changing Views, a Label for Quality Information". The GNH label, she explains, will guarantee quality information especially in advertisement and publicity sectors by balancing the holistic needs of the individual, society and the earth. The existing ethical codes such as those on human rights, international anti-racism, and anti-slavery etc. can be used to develop a set of criteria as defined and controlled by competent international, national, regional and local authorities. The application of GNH-label will guarantee the qualities of the promoted product as well as well as information before advertisement. The visibility of the GNH-label will inform the consumers on the undoubted quality of products and message.

We would like to apologise to those participants whose papers could not be accommodated in this publication for the lack of space. Except for "Time Use and Happiness" by Karma Galay, none of the papers written by researchers of the Centre for Bhutan Studies, has also been published in this proceedings; they will be published separately.

To conclude, the Centre for Bhutan Studies would like to thank all the participants for their participation and papers. A group of fresh college graduates, who truly embody one of the important indicators of community vitality, provided their voluntary service both before and after the conference in providing logistic service

and looking after the participants. The Centre would like to thank all of them for their service.

Once again, United Nations Development Programme in Bhutan funded not only the first national GNH survey but also the organization of the conference itself. The Centre is ever grateful for this assistance.

Lastly, the Centre for Bhutan Studies would like to dedicate the conference, the publication and all the positive outcomes to His Majesty the Fourth Druk Gyalpo Jigme Singye Wangchuck, the Author of Gross National Happiness, and to His Majesty the Fifth Druk Gyalpo Jigme Khesar Namgyel Wangchuck who personifies Gross National Happiness both in spirit and action.

Keynote Address by His Excellency Jigmi Y. Thinley, Hon'ble Prime Minister of Bhutan

It is a great honour and pleasure for me to be with you this morning at the opening of the Fourth International Conference on Gross National Happiness. From the philosophical domain of esoteric discourse on the purpose and meaning of life at the first conference, we have now come down to the world of reality where most things unquantifiable are not saleable or deemed to be worthy of pursuit.

Having fully convinced ourselves that in order to make GNH practicable, it must first become measurable, this conference I understand, will discuss how best to promote the 'Practice and Measurement' of GNH. (I am glad that we have long rejected the notion of measuring happiness through the breadth of smiles.) Likewise, the view that attempts to measure happiness will run the risk of promoting and pursuing only those elements that can be identified and measured has not found support.

It gives me and my colleagues in the government immense pleasure to note that so many distinguished persons from many countries have considered it worthwhile to attend the conference. 25 nationalities are represented here today. To receive fellow pilgrims in the quest for a better world through GNH at this time of the year is of special significance to us for three reasons.

First, this year is of extraordinary importance in the history of our country. Our country became the youngest parliamentary democracy in the world after 257 years of theocratic rule, albeit as a dual system, and 100 years of a golden era under monarchy. It was probably the most peaceful transition to democracy. What is unique about the transition is that it did not come through the will of the people but by the will of a King whose selfless love for and trust in the people led him to convince them that the destiny of the country must lie in the hands of the people themselves and not

depend on a single individual. Against strong resistance to change, the Bhutanese people finally accepted democracy not because of its inherent virtues but because they trusted their King.

A philosopher once said that trust is the basis of democracy and human rights rather than democracy and human rights being the basis of trust! I mention this point on trust as it is highly relevant to the vitality of institutions and communities, as well as to the way a democracy operates and affects our happiness. With such a sobering awareness, my government has begun our spirited journey of combining democracy and GNH. We have committed ourselves to ensuring that the trust of our Kings in the people and the people's trust in us, the elected, are not betrayed. We have pledged to consolidate and strengthen the conditions that will enable each citizen to find happiness. To this end, the most important goal of my government is to establish, in our society, a democratic culture of trust in the constitution and the capacity to inspire and hold its elected leaders responsible and accountable.

Second and most importantly, you have come here just after the Coronation of His Majesty King Jigme Khesar as the Fifth Druk Gyalpo. The Coronation of His Majesty is of special significance for GNH for His Majesty and his reign personify GNH. The King has emphasized promotion of GNH as His responsibility and priority as made clear in His Coronation Address, "... whatever goals we have - and no matter how these may change in this changing world - ultimately without peace, security and happiness we have nothing. That is the essence of the philosophy of Gross National Happiness... I shall give you everything and keep nothing; I shall live such a life as a good human being that you may find it worthy to serve as an example for your children; ...I also pray that while I am but King of a small Himalayan nation, I may in my time be able to do much to promote the greater wellbeing and happiness of all people in this world - of all sentient beings." Bhutan has, yet again, been blessed with a great King who is compassionate and wise. His commitment to GNH is based on a deep understanding of the philosophy and the

conviction that it is through this that his people can be best served. GNH could not find a greater advocate and patron and this conference could not have been better timed.

And third and lastly, you are here during the period of the celebrations for the centenary of our monarchy that will extend up to 17th December. This is the year when all Bhutanese are single minded in their reflections on the amazing journey of our beloved country under 100 years of monarchy. Each of our Kings served the nation under extraordinary circumstances and endowed the country with legacies that have made this kingdom what it is today. In this regard, I consider this conference to be a special celebration of the timeless gift of GNH by His Majesty the Fourth King not only to the Bhutanese people but to human society in general. Gross National Happiness as the goal and purpose of development is the fruit of his wisdom born out of his dedication to understand, articulate and fulfil the innermost desire of his subjects. It served as the main motivator and basis of all his policies and actions during a glorious reign of 34 years. As the reality of our unsustainable, unfulfilling way of life becomes ominously and indeed, devastatingly clear in our troubled world, I believe GNH, seen as an alternative development paradigm, has become ever more relevant.

These events and the mood that pervades throughout this Himalayan kingdom offer an exceptionally expectant setting for the GNH conference which has returned to Bhutan after two highly productive sessions abroad. As a participant in all three international conferences in the past, I feel specially privileged to be able to welcome it back to Bhutan. In fact, the royal government considers this conference as one of the most important and meaningful activities of the Centenary celebrations.

This occasion evokes a sense of continuity, renewal of solidarity among fellow GNH pilgrims and creation of fresh bonds of partnership toward a worthy cause. In particular, we are very happy to have here with us, Dr Ron Colman, Director of GPI Atlantic who was the chief organizer of the landmark 2nd GNH

conference in Halifax, Canada. That conference brought GNH to the broad-based attention of the people in North America. We are equally delighted to welcome Hans van Willenswaard and Hans Wallapa, the chief coordinators of the hugely successful 3rd International Conference in Nongkhai in Northern Thailand and in Bangkok. Through the Bangkok and Nongkhai conference, GNH was suffused, like the waters of Mother Mekong, through the Mekong Delta countries.

The breadth of participants in both these conferences were unprecedented, bringing in the Governor General of Canada, Prime Ministers of Thailand and Bhutan, politicians, corporate leaders, professionals, NGOs, youths, artistes, religious leaders and writers. The movement and practical actions the conferences generated are still rippling through places and societies in ways that have humbled us. You will be pleased, as I am, to be informed that the venue and hosts for our next conference has already been chosen. Please welcome Dr Susan Andrews, from Brazil, who will be instrumental in holding the 5th International conference on GNH in Brazil. My only request is that we now become more focused on translating the concepts of GNH into clear policies. For the organization of all the GNH conferences from the Bhutanese side, the UNDP has been exceptionally generous and a reliable partner. I would like to thank Nicholas Rossellini, UNDP Resident Representative, for his unwavering support.

Your participation in the past conferences has inspired, provoked and generated scientific inquiry and insights among ourselves and beyond. I have no doubt that the achievements of this conference will be no less. To you goes the credit for the widening interest in GNH and the growing conviction in the urgent need to search and find an alternative to our acquisitive, exploitative and insatiable way of life dictated by our faith in the infallibility of market forces which, in turn draw their power from the ambrosia of consumerism.

Over the years, due to the transmission of GNH by all of you, there have been attempts to practice and measure aspects of it in ways

that have and should always take into account local specificities and relevance. It is most encouraging to observe how aspects of GNH are being implemented in bottom-up, non-centralized ways, in many local communities around the world. Big shifts from governments towards what is recognition of true progress and how it should be measured may indeed only come when citizens and organizations, dispersed as they are, act in unison and convergence spurred by a new consciousness. Such actions are being stimulated by the collaborative activities of vanguard research institutions around the world that are supported by enlightened people and leaders.

Present here in this conference are key researchers from many leading edge research institutions. They include the statistical office of the OECD based in Paris, New Economic Foundation from London, and the International Cooperation Centre based in Osaka, Japan. The OECD, whose membership includes all industrialized and donor countries, is to be congratulated for having conducted a series of regional conferences covering all the continents on fostering and measuring true human progress. These culminated in the world summit in Istanbul, Turkey last year. I myself had the pleasure of being invited to participate in the Asian regional conference in Seoul and the global summit. These and such other activities demonstrate very clearly the growing concert to find a development model inspired by GNH.

Without being complacent, it would be most beneficial to intensify international collaboration on practices and measurements, while emphasizing the need to maintain focus on formulation of practical applications in terms of projects and programmes being rooted in the local where the real people are, and where genuine meaningful grassroots changes must take place. In this regard, it appears that developing measurements or indicators of progress for GNH may actually be easier than applying them to reshape public policy and action. The point of all attempts to measure holistic development is to persuade reconfiguration of public policies, restructuring or reorientation of institutions and

transformation of human behaviour. To this end, we may even have to be bold enough to suggest alternatives to competitive politics whereby common purposes and visions are often defeated by conventional divisions of left versus right, pro-market versus socialism, electoral calculations versus long term interests. While everyone acknowledges globalization and the reality of the global village, politics at all levels need to transcend parochial, national or regional perspectives to respond to and act on global problems such as the depletion of shared resources and erosion of ethical and moral consciousness. Even as we welcome democracies as part of the solution, we must be aware of what philosopher Onora O'Neill said: "Democracy can show us what is politically legitimate; it cannot show us what is ethically justified."

I dare say that contemporary vocabulary and architecture of governance are not in perfect harmony with governance for GNH. Practices based on GNH measurements will, I am certain, require changes in traditional government structures, objectives and administrative norms. To begin with, the tools and criteria for selecting projects and programmes need to be aligned with GNH. Then there are the criteria governing public budgetary allocation for realizing public goods. These are in need of revision just as the notion of what constitutes public good itself. For all I know, happiness, as a public good, does not feature as the intended outcome of most government expenditures. What will not change though is one challenge of public policy which is to enhance the well being of the individual without compromising the well being of the collective or vice versa. How does one achieve a judicious balance between the two? Is there a dichotomy?

As this august gathering discusses the subject of practice and measurement of GNH, I urge you to consider pondering the many questions that haunt me.

How does one create an enlightened society within which the citizenry knows that individual happiness is the fruit of collective action and happiness – that lasting happiness is conditioned by the happiness of surrounding individuals and that striving for others

happiness is the most certain path to fulfilling experiences that bring true and lasting happiness? How does one go about persuading people to adopt a new ethical paradigm that rejects consumerism? How do we convince them that the dogma of limitless productivity and growth in a finite world is not only unsustainable and unfair to future generations but that it squeezes out social, cultural, spiritual and aesthetic pursuits?

Even the justification for economic growth for poverty alleviation seems very shaky, unless we radically improve redistribution. Shamefully, little goes to poverty alleviation from the enormous wealth generated in the aggregate global economy. The same is applicable to the argument that we need to grow so that there will be money to fix environmental problems. To believe this is to believe in killing the patient to cure the disease. Evidence that we need to grow economically to be collectively happier is of course even scarcer among the rich countries. Well then, how does one advocate a new concept – definition – of productivity, wealth, prosperity and fulfillment that has little to do with material accessories and edging out the weak as compared to having more to do with social, psychological and emotional well being?

Is it enough for us to know how to measure happiness and to hope that this will influence policy-making? Is making GNH policies and programmes enough? What of political will and capacity given the fact that these, in a democracy, are responses conditioned by popular demands and aspirations? So, if people do not understand and favour GNH based policies, will politicians dare? And if they do, would they succeed? How do we begin? How do we internalize, beyond intellectual enquiry and statements, the values that we speak of? How do we as academics, thinkers, scientists, leaders and concerned citizens change our own way of life and behaviour?

I come now to the end of my humble address. Traditional wisdom tells us that new thoughts and ideas emerge from chaos and devastation. If GNH must be the new order, then the old certainly appears to be giving way as manifest in the multiple crises that are

testing the relevance and sustainability of the prevailing order. The financial, energy, and food crises as well as the natural calamities of the magnitude and frequency never seen before are, I believe, alarm bells to warn us away from living the way we do.

Thank you for your patience.

Tashi Delek!

Remarks by Nicholas Rosellini, UN Resident Coordinator in Bhutan

At the outset, I would like to thank the Centre for Bhutan Studies for inviting me to the opening ceremony of the Fourth GNH Conference. I feel very privileged to address this distinguished gathering on a subject that has been personally both enriching and interesting to follow.

As you all know, since the 1980s, the world has felt the need for a development yardstick that not only measures economic progress through Gross National Product and per capita income but also captures other aspirations of a society. There was growing evidence that existing methodologies did not reflect the quality of life of the people and that the world was ready for an alternative measurement of human progress. This led to the development of the human development approach and the associated index which includes income, longevity and education.

On the other hand, little known to the rest of the world and much before this pluralist notion of development and human progress was to gain momentum, His Majesty the Fourth King of Bhutan stated that Bhutan's development should be guided by the philosophy of gross national happiness. I know most of you present here have followed and been part of the interactions in international conference settings or otherwise, on both the conceptual understanding and the complementarities of GNH with other development paradigms. While many methods have attempted to move beyond purely materialistic interpretations of human progress, none has yet gained broad-based acceptance among academics and development practitioners. Hence the importance of this conference where alternative approaches can be discussed and refined, benefiting from different international perspectives.

I strongly believe that in this globalised world, the GNH philosophy has strong credibility to rekindle global concern for the common interest and the public good. This is especially true in our turbulent times when many countries face severe economic problems, caused at least in part by our own excessive preoccupation with profit and consumption.

In the developing world especially, the livelihoods of millions of people are in jeopardy due to a crisis for which they had no responsibility. This situation could lead to major setbacks in reducing extreme poverty and, more broadly, in progress towards all MDGs.

We, at the United Nations System in Bhutan have been fortunate to partner with national agencies such as the Centre for Bhutan Studies and the Gross National Happiness Commission to assist in their elaboration of the messages of GNH and defining means to measure the country's progress and translating this vision into reality. We are privileged to have had the opportunity to join the discourse on GNH and be part of the various developments that have taken place since Bhutan's unique and inclusive development philosophy attracted attention internationally. We are confident that the work done here in Bhutan through conferences such as this will eventually influence the way we take forward development in many other countries.

While concepts such as human development with its HDI methodology continue to be relevant, we all know that the global environment has changed significantly since it was first introduced. The financial, food and fuel crises serve as very visible illustrations of this dynamic. It is in the spirit of recognizing this changing and varied nature of reality that we must continue to re-assess the relevance of development paradigms and search for alternatives. I feel that from this vantage point, GNH continues to give a refreshing perspective to development and it is encouraging to note that this conference will help Bhutan's endeavours in developing relevant indicators and indices to use GNH both as a

policy tool and as a measurement to assess the country's development progress.

It is also in this context of searching for alternatives, that I am happy to share that UNDP in association with Oxford University has recently initiated a study into understanding the missing dimensions of poverty. In this regard, Bhutan's on-going efforts to measure development through the GNH index, particularly those related to culture, psychological well-being, community vitality and other social safety nets (that I understand will be discussed at this conference) will be relevant dimensions that need to be addressed.

If this ongoing discussion on the HDI in different countries and with many contributors is any indication, then I think we are ready for a drastic change in the way we perceive poverty or human progress. Interesting dimensions similar to the ones related to the various domains and indicators developed for GNH such as the security, institutional or government performance, violence factor and community relations are being suggested for consideration as further dimensions of poverty and development.

In this context, I am reminded of the powerful message of His Excellency Prime Minister's statement at the 63rd UN General Assembly where he warned against the world's unsustainable and irrational way of life, whereby we are simply transferring our many debts to future generations who are not here to argue against it. From the UN perspective, new global solutions are needed that recognise the vulnerability of poor countries to the negative impact of interconnected crises – financial instability, climate change, volatile prices for food and energy, and unacceptable levels of hunger, poverty and inequality. We simply cannot address the challenges of the 21st century with the instruments of the 20th century.

May I conclude with this ardent hope that His Majesty the Fourth King's noble vision of Gross National Happiness be a gift of Bhutan to humanity, humanity deeply in need of it. I wish you all

a productive conference and a happy stay in this beautiful country.

Measurement

1

Measuring Progress towards Gross National Happiness: From GNH indicators to GNH national accounts

Ronald Colman

Why go beyond indicators?

Since the First International Conference on Gross National Happiness nearly five years ago, major progress has been made in Bhutan on developing indicators to measure progress towards GNH. The Centre for Bhutan Studies, under its brilliant and inspiring leadership of Dasho Karma Ura, has developed the Kingdom's first ever GNH survey, pilot tested it, then administered the survey to a nationally representative sample, and analysed results – all in the most rigorous and careful way.

The emerging indicators are an absolutely essential first step in operationalizing GNH and measuring progress towards GNH, and in ensuring that the enduring values of Gross National Happiness guide the Kingdom steadily through the unpredictable vagaries of party politics. People sometimes ask – what is the relationship between measurement and policy? The two are intimately and naturally connected in several ways:

Good evidence is essential for informed decision-making. Without such measures, policy making would be blind, and have no understanding where the greatest needs are, and which population groups need to be targeted with which programs. They can also send early warning signals to policy makers if key indicators begin to trend downward, and they thus allow and encourage timely remedial action.

The new GNH measures spanning nine different domains (health, education, living standards, time use, environmental quality, culture, community vitality, governance, and psychological wellbeing) enable policy makers and the general public to be aware of the practical trade-offs involved in each decision. If we make progress in one area, is it at the expense of another, or can we advance all domains of GNH harmoniously?

The indicators can help set specific goals and targets and mobilize the population behind a common vision. This is not theoretical or conceptual but very practical. For example, if we know what the crime rate or poverty rate in a certain area is, we could set the goal of halving those rates by a certain year, and measure our progress in getting there.

The new measures can help evaluate which programs are working and which are not, according to whether or not they are achieving the GNH goals and targets established through the indicators. Ineffective programs can be scrapped and better ones put in their place.

The indicators enable Bhutanese to hold their government accountable. At election time, for example, the people can assess the degree to which their elected representatives made progress towards the GNH goals and targets established through the indicators, and they can cast their votes accordingly. They can also assess their own personal commitment and that of their community in making progress towards those goals.

The new measures can ensure that—whichever political party gains power—all elected representatives are held to a set of common principles and consensus goals, and they will all be judged by the same standard.

In all these ways and more, the indicators can be very practical policy-relevant tools that are now ready for application. So we should not underestimate the remarkable achievements of the Centre for Bhutan Studies in the last four years in creating these

new GNH measures and producing the first ever baseline data that henceforth will provide the ground for measuring progress. This is an historical achievement.

But are these new indicators all that is needed to embed GNH firmly in the institutional structure of the Kingdom for the long haul? I don't think so, and I want to be bold enough to suggest a second key measurement step—perhaps for the next five years. Resting on the firm foundation of the indicators, I believe—based on our Nova Scotia experience—that the next essential step is the development of a set of GNH National Accounts.

So why go beyond indicators? Why a set of National Accounts? And what does that mean? The best place to begin is to recollect the ground-breaking words of His Majesty the Fourth King, who started the whole thing by declaring: “Gross National Happiness is more important than Gross National Product.” It is no coincidence that the birth of the term GNH took place by way of explicit contrast with GNP (or GDP as currently used, which measures the total quantity of goods and services produced and sold in the domestic market economy)—a totally materialist measure.

GDP is not an indicator; it is an accounting system

So if the power of GDP as a measurement system is to be broken or at least weakened, that will not happen through indicators alone. We eventually need to take aim at our materialist GDP-based accounting system and to reshape that accounting system entirely to reflect the constituents and components of GNH.

Nothing changes people's behaviour like price signals. All the preaching about greenhouse gas emissions and energy conservation and all the good energy efficiency and climate change indicators in the world didn't tempt North Americans to switch away from their gas-guzzling SUVs. But a doubling of oil prices very quickly stopped the SUV lust in its tracks and created

an overnight demand for small fuel-efficient cars that the market could not meet.

We won't begin to send price signals that are in accord with GNH principles until we change the present produce-and-spend economic accounting system to reflect the true social, cultural, and environmental costs and benefits of economic activity. And yet....if we do not dare to take that scary next step onto the main highway of the economy, we face the real danger that GNH will become a wonderfully inspiring set of principles, reflecting people's deepest aspirations—the fodder for countless brilliant speeches—but it will become ever more divorced from behaviour and action.

We *can* rebuild that economic accounting highway, and we have the tools to do so. We *can* face down the GDP accounting monster head-on and create a sane accounting system that not only fully reflects our GNH values but also protects against the kind of insane boom and bust cycles that our present economic system and its growth-based accounting system inevitably produce. Most importantly—unlike our present winner-take-all-and-future-generations be-damned accounting system—such a new GNH accounting system can actually shape an economic infrastructure capable of supporting future generations and of ensuring long-term sustainable prosperity in harmony with the natural world and with our longstanding cultural traditions.

The difference between indicators and accounts

Indicators assess progress and are based on physical measures (e.g. employment, crime, poverty, and illness rates, levels of educational attainment, greenhouse gas and air pollutant emissions, etc.) The units of measurement are unique to each indicator, with rates generally measured in per capita terms (e.g. number of jobs, crimes, smokers, graduates per 100,000 or as percentage of total population, or in tonnes per capita for pollutant emissions). Indicators tell us if things are getting better or worse. And they perform vitally important policy functions,

sending early warning signals to policy makers, and assessing which programs are working and which are not in attaining agreed targets.

Accounts assess *value*, with units of measurement expressed in common monetary terms (ngultrum) to the degree possible, and with evidence describing and pointing to economic value when monetization is not possible. Accounts form the basis of government financial incentives and penalties—including taxes, subsidies, and investments in particular sectors of the economy. And those financial incentives and penalties in turn affect price—which, as we saw, is the most immediate, powerful, and effective determinant of behavioural change.

Here are some examples of the difference between indicators and accounts:

Crime rates (an indicator) tell us—in criminal incidents per 100,000 population—whether crime is going up or down, with lower rates signifying progress. Accounts tell us the cost of crime to society—how much we spend in ngultrum on courts, prisons, burglar alarms, security guards, hospital costs due to assault, replacing victim losses, etc. This can be expressed as the amount we would save and have available for more productive investments in wellbeing if there were no crime. We found that crime costs Nova Scotia more than \$700 million a year.

Trends in volunteer work can be a good indicator of generosity and community strength, and tell us—in hours—whether volunteerism is increasing or declining. Accounts tell us the *economic value of volunteer work*—by assessing what it would cost to replace for pay the services presently provided free by volunteers. If volunteerism declines, as it has in Canada, accounts tell us the lost economic value of those missing volunteer hours. We found that voluntary work contributes the equivalent of \$1.8 billion a year in services to the Nova Scotia economy. (Of course this figure is invisible in the GDP statistics and conventional

economic accounts, which ignore the value of unpaid work and only measure paid work.)

Smoking rates (an indicator) tell us—in number of smokers as a percentage of total population—whether we are making progress in avoiding the high rates of premature death and illness attributable to smoking. Accounts tell us the cost of smoking to society which, in Nova Scotia, we found was \$171 million a year in direct health care costs and about \$700 million more in lost productivity.

Of course, there is a good news side to all these stories. The sharp decline in smoking rates translates into a long-term saving of hundreds of millions of dollars. We calculated that if Nova Scotians didn't smoke, had healthy weights, and exercised regularly, the Province would save half a billion dollars in years in avoided excess health care costs.

Needless to say, all these examples make very clear the *relationship* between indicators and accounts, and why the latter depend on the data and evidence provided by the former. It is the change in the *rates* of smoking, crime, volunteer work, etc, that allow the calculation of the related economic costs and the savings (in ngultrum) that will accrue from an improvement in the indicator.

Fortunately, smoking is one indicator that Bhutan doesn't have to worry too much about, being the first country in the world to ban the sale of tobacco. And, since Bhutan had no problem being a world leader in this field and in many others related to the GNH view, it is likely the world's best candidate to be the first to adopt and implement the new GNH economic accounting framework.

One more example of the relationship between indicators and accounts. A climate change *indicator* tells us—in CO₂ equivalent kilo tonnes—whether greenhouse gas emissions are increasing or not and therefore whether we are making *progress* in combating climate change. *Accounts* tell us the economic costs of climate

change damages and the costs of controlling and reducing greenhouse gas emissions by a certain amount. By comparing those damage costs with those control costs, accounts enable us to assess the cost-effectiveness of particular measures to reduce emissions.

I think those few examples illustrate the difference between indicators, which measure *progress* in physical units of measurement (crime incidents, smoking rates, greenhouse gas emissions, etc.), and accounts which assess *value* in economic terms. An effective set of GNH measures requires both, with the former providing the basis of the latter. Now that the Centre for Bhutan Studies has done such excellent work in the last few years in developing GNH indicators, it may be time to consider the next step—which for the first time can confront GDP directly and truly turn the world on its head in the best possible way. And in doing so, I do believe we can begin to realize the profound aspiration of His Majesty the Fourth King when he declared: “Gross National Happiness is more important than Gross National Product.”

Fundamentals of the new accounting system – stocks and flows

Two types of accounts or systems of economic valuation are always needed—stock accounts and flow accounts. The former consist of national balance sheets that assess a nation’s assets, liabilities, and wealth (which is defined as assets minus liabilities). These stocks—also sometimes called capital accounts—represent value that has accumulated over time, and which can also depreciate over time. Flow accounts, by contrast, assess what we earn and spend, and represent a current snapshot. A house, for example, is a stock or capital asset, while monthly rent or mortgage payments represent a flow. Unfortunately, our present conventional stock and flow accounts account for only a fraction of our true wealth and spending, and are therefore remarkably narrow and distorted—not surprisingly sending highly misleading signals to policy makers:

Our conventional national balance sheets (our present stock accounts) count only the value of our manufactured, built, and financial capital, and entirely ignore the value of our natural, human, social, and cultural capital—though the latter are just as subject to depreciation and in need of re-investment as manufactured capital. If a forest is cut down or degraded, that is a depreciation of natural capital as surely as machines in disrepair or an unsafe bridge reflect a depreciation of manufactured and built capital. Similarly, a sick and uneducated populace reflects a depreciation of human capital; higher crime rates reflect a depreciation of social capital; and a loss of native language speakers, traditional wisdom, or knowledge of traditional arts and crafts reflects a depreciation of cultural capital.

Similarly, environmental protection and restoration, health promotion efforts, skills training, promoting use of Dzongkha and other Bhutanese languages and dialects, training young Bhutanese in traditional crafts, and wearing the gho and kira can rightly be seen as investments in the natural, human, and cultural capital that constitute essential components of the nation's wealth. In short, we need to expand our present narrowly based balance sheets or stock accounts, which ignore and therefore devalue our true wealth, into a full capital accounting system that properly accounts for the value of all our assets.

Likewise, our present flow accounts—namely GDP—count only the value of market production (goods and services produced for pay), and take no account at all of the value of unpaid work or of the un-priced services to society provided by nature, culture, social networks, or knowledge— though these underpin the market economy itself. So we presently count what we earn and spend, but we take no account of the demands that our consumption and human activities place on nature and on our communities. Ironically, when those un-priced services become depleted or degraded and have to be replaced for pay, we mistakenly count that replacement as growth and a contribution to prosperity. So if the water coming from our streams and taps is no longer safe

to drink, we count what we pay for water in plastic bottles as a contribution to GDP. And when we have to pay for child care once provided for free, the economy grows again.

In fact, our current accounting system has a convenient term for everything it excludes—it calls them “externalities,” which is a handy way of ignoring the true costs of resource depletion, greenhouse and pollutant emissions, smoking, crime, cultural breakdown and more. The more trees we cut down, the more the economy will grow, because GDP counts only what we extract from our resource base and send to market and takes no account of the health of the forest we leave behind. According to GDP-based measures, we can deplete our natural wealth and count it as if it were economic gain—bad accounting and bad economics, as any factory knows if he were to sell off all his machinery and count it as profit.... And bad financial management, as we now humbly recognize after a debt-fuelled decade of spending.

One reason we are so confused about the difference between indicators and accounts is that—contrary to the admonitions of its architects—GDP *has* been wrongly turned into an indicator of wellbeing and economic prosperity. Nobel prize winner, Simon Kuznets—primary architect of national income accounting—warned 60 years ago that GDP should never be used as a measure of nation’s welfare. To measure how a country is doing, he said, you have to ask *what* is growing, not just *how much* is growing. After all, anything can make the economy grow—more sickness, crime, pollution, natural disasters, war, resource depletion.... So long as we are spending money, the economy will grow. And Kuznets broke from the U.S. Department of Commerce largely over its refusal to include the value of unpaid work in its calculation of GDP which, he argued, at least had to value all production.

But before saying a few words on the new accounting system, it is essential to add one key caveat: We are *not* seeking either to replace or modify GDP. Rather we seek to replace the widespread misuse of GDP as a measure of progress, wellbeing, and

prosperity—a purpose for which it was not intended or designed. GDP will always be needed to assess the size of the market economy. But, confined to that role and put in its proper place, so to speak, it becomes far less important—and certainly not needed nearly as frequently as currently produced. Even logically, a quantitative measure of economic size cannot possibly assess *quality* of life. We know well what’s wrong with GDP-based measures—no need to dwell further on that.

But we cannot fix the problem or meet the challenge with indicators alone, though they are an essential *part* of the solution. An integrated, holistic set of measures like GNH or GPI requires both indicators of progress *and* a set of full cost accounts that include valuations of all key forms of capital (stock or wealth accounts) and the services they provide (flow accounts). Only such accounts can properly assess the cost-effectiveness of alternative policy options, and balance the costs and benefits of particular actions against the costs of not taking action.

Principles and methods of full cost accounting

There are basically three key principles of full-cost accounting, which together can actually function to make the market economy much more efficient if adopted in practice.

First—from a flow perspective—full cost accounting internalizes ‘externalities’ like the social and environmental impacts of economic activity, and thus assesses the true costs of production, which in turn *should* be reflected in market prices. If, for example, the full costs of pollution and greenhouse gas emissions were included in the cost of production (and thus) in market prices, imported food might become considerably more expensive than locally grown produce, and driving an SUV would cost far more than it presently does.

For those on the political right, such an accounting system should be particularly attractive, as government will no longer need to step in with heavy-handed regulatory mechanisms and expensive

taxpayer funded environmental clean-up costs to compensate for the consequences of market failures. Instead the costs of pollution or profligate fossil fuel combustion, for example, will be reflected in higher market prices once these current externalities are internalized, and such unsustainable behaviours thus discouraged at the production stage in order to keep goods competitive.

Secondly—from a stock perspective—full-cost accounting recognizes and accounts for the economic value of non-market assets that are not traded in the market economy, but which nevertheless have real economic value. In assessing the value of a forest, for example, a full set of natural capital accounts will value not only the timber value of a forest, as in conventional balance sheets, but also the value of the forest in regulating the climate and sequestering carbon from the atmosphere, in protecting watersheds, in preventing soil erosion, in providing habitat for many species, and in providing aesthetic and recreational enjoyment. From the perspective of a full benefit-cost analysis, a 'healthy forest' is one that performs all these functions optimally. Indeed, the scientific evidence clearly shows that when the non-market values of a forest are compromised, timber quality also declines. In that sense, full-cost accounting is far more in accord with science, the scientific method, and economic efficiency, than an accounting system that ignores the non-market values of natural, social, human, and cultural capital.

And thirdly, a full-cost accounting system substitutes variable for fixed costs to the extent possible. To give a concrete example, fixed annual payments for car registration and insurance provide no incentives for conservation and no penalties for unsustainable behaviours. By contrast, varying such payments by type of vehicle, fuel efficiency, and number of kilometres driven annually reflects a far more accurate picture of reality and of the actual social, economic, and environmental impacts of driving. All three of these principles enhance market efficiency by pricing assets and economic activity more comprehensively and in ways that reflect actual benefits and costs to society.

One major caveat must be added here. Any system of full capital accounts and economic valuation is severely constrained by the inadequacy of money as a valuation instrument and common metric. Money was designed to facilitate market transactions and was never intended to price non-market assets and services. So 'economic value' in a full-cost accounting system must necessarily be defined far more broadly than in monetary terms alone. Monetization of non-market values and so-called 'externalities' *is* undertaken, where possible, but for strategic reasons—primarily because it creates a language and bridge to the world of conventional accounting. But it cannot and should never be taken as a literal or accurate description of reality.

And where monetization is not possible, as it often is not, economic value must be described in non-monetary terms by pointing to the social and economic functions performed by natural, human, social, and cultural capital. For example, there is no doubt that a coastal wetland is performing an economically valuable function by protecting against storm surges and coastal erosion, though it is not presently possible to monetize the value of that function with rigour or accuracy.

To illustrate the challenges inherent in the internalization of externalities and in the economic valuation of non-market assets, let us look briefly at a few of several full-cost accounting methodologies—replacement cost valuation, damage and control cost assessments, and contingent valuation.

To assess the value of volunteer work, the GPI looks at the actual work performed by volunteers and then assesses what it would cost to replace volunteer services for pay in the market economy. The City of New York purchased a standing forest that naturally filtered the City's water supply. The consequent saving to the City of hundreds of millions of dollars that would have been spent on a hugely expensive filtration plant can be taken as a proxy for the watershed protection value of that forest—demonstrating that a forest may be worth more standing than felled for timber

(contrary to the message sent by GDP). These are replacement cost valuations.

It is possible to use climate change models—as former World Bank chief economist Nicholas Stern recently did in the UK—to assess in monetary terms the potential damage costs of each tonne of greenhouse gas emissions. In that case, the valuations are complicated by the wide range of assumptions underlying different climate change models—leading GPI Atlantic in its accounting work to provide ranges of estimates from low-end, highly conservative valuations to higher-end ones that account for positive feedback loops and potentially catastrophic consequences. This example also illustrates the close linkage between stock and flow accounts. Every tonne of carbon emitted (a flow) has an atmospheric life of at least a hundred years, and thus contributes to the stock of greenhouse gases in the atmosphere. In short, that tonne of carbon emitted in 2008 will continue to contribute to climate change and to its damages and costs into the next century. Those potential damage costs can then be compared to the costs of controlling emissions to assess the cost-effectiveness of different greenhouse gas reduction strategies.

Contingent valuations are often considered more ‘dodgy’ and suspect, yet there is a strong argument that even indirect ways of assessing value are more accurate than assigning an arbitrary value of zero to non-market assets and services, as GDP does, and as would continue to happen if we did not at least attempt such valuations. In this method, behaviours are examined and surveys conducted to assess people’s ‘willingness to pay’ for such non-market assets and services. What, for example, is the value of aesthetic enjoyment? Clearly money is a hugely inadequate tool to answer such questions. And yet, it is clear that a nice view *does* have real economic value, as evidenced by people’s willingness to pay a higher rent for an apartment overlooking a beautiful and scenic park than for one overlooking a dump or scarred landscape.

The problem—if we don’t at least attempt such economic valuations, however indirect and inadequate—is that the

conservation and protection of our natural, cultural, human, and social assets will get inadequate attention and funding in the policy arena. This has never been clearer than at present, where all the talk of staving off recession, stimulating the global economy, and fiscal stimulus to spur consumer and corporate spending, virtually never references environmental concerns. For strategic reasons alone, therefore, there is an absolute necessity to include human, social, cultural, and natural capital values in our new GNH accounting system.

Despite the enormous challenges inherent in valuing natural, human, social, and cultural capital, and in pricing non-market assets and services, the good news is that the methods and data sources available to do so have vastly improved and expanded in recent years—making a full set of GNH National Accounts more feasible than ever. Thirty years ago, we had no reliable measures of greenhouse gas emissions, few comprehensive forest inventories, almost no scientific monitoring of soil, water, and air quality, virtually no diversion of solid waste from dumps, almost no systematic monitoring of health risks like obesity and physical inactivity, no comparable international literacy assessments, and no time use surveys assessing time spent on unpaid work and free time. We now know how to measure these and other non-market values, and we have burgeoning databases and time series in these and other areas. Statistics Canada now regularly asks survey questions on social supports, and it recently conducted its first full-fledged national social capital survey.

The splendid advantage that a country like the Royal Kingdom of Bhutan has in entering this field in the 21st century is that it can reap the direct benefit of the last three decades of developmental work in this field in other places and begin with the latest and best methods available from elsewhere in the world—leapfrogging over earlier, clumsier, and more primitive valuation attempts, and not bound to previous, less effective systems. Discussions with Statistics Canada have led me to believe that the diversion of only a fraction of the resources currently devoted to collecting the

regular GDP statistics would suffice to make considerable headway in developing usable and workable natural, social, human, and cultural capital accounts.

In terms of feasibility, we often hear that economic valuations of human activity—even if not currently valued in conventional accounting systems—make more sense than valuations of natural capital and ecological services that are generally not replaceable or substitutable by other forms of capital and that are therefore literally ‘price-less.’ Thus, the use of market replacement values to assess the value of unpaid voluntary or household work makes intuitive sense to users, since similar work can be performed for pay. And monetizing the cost of crime is relatively straightforward since most costs are market-based—including direct victim losses, spending on police, courts, lawyers, prisons, security guards, and burglar alarms, hospitalization costs due to assault, retail losses due to shoplifting and employee theft, higher premiums due to insurance fraud, and productivity losses to the economy due to homicide or assault. Illness costs attributable to risk factors like smoking, physical inactivity, and obesity are also market-based—either directly through taxpayer funded or private health care costs and economic productivity losses due to premature death and disability.

But how do we assign an economic value to natural capital like forests, agricultural soils, fisheries, water, and clean air? And how do we assess the costs of their depreciation and the returns on investment in natural capital. While valuations of natural capital and environmental services certainly pose particular challenges, and while money is a particularly inadequate valuation tool in this area, the attempt to undertake such economic valuation is essential to prevent the under-valuation of natural wealth and to bring the necessity for adequate conservation and protection properly into the policy arena.

Policy applications of GNH indicators and accounts

I think our prior discussion has already demonstrated the policy utility and relevance of both GNH indicators and potential GNH accounts in several ways, and I noted earlier that our accounting work and economic valuations have actually penetrated the policy arena far more effectively than our indicators. Here are a few remarks on possible future directions in applying these measures to the policy arena.

The expanded capital model increasingly recognized

First, I am delighted to report that in 2006 the Nova Scotia Government officially adopted a five capital approach to its development, undertaking to value its natural capital, human capital, and social capital in addition to its built and financial capital. I am sure that the Royal Kingdom of Bhutan will want to adopt a six capital model that includes cultural capital. That recommendation actually comes from New Zealand, where the preservation of Maori culture has become a high national priority. The remarkable resurgence of Maori language in the last 25 years, after teetering on the brink of extinction, is a powerful testimonial that dedicated investment in cultural capital can yield a high return (to use accounting language), and that cultural assets can not only be preserved but strengthened in the most creative ways. The Maori instituted “language nests” in which toddlers were immersed in Maori language from a very young age. Not surprisingly, since language carries knowledge, Maori cultural institutions, practices, traditions, and even political assertiveness have also seen a most inspiring revival in the last two decades. To its credit, and in recognition of this new reality, Statistics New Zealand has now recommended consideration of a six capital model that includes cultural capital.

Consensus goals and political debate

One of the most interesting and important aspects of this commitment—which *has* manifested in Nova Scotia, and which I venture to say is equally true in the Royal Kingdom of Bhutan—is that these new measurement tools have proved to be a remarkably unifying force that has the power to transcend partisan politics. While Nova Scotia politics—like most party political systems—is characterized by endless and endemic bickering, attack, and name-calling, the new measures, accompanied by specific targets designed “to make Nova Scotia one of the cleanest and most sustainable environments in the world by the year 2020,” have received unanimous all-party support. Indeed, a 2007 Environmental Goals and Sustainable Prosperity Act setting out these targets was passed by the Nova Scotia legislature without a dissenting vote. Likewise in Bhutan, GNH is a powerfully unifying force that expresses underlying national values.

I believe that the measures of progress themselves contribute greatly to this unifying role, since they necessarily reflect deeply held underlying values and express agreed goals. Indeed, any measure of progress is normative by definition, since—by definition—it must ask the question: “progress towards what?” Answering that question in turn requires some vision of the kind of society we want to see five, ten, or fifty years from now. In identifying our genuine progress indicators for Nova Scotia, we therefore took particular care to ensure that each indicator reflected consensus values. Thus, no political party of left or right will argue that more crime is better than less crime, that a sicker population is better than a healthy one, that higher rates of poverty are better than lower rates, that an ignorant populace is better than an educated one, that a polluted and degraded environment is better than a clean and healthy environment, or that social exclusion and alienation are better than inclusion in strong and safe communities. So long as our indicators and measures reflect such consensus values, they can effectively help

to mobilize and unify a society behind common goals and targets in a way that transcends partisan politics.

Of course, this does not eliminate the need for debate. While consensus goals, shared vision, and non-partisan measurement can help unify a society and provide a strong basis for evidence-based decision making and informed debate, politics is about *how* to get there. Indeed, the appropriate role of democratic politics is to debate the best way to achieve GNH goals, even while there is a consensus on what those goals are and on the agreed ways of measuring progress towards those goals. To take some practical examples, there can be complete consensus on the need to reduce poverty and greenhouse gas emissions and even agreement on specific targets, and at the same time vigorous debate on how best to achieve those goals. In other words, there should be consensus on goals—the realm of measurement, and debate on strategy—the realm of politics.

As well, to add fuel to the political fire, the new measures can and should be used both to hold governments accountable according to their success or failure in attaining or moving towards the agreed goals, and to evaluate the effectiveness of programs designed to achieve those goals. The political arena is the place to debate those programs and possible alternatives to them. But the benchmark of those debates and the reference point of all political parties will remain the consensus goals and the measures that assess progress towards them.

Urgency and predictive power

I mentioned early on that we have found—in our Nova Scotia experience with this work—that the accounts and economic valuations have had a much more direct and powerful impact on policy than the indicators, and they also grab media attention far more readily than reports on trends and rates. That said, however, I want to emphasize that we have only begun to scratch the

surface of the longer-term potential impact of this economic valuation and accounting work.

In fact, I see us to date as having taken only the first step in a four-step process (described in the next sub-section below), the final fruition of which I fervently hope (but am not sure) I will see in my lifetime. Recall that GDP-based accounting has held sway for more than half a century, still rules the minds of policy makers, economists, financial analysts, and journalists worldwide. As the current obsessive focus on stimulating spending and economic growth to stave off recession clearly shows, this GDP-based economic paradigm is not close to being dislodged. How long will it take for the new expanded capital accounting system to take hold and supersede the existing narrow one as the primary method of economic valuation?

If we continue to assign an arbitrary value of zero to our natural, human, and social wealth; if we continue to ignore the costs of their depreciation; if we continue to treat the services these capitals provide as so-called ‘externalities’; and if the true costs of economic activity remain hidden, then I fear that the world we leave our children and grandchildren will be so depleted and uncertain that it may no longer be possible to salvage key components of our true wealth. Most dangerously, a domino effect will become apparent, where the collapse of one resource will trigger the diminution and eventual exhaustion of another, in a feedback loop that will become unstoppable. These present times, my friends, are “the good old days,” and they will increasingly be looked back upon with nostalgia mixed with astonishment that our generation could have been so wilfully ignorant.

Saddest of all is that—since we are not properly counting and measuring the depreciation of natural, human, social, and cultural—many of these “collapses” will occur with a whimper rather than a bang, since we are simply not keep track of their demise nor heeding early warning signals. We will gradually become accustomed to a degraded world. When Nova Scotians drive down the highway today and look out their SUV windows,

they think that what they see is a natural forest. Since they have never seen or walked in an old-growth forest, they do not miss it or have any idea of what this landscape was. Not accustomed to the sound of old-growth dependent song-birds, they think the silence of the forest is its natural state. They will not miss cod or tuna once they have disappeared. And so long as the store shelves are stocked with produce from California and Florida, they will never know that there were once local farms providing fresh-picked seasonal fruits and vegetables.

And the same is true in the social and cultural sphere. I don't think any politician in Canada is aware that voluntary work has declined by 12.3% in the last decade, because unpaid work is not measured in our national accounts or measures of progress, and therefore does not get proper reporting or attention. And because the politicians don't know the numbers, the issue never surfaces for debate in any legislature in the country, even while they pass multimillion dollar bailout packages for the automobile industry. So communities gradually weaken as the fabric of volunteer participation unravels, while those in need gradually get used to a diminution of voluntary services and to relying ever more on their own private resources—all unnoticed, gradual, beneath the surface, away from the spotlight of regular measurement, monitoring, reporting, and debate.

And how many North Americans miss the fact that most Aboriginal languages on the continent have become extinct, with the remainder in rapid decline—though the loss carries with it a tremendous store of Indigenous knowledge that the world needs more than ever for the lessons it carries about living in harmony with Nature? In the GPI, we document this depreciation of cultural capital and the loss of Indigenous languages and knowledge as one of our key education indicators. But the loss is invisible in the conventional accounts, and so there is little dedicated policy attention or educational reform designed to preserve remaining Indigenous languages, and virtually no public

awareness of the issue, despite ample early warning signals of their imminent demise.

And we won't even begin to talk about the mother of all dangers—climate change—where our conventional GDP-based accounts, and the indicators based on them, still count more fossil fuel combustion as a contributor to economic growth and progress. And when I say 15 years, I mean 15 years actually to turn things around, not 15 years before we start counting things right. In fact, if we keep counting natural resource depletion and fossil fuel combustion as gains to the economy and contributions to prosperity for the next 15 years, and thereby justify the continuation of our current growth patterns as if there were no tomorrow, then it will almost certainly be too late. Irreversible changes will have been set in motion that generate their own feedback loops, until it is quickly beyond the capacity of governments to manage change, cope with shortages, and handle the ensuing chaos and flood of environmental refugees. So counting things right has to start without delay, so that at least the framework and paradigm for change are put quickly in place.

This is *not* fear-mongering, my friends—I don't believe in that at all—but a simple analysis of current trends based on the best available statistics and evidence. One thing we have found over the last 12 years of work in this area is that the GPI has remarkable predictive power. In 1998 we released our first report on the economic value of civic and voluntary work, in which we warned of certain trends that threatened the viability of the voluntary sector. Ten years later the numbers pointed to a massive decline in voluntary work, belatedly proving the earlier warning correct.

In 2000, our analysis of the agriculture sector pointed to a serious long-term decline in the economic viability of farming in Nova Scotia, based on five key indicators—net farm income, expense to income ratio, debt to income ratio, return on investment, and solvency ratio. We warned that if existing trends continued unabated, farmers would be forced off the land because they could no longer afford to farm. This year we updated that report and

found that in four of the last six years, net farm income had actually dropped below zero. Put simply, it was costing farmers more to farm than they were earning. When we issued the warning eight years ago, net farm income was not yet below zero, but it was headed in that direction. For many farmers, it's now too late!

By contrast, Gross Domestic Product (GDP) sends no such warning signals, and in fact sends perverse and entirely misleading signals to policy makers. While all five of our GPI *net* farm viability indicators were trending seriously downward over a 36-year period from the early 1970s to the present, *gross* farm cash receipts (which are the primary input to agriculture GDP) have trended upward and show no problem at all.

Similarly, fishery GDP remained at record high levels and with the fisheries regarded as a 'boom' industry right up to the moment that the Atlantic groundfish stocks collapsed in 1992. As noted earlier, GDP is a gross rather than net approach that only counts what we extract from our natural resource base and takes no account of the health of the resource—in this case the fish stocks in the oceans—we leave behind. Reliance on GDP statistics actually encouraged over-fishing and natural resource depletion simply because it tracked only the nominator (fish landings) and not the denominator (fish stocks). This, quite frankly, is primitive and poor accounting practice.

Again, this is not rocket science, and is entirely in line with simple household budgeting practice, in which we count not only our gross income, but rather keep track of our expenses *in relation to* our income. Any *net* approach will have the predictive power described here and the capacity to send early warning signals that allow timely remedial action. That, in a nutshell, is one of the key purposes and practical functions of a set of GNH Accounts.

One final example of the predictive power of the new accounts and perhaps most poignant of all given the current economic circumstances: GPI Atlantic released a report on debt and financial

security just a month before the current economic collapse, warning of unsustainable trends in the economy—like the fact that debt growth during the so-called economic boom period of the last decade had massively outpaced income growth for 80% of Canadian households, thus threatening the ability of many households to manage and service their debt. Only among the wealthiest 20% of Canadians did we find the rate of income growth exceeding the rate of debt growth—far too narrow a base for a healthy economy. We noted that more than 77,000 Atlantic Canadian households, in our small corner of Canada, had become so deeply indebted that they could not get out of debt even if they sold everything they owned, including their homes—not a good feeling with which to go to bed or wake up in the morning to say the least! That depth of financial insecurity can hardly be considered an ingredient in wellbeing.

We asked one of the top executives of Canada's most important bank, and a respected financial analyst, to review our report and provide comments prior to its release. He took issue with our conclusions (though interestingly not with our statistics), saying (according to the conventional wisdom of the time) that Canadian household finances had never been healthier, and that Canadian households were more financially secure than ever. When the crash came a few weeks later, we at GPI Atlantic were not surprised—not even slightly. Part of me does want to go back to this 'expert' now and ask "never healthier"? "More financially secure than ever...?" "Would you like to reconsider...?"

But—and this is a very big but—the purpose of the GPI or of GNH indicators and accounts is not to shake our heads in despair months or years later, or to say "I told you so!" The purpose is precisely to identify our strengths so that we can build on them and protect them rather than take them for granted while they weaken behind our backs, and it is precisely to identify our weaknesses so that we can work to overcome them as soon as we detect early warning signals. The good news is that we have not yet crossed the threshold of irreversibility or passed the point of

no return, even though we are getting close. We do still have a chance to turn things around, so long as we don't hesitate but act decisively while the narrow window of opportunity remains.

And there may never be a better opportunity than the present, where the conventional system is in crisis and where the so-called experts are wringing their hands in despair and disbelief that they could have been so wrong. Alan Greenspan's chest-beating confession before Congress—the King of Economics utterly humbled—symbolizes a golden opportunity to present a new and saner economic paradigm that accounts properly for true benefits and costs.

That moment of opportunity is probably not while the fire brigades are totally engaged at the scene of the fire and while so much adrenaline is pumping through the system with desperate trillion dollar fiscal stimulus packages and cash injections to re-stimulate spending and growth. But perhaps six months or a year from now, when the stimulus has not only failed to stimulate, but when governments find themselves with their backs truly up against a wall, having racked up massive deficits and accumulated monstrous debts through their so-called fiscal stimulus and bailout packages. Sad that it always seems to take a catastrophe before eyes and ears open (— 'Catastrophe' only from our human perspective, needless to say. For the natural world, the more the stimulus fails to stimulate, the deeper the recession or depression, the greater the crisis in so-called 'consumer confidence', and the less spending and consumption that happen, the better its chances for recovery.)

But in the meantime, we can prepare the ground, and when the moment comes, simply quietly demonstrate through practice and action that a sane alternative is not only possible but exists. How remarkable and inspiring it would be for folk in the depths of a global depression to notice that some jurisdiction (like a small Himalayan Kingdom for example) was cheerfully prospering. Then, they might ask themselves with genuine curiosity—how did

they manage that? And how did that jurisdiction escape the clutches of depression gripping the world?

A four-step process

These are the four steps I see in changing our systems of accounting and economic valuation:

First Step: We have begun to build the new accounting system by valuing natural, social, and human capital properly. Much more work is needed, including improvements in data sources and methodologies. What was once just a concept and an aspiration is now feasible and measurable, and there is no barrier for jurisdictions like Bhutan and Nova Scotia to construct, adopt, and implement the new indicator and accounting tools as guides to policy. That measurement work is so well under way that there is already no obstacle to step 2.

Second Step: Some jurisdiction now has to adopt the new indicators and accounts fully and properly, and to take them as its core measures of progress and valuation, in order to demonstrate their feasibility, utility, and policy relevance. This is a matter of political will. Not to put any pressure on anyone, but I don't happen to know of any sovereign nation anywhere in the world, other than a particular small Himalayan mountain kingdom, where that political will is riper and more developed and more ready to take that leap.

Whenever I see new measurement systems begin from the premise that our conventional economic statistics are not enough and that we have to "add" a raft of new social and environmental measures, I begin to worry and hear alarm bells ring. This "add-on" mindset fundamentally accepts the validity of the conventional economic measures, but pats itself on the back for being broad-minded enough to add a bunch of social and environmental statistics *on the side*—**always**, mind you, on the side. Rarely are the new statistics allowed to *challenge* the

messages being sent by the conventional measures and through the existing economic paradigm.

“Co-existence” in the sense of having the best of both worlds is not an option! We cannot sing the GNH language without simultaneously challenging a materialist philosophy based on ever expanding consumption. And we cannot simply add on a bunch of new indicators to ones that are fundamentally flawed and that send highly misleading signals to policy makers. We run the danger of exacerbating rather than ameliorating confusion. I believe this is why—in the Buddhist philosophy—“renunciation” is described as the “foot of meditation.” And I believe it’s why Chogyam Trungpa Rinpoche’s Taktsang generated Sadhana of Mahamudra right here in Bhutan, and indeed his first years in the west right after that, took direct aim at what he called “spiritual materialism.” We run that danger in our indicator and measurement world, however well-intentioned we may be.

In short, Step 2 in this process is the genuine political will to adopt the new measures fully, properly, and with integrity—to implement the new indicator and accounting systems in practice, and to use them actively as the country’s core measures of progress and valuation, and as the evidence base for new policy.

Third Step: Not much point in talking in great detail of Steps 3 and 4 when we are only at Step 2. So a few words will suffice. Once the new accounting system has been adopted by government, it provides the basis for a system of financial incentives and penalties designed to encourage sustainable behaviours that contribute to wellbeing and GNH and to discourage unsustainable behaviours that undermine wellbeing and detract from GNH. This includes very practical actions like shifting taxes from low-income households to carbon and pollutant emissions; subsidizing renewable energy development, public transit, organic farming, and uneven-aged forest management while increasing taxes and fees on gas-guzzling Prados, synthetic fertilizers, and clear-cutting, for example. The underlying *accounts* provide an objective basis for determining

the ngultrum amounts of such incentives and penalties, since the accounts assess the true and actual benefits and costs of economic activity to society.

Fourth Step: And those incentives and penalties in turn will naturally affect consumer prices, thereby changing behaviour. It is absurd, at present, that organically grown local food is more expensive than chemically grown food imported from 2,000 miles away—a perversity only made possible by ignoring the true costs of soil degradation, transportation, greenhouse gas and pollutant emissions, and other actual costs of production, and ignoring the true value of enhanced nutrition, freshness, health, and resource conservation. Once goods are properly and accurately priced according to their true costs of production, not only will consumer behaviour change, but the market economy itself will become far more efficient—with profligate and wasteful energy use penalized for example, and rewards for energy conservation built into the price structure. We're a long way still from that kind of pricing system, but, as I said, I fervently hope to see it in my lifetime, as it the surest guarantee of widespread behaviour change.

Is such complication really needed, and if so, why now?

We have to be honest enough to acknowledge that all these complicated indicators, accounts, economic valuations, and measurement systems are entirely unnecessary if the underlying GNH values truly pervade and penetrate both the society and the political arena in a profound way. Particularly in an absolute, benevolent monarchy, good and wise policy that judiciously balances social, environmental, cultural, and economic objectives does not need to be justified with such measurement and accounting complexities. And especially when a country is relatively isolated from the world, no particular justification for its unique traditions is needed and no comparative indicators of progress are necessary.

Indeed, economic valuations would never be needed if the full social and environmental consequences of all policy actions were

considered in every decision. In any case, we have already noted that such economic valuations are at best only a strategy designed for a materialist world and intended to point towards an underlying physical reality. Even indicators are only a “second best” tool that imperfectly describes reality. As the old saying goes, the finger pointing towards the moon is not the moon. And so indicators can only point in the general direction of a social reality and can never pretend to describe it fully and accurately.

Thus, the Fourth King of Bhutan did not need a complicated battery of charts, tables, and spreadsheets to pronounce that Gross National Happiness is more important than Gross National Product, and yet his meaning was crystal clear. And in some of our native American traditions, there is a custom in which one tribal elder is required—in every major Council decision—to represent the interests of the seventh generation hence. How will this decision affect future generations? When decisions are made in that way, or with the wisdom of a wise and benevolent monarch, we do not need complicated spreadsheets or accounting mechanisms.

But I see three important reasons for adopting the new measures now with all their complications: First, they are a powerful insurance policy in a party-based democracy that holds no long-term guarantee that GNH values will always pervade the decision-making arena regardless of the vagaries of elections and who holds power. Because they transcend partisan politics and represent consensus values, the new measures can serve as a highly effective touchstone of fundamental underlying principles—a standard against which actions can be judged, policies and programs evaluated, and governments held accountable.

Secondly, when Bhutan is increasingly joined to the larger world by internet, television, roads, trade, tourism, and membership in international organizations, the new measures are ever more urgently needed to maintain what is unique and vital to the country’s identity and wellbeing, and to prevent it being

swamped by the dominant global materialism. Unless its own ways of measuring progress and valuing its wealth are firmly entrenched and well understood, its progress and wealth will be measured for it according to alien standards and outside forces that do not appreciate what is of value here. If Bhutan were to join something like the World Trade Organization—which has its own standards, measures, and ideas of progress that have little to do with GNH—and were to do so without its own clearly enunciated and officially entrenched measures of progress and accounting system firmly in place, then it will be held entirely accountable to standards and rules not of its own making. Let the WTO rather challenge an official accounting system that does include the full costs of production and that values all forms of capital properly and comprehensively. In short, the new measures and accounts are needed in order for Bhutan to protect its interests and represent itself accurately and with integrity in the international arena, and to avoid being classified, judged, ranked, and manipulated according to alien standards and measures that have no respect for what matters to this country.

And thirdly, the new indicators and accounts are needed *if* the Royal Kingdom of Bhutan wants to help the world and set an example of a sane way forward.... *If*, in other words, the Mahayana Buddhist foundation of the Kingdom truly extends to all beings. That is a decision only the Bhutanese can make. But if they choose to set such an example and work to create an enlightened society that can show humankind a way out of its materialist Dark Age, then it can only do so by communicating and engaging the world in a language the world can understand. Lofty words, principles and ideals will be less effective in getting others to watch, listen, and pay attention than the language of measurement, economics, budgets, and production costs. The new indicator and accounting systems—because they speak in a familiar and universal language—will allow the world to recognize the flaws in its own measurement and accounting systems, and in its consumption and growth-based economic

paradigm, and will demonstrate its own potential to shift its view and approach.

From a ‘bodhisattva’ perspective, therefore, the new measures—both indicators and accounts—constitute a tremendously useful communication tool that creates a bridge to the rest of the world and that starts the dialogue from where others currently are. In all this, it must be emphasized that the Royal Kingdom of Bhutan does not need to “sell” either itself or GNH or the new measures. So long as Bhutan genuinely puts GNH into practice at home and uses the new measures to guide and explain its own policy, it will naturally be performing an enormously useful and valuable function for the world that cannot help but set an example for a global system in confusion, disarray, and despair. But practice is everything. Talking or reading about an apple is not the same as eating it, and nothing will help the world more than a living, breathing example of GNH in practice.

And if this third reason is operative, then there is absolutely no time like the present to adopt the new measures, since the current global economic downturn represents a unique historical opportunity to make the changes that are needed on a larger scale. I’d like to end this paper with just a few comments on this present historical moment, and its enormous potential to bring GNH to the larger world.

A “balanced,” multi-dimensional approach

I once heard David Suzuki, brilliant scientist and defender of the environment, argue that the only biological organism he could think of, which shared our economic dogma of limitless growth, was the cancer cell—which also thrives on unlimited growth till it destroys its host. I suppose we could add some other examples—like weeds or algal blooms that suffocate plants and water bodies. Suzuki’s point is simple: In nature, limitless growth is inherently destructive. By contrast, he points out, nature always thrives on

balance. Plants, for example, do best when they have not too much water and not too little, not too much sunlight and not too little.

Indeed, I have often thought that if I had to choose just one single word to describe and characterize GNH or the GPI, it would be “*balanced*”—in sharp contrast to the “extreme” view of GDP-based measures. What is GNH if not a judicious balance between environmental, economic, social, and cultural objectives? And what is the meaning of “good governance” if it does not effectively balance those priorities?

In fact, I would be so bold as to say we don’t have to “sell” GNH or GPI any other way than simply to point out that these are *balanced* or ‘middle way’ approaches that look at both sides of any equation, and which thereby provide far more accurate signals to policy makers than an extreme doctrine like limitless growth.

In applying the new multi-dimensional GNH measures spanning nine different domains, critics often baulk at their complexity, which they find daunting and challenging to interpret compared to the simplicity of the one-dimensional single number GDP / economic growth statistics. I think we should never apologize for this complexity. Would we prefer an airplane pilot to have only one gauge (say altitude) when piloting our plane? The pilot might have quite a difficult time taking off, landing, checking safety features, or ensuring that we have enough fuel to get us to our destination with such limited information. Would we not feel far safer and more secure if the airline pilot had a complex, multi-dimensional set of gauges on his dashboard providing him with all the varied information required to get us safely to our destination?

Piloting the ship of state is no less challenging or complex and requires at least the same multi-dimensional range of information as we would expect of our airline pilot. The very narrow fiscal stimulus fire-fighting currently under way to deal with the present economic downturn well demonstrates the limited tools available

to policy makers who operate from within a GDP / economic growth framework alone. Let's see how the options naturally expand when we broaden our approach and embrace the complexity.

In sum, the GNH approach and practice not only offer highly positive potential solutions to the current global economic crisis, but its most effective agents and standard bearers are likely to be the younger generation whose stake in a sane, secure, sustainable, and balanced world is probably the greatest of any demographic group. Including GNH principles, practices, and examples in educational curricula, training our youth in the GNH measurement methods, and generally nurturing their participation in GNH deliberations and in a wider GNH movement may well be the most effective and productive possible investment in moving towards the realization of GNH in practice.

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2

The Analysis of Results of Research into 'the Ideal Society' in Japan, Sweden and Bhutan --

Using the indicator of Human Satisfaction Measure (HSM)

Terue Ohashi

Abstract

The human satisfaction measures (HSM) as a sustainable social welfare indicator includes the triple bottom line (society, environment and economy) inevitable for Sustainable Development under six categories, namely, labour, health, education, gender, environment and income. HSM version 1-3 was developed by assigning equal weight to the indicators of the six categories. Considering interpersonal differences in the value to six categories, the author tried to calculate weighting coefficients using Analytic Hierarchy Process (AHP) methods. A web-based survey "The Questionnaire on Ideal Society" was conducted in Japan, 2007 (2109 samples collected) and Sweden, 2008 (300 samples collected). In addition in Bhutan, the author asked five experts to answer the questionnaire on her visit to Bhutan in 2007. Using the results of weighting coefficients of Japan, HSM ver.4 was developed, and from those of Sweden, HSM ver.5 was developed.

Introduction: progress of the study and its prospects

The Human Satisfaction Measure (HSM) includes the Triple Bottom Line (society, environment, and economy) that is necessary for HSM to be a sustainable development indicator, and was first developed by Ohashi (2000). Later, versions 1, 2-(1), 2-(2) (Ohashi, 2005) 3-(1), and 3-(2) (Ohashi and Nguyen, 2006) were further developed in collaboration with Hong Nguyen in 2005.

Until 2007, the six categories of HSM were calculated by assigning equal weights. However, considering interpersonal differences in valuing the six categories, the author, in collaboration with Nobuyuki Kimata, calculated weighting coefficients by adopting the Analytic Hierarchy Process (AHP) method. As a result, HSM version 4 was developed (Ohashi 2007, 2008). This version is based on a web-based survey “The Questionnaire on Ideal Society” conducted in Japan in 2007. Furthermore, this survey was also conducted in Sweden, which resulted in HSM version 5. In the latter part of this paper, the survey results from Japan, Sweden, and Bhutan are compared.

Observing the Consistency Index (C.I.) of the weighting coefficients of the six categories, the consistency in the Swedish data is significantly higher than that of Japanese data, which indicates that the survey questions were easy and clear for the Swedes. On the other hand, C.I. of the survey data of six categories in Japan was low, perhaps because the respondents had difficulty in answering the questions. Analyses of the mapping of words given to open-ended question using *True Teller* text mining software developed by Nomura Research Institute show that there are common key words appearing both in Japan and Sweden (consideration for environment, stabilization of life), and that there are key words that are characteristic in Japan (society without social gap and anxiety). On the other hand, those key words “democracy”, “education”, and “equality” appeared only in Sweden. In order to deepen the analyses of these answers, it seems necessary to conduct next step survey that can be utilized for policy implications for Japan.

1. What has been learned so far?

1.1 “Sustainable development” should be guaranteed to secure theories on wellbeing and satisfaction

The richness of ideal society can be indicated by satisfaction and wellbeing of the members of the society. However, the marketing theories, sociology, and economics discuss only individual

satisfaction (wellbeing), and to the author's knowledge, no thesis has discussed that sustainable development should be guaranteed for human satisfaction (wellbeing). For example, scholars of marketing define the purpose of marketing as "the availability of enough goods and services to consumer's expectations and needs" (Oliver, 1997, 13). But the author believes that the consumptions should not exceed the degree that allows sustainable development of the society. The conventional marketing theories are not linked with sustainability, except for the environmental marketing theories that are specified in environmental sustainability.

Although there are at least about 400 Japanese books (Shingu, H. 1998) discussing human wellbeing, no one has pointed out that sustainable development must be secured as a prerequisite for human wellbeing. In the thesis "Explaining Happiness", Richard A. Easterlin (2003) shows data, and explains that wellbeing is related to individual's life events (such as marriage, divorce, remarriage, bereavement, employment, and unemployment), individual's health, and individual's education. However, he does not mention the importance of the Triple Bottom Line (society, environment, and economy) that is closely related with sustainability of the society.

In "The role of human, social, built, and natural capital in explaining life satisfaction at the country level: Towards a National Well-being Index", Amanda W. Vemuri and Robert Costanza (2006) do not verify that four basic capitals (human, social, built, natural) underlie sustainable development of the society, and that sustainable development of the society is the prerequisite for human wellbeing.

However, both theses repudiate the economic theory that more income makes people happier. Vemuri and Costanza (2006) show that there is no correlation between the real GDP per capita and life satisfaction. Easterlin (2003) notes that allocating more time for paid work to increase income slights non-monetary values such as family and health, and reduces wellbeing as a result. Regarding "Time Use and Balance", one of the nine indicators for GNH being

developed in Bhutan, Karma Galay, of the Centre for Bhutan Studies stated in author's interview (August 10, 2007) that the people in Bhutan allocate more time for work for increasing income, which gives people less time to spend for their family. Therefore, an increasing income does not necessarily result in wellbeing (Galay, 2007).

1.2 Definition of sustainable development

There are a few hundreds of definitions of sustainable development (UNESCO, 2002), of which the author demonstrates two main points. The first one presented by the World Commission on Environment and Development (WCED) defines sustainable development as development that satisfies the needs of the present generation without harming the ability of the future generations to meet their own needs (WCED, 1987). This means that happiness and satisfaction of the present generation should not be intergenerational exploitation.

This way of thinking requires guarantee of environmental rights and rights to survival of future generations. In Germany, Chapter 20a of the constitution states that the State is responsible for the environmental rights of future generations (Ecosystem Conservation Society 1996). The Chapter One of the Swedish "Instrument of Government" states that the public institutions must promote sustainable development in order to provide the present and future generations with good environment (Abe and Hata, 2005). Also the Swedish Environmental Code (Chapter One, 1999) aims to ensure that present and future generations will live a healthy life in a comfortable environment (Ohashi, 2007). The Constitution of Bhutan (Article Five) states that the nation's natural resources and environment are for the benefits of present and future generations (Constitution Drafting Committee, 2005). The Constitution of Japan does not mention environmental rights, but the Fundamental Law of Environment (Chapter Three) states that the present and future generations must be able to enjoy the benefits from healthy and rich environment.

The second point of the definition of sustainable development presented by Barbier (1987) emphasizes the harmonization of ecological system (environment), economic system (economy), and social system (society) (Barbier, 1987). Similarly, Elkington (1997) wrote the Triple Bottom Line (society, environment, and economy) must be audited.

1.3 HSM is sustainable development indicator that adopts triple bottom line

HSM adopts the above-mentioned second point of sustainable development (harmonious balance of the Triple Bottom Line), and consists of six indicators in three categories that can be broadly collected in many countries (see Table 1).

Table 1: HSM adopting society, environment, and economy

Triple Bottom Line	
Society	Labour category: unemployment rate Health category: infant mortality rate Education category: primary school enrolment rate Gender category: female advancement rate to 4-year university
Environment	Environment category: Ver.1 popularization rate of water supply Ver. 2-1 CO ₂ emission Ver. 2-2 ecological footprint Ver. 3-1 CO ₂ emission Ver. 3-2 ecological footprint Ver. 4 ecological footprint Ver. 5 ecological footprint
Economy	6. Income category: Gini coefficient

HSM, as a sustainable indicator consisting of Triple Bottom Line, is superior to many other social indicators (see Table 2).

2. Version-up of HSM

2.1 Equation of HSM and the shift of environmental category variables

HSM selects six categories that are not included in GDP, and establishes as the sustainable social welfare indicators in the following equation:

HSM= W (Labor, Health, Education, Gender, Environment, Income)

As shown in Table 1, six categories corresponding to the Triple Bottom Line are selected, and the data sources for the six categories consist of statistical fixed quantity data.

Table 2: Social indicators from the perception of sustainability

	GDP (Gross Domestic Product)	SEEA (Handbook of National Accounting: Integrated System of Environmental and Economic Accounting)	NNW (Net National Welfare)	ISEW (Index of Sustainable Economic Welfare) GPI (Genuine Progress Indicator)	HDI (Human Development Index)	GNH (Gross National Happiness)	HSM (Human Satisfaction Measure)	HPI (The Happy Planet Index)
Economy (Income)	○	○	○	○	○	○	○	×
Society	×	×	△	○	×	△	○	×
Labor	×	×	△	△	○	○	○	○
Health	×	×	×	×	○	○	○	×
Education	×	×	×	×	○	○	○	×
Gender	×	×	△	△	△ Addition- ally GDI/GEM	×	○	×
Other	-	-	○ Consumer durables service	○ Costs on traffic accidents	-	○ Good govern- ance	-	○ Satis- faction
Environment	×	○	○	○	×	○	○	○
Sustainability	×	△	△	○	△	○	○	△
International comparison	○	Produce by country	×	△	○	Not known	○	○

Note: Whether "society" "environment" and "economy" are included

○: included; △: partly included; ×: not included

International comparison: ○: possible; △: partly possible; ×: impossible

The ecological footprint used for environment category is a conversion of ecological capacity, which is necessary for a human group to support itself and to absorb wastes into land area and

water area. The unit of the ecological footprint is gha (global hectare). The advantages of the ecological footprint are: (1) calculation of ecological footprint includes the CO₂ emission; and (2) if the data of the ecological footprint exceeds the environmental capacity, the services given by environment for human need decreases. Thus, from the perspective of a decrease in human satisfaction, the ecological footprint is well linked with HSM. In Japan, ecological environmental capacity is 0.8 gha, but the ecological footprint is 4.3 gha, which is 5.4 times as much as the ecological capacity.

2.2 Shift in the calculation method for HSM

The versions 1, 2-(1), and 2-(2) of HSM were calculated by the Cross Entropy method (Golan and Miller, 1996).

$$HSM_i = Po, j \sum_{j=1}^6 \ln Po, j - Po, j \sum_{j=1}^6 \ln Pi, j$$

(Equation 1)

Po, j : standard value of j category in every year

Pi, j : empirical data value of j category in every year

i : annual data

j : every category

The versions 3-(1), 3-(2), 4, and 5 were calculated by the DtT (Distance to Target) method (Itsuno and Inaba, 2005). Although the Cross Entropy method is one of the useful methods, it has a disadvantage that the calculation method is highly complicated and too difficult for policy makers and ordinary citizens to use. The DtT method was developed in the 1990s so that policy makers can make objective and transparent decisions. The advantages of the DtT method are: (1) Calculation method is simple; (2) Scientific transparency is assured; and (3) It can show consistency between policy objectives and the reality. The calculation method measures the distance between the policy objective and the reality. The United Nations assesses the DtT method as a preferable method

(UN (2001). The following equation shows the calculation method of HSM by the DtT method adopted after version 3.

$$HSM = \sum_i \frac{1}{P_i^o} \times \frac{P_i}{P_i^o} \times C \text{ (Equation 2)}$$

P_i^o is policy objective value; P_i is present value

$1/P_i^o$ is a standardization to show relative effect of each category within HSM, and demonstrates focuses of policy makers

P_i/P_i^o shows assessment of the realization of policy objective value; C is constant

2.3 Value changes in 15 countries from HSM Ver. 1 to Ver. 4

The figures below show HSM value shifts in 15 countries from HSM Ver. 1 to Ver. 4 between 1990 and 2002.

Figure 1: HSM Ver. 1

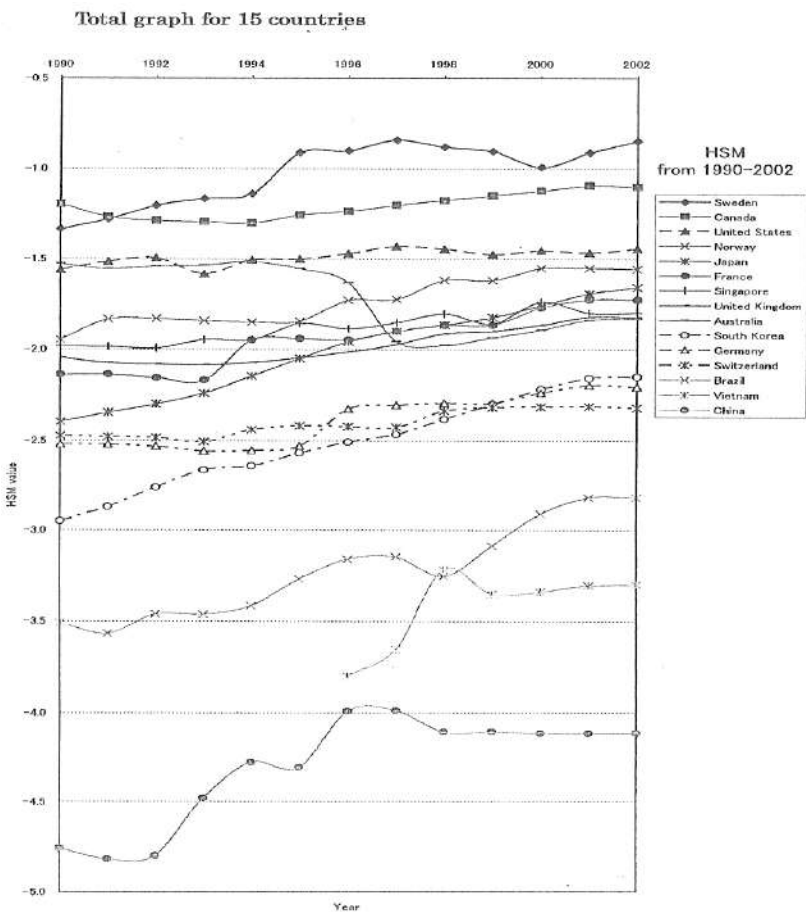


Figure 2: HSM Ver. 2-(1)

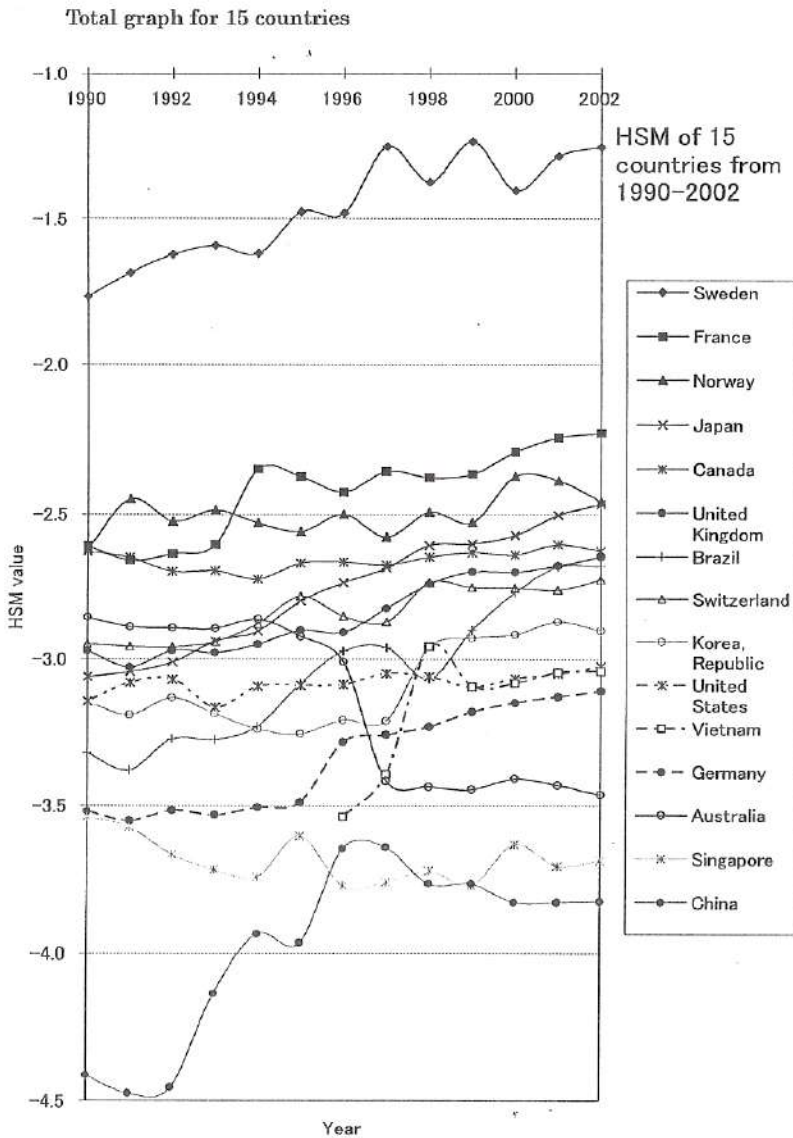


Figure 3: HSM Ver. 2-(2)

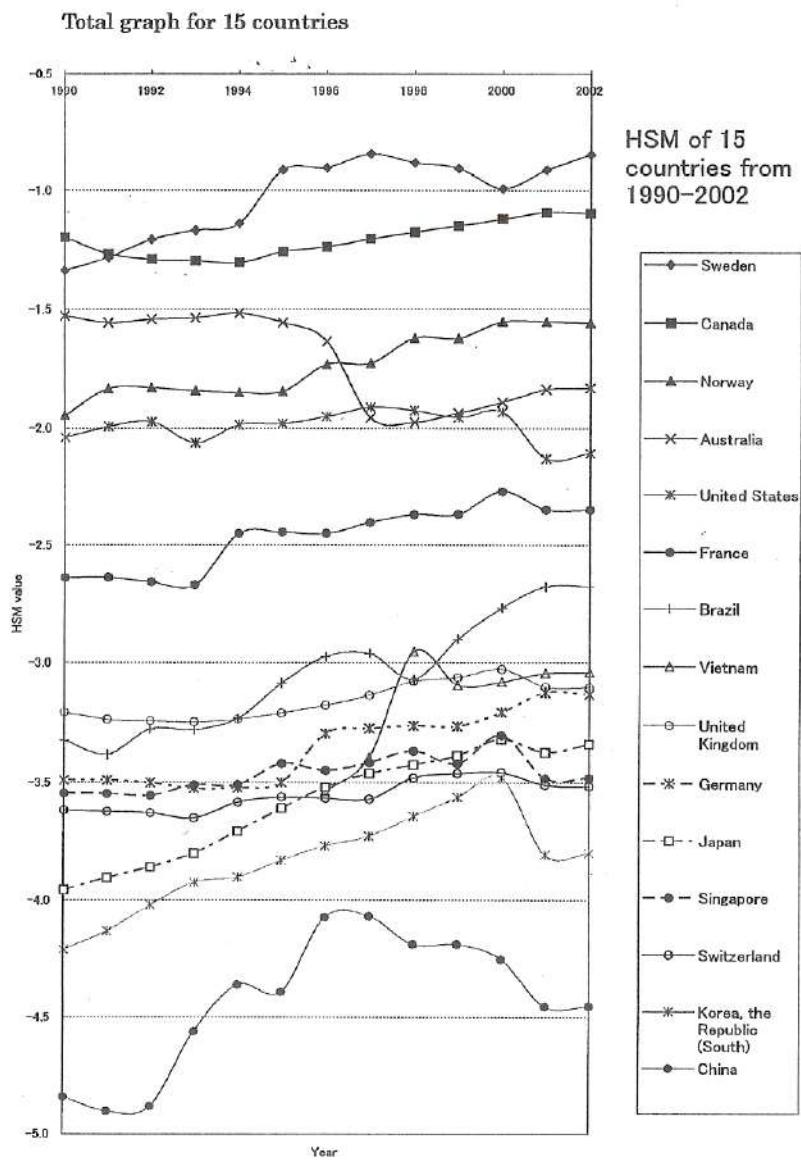


Figure 4: HSM Ver. 3-(1)

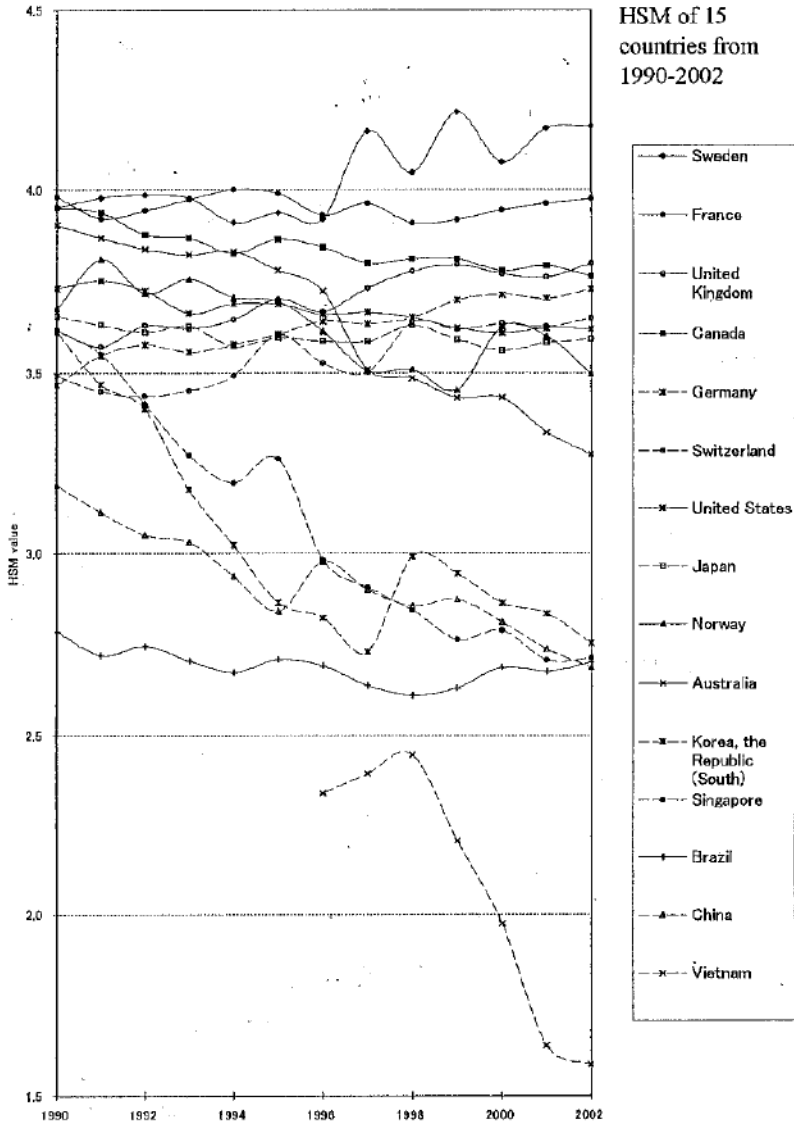


Figure 5: HSM Ver. 3-(2)

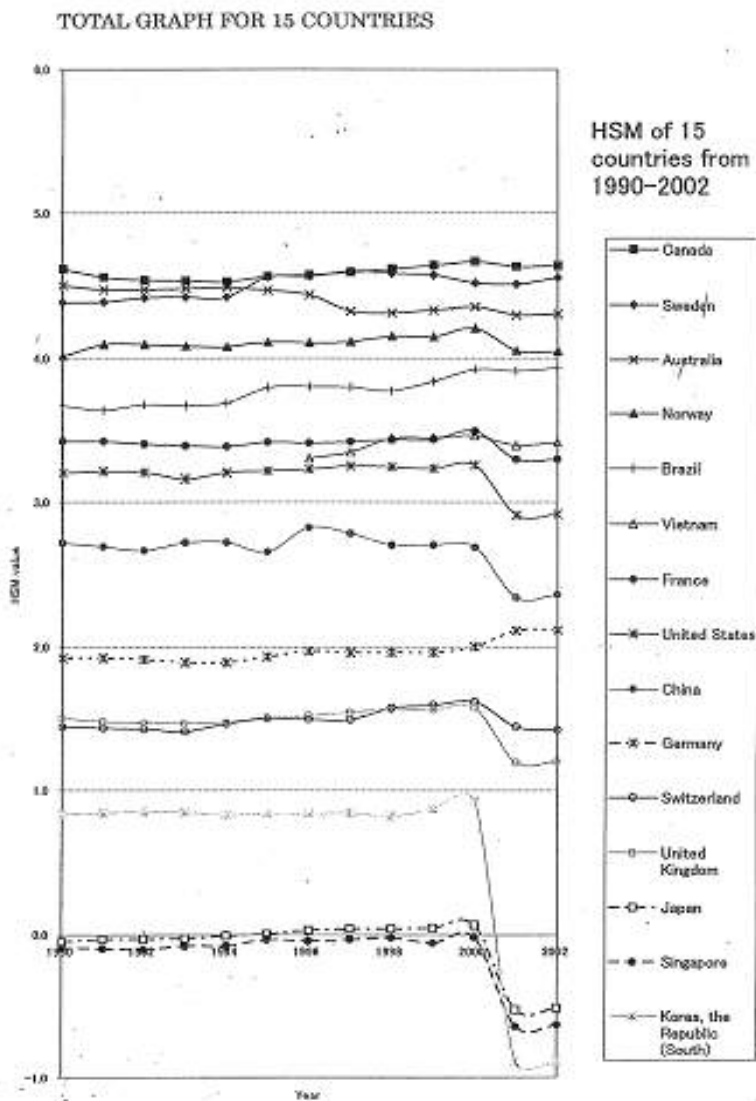
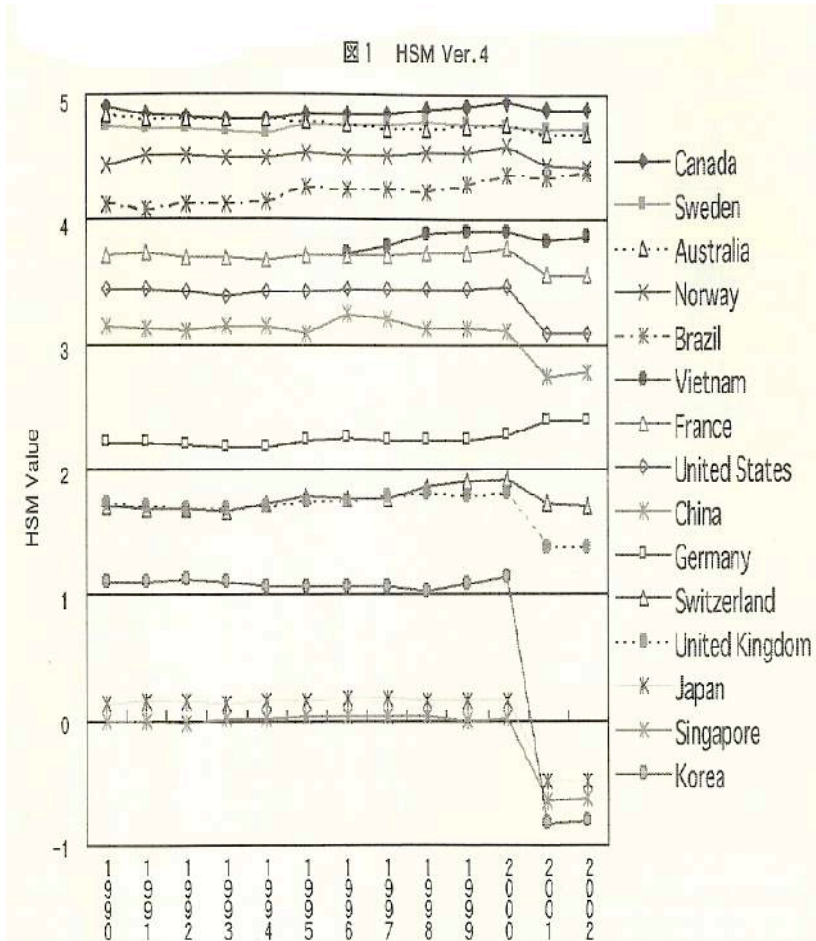


Figure 6: HSM Ver. 4



Since Japan's annual consumption per person is 5.4 times as much as the annual environmental capacity, the ecological footprint overshoots in Japan. Therefore, when the ecological footprint value is included in the environmental category, Japan's HSM ranking falls radically to the 13th place out of 15 countries.

3. Weighting coefficients of the six categories of HSM using the AHP method

3.1 Materialization of HSM and applying it to policy implications

HSM versions 1-3 calculated the composing six categories by assigning equal weight to them. However, considering interpersonal differences in attaching importance to the six categories depending on individual values and awareness, the Analytic Hierarchy Process (AHP) method was applied to calculate the weighting coefficients. First of all, in 2007, a web-based survey on ideal society was conducted in Japan. Then the weighting coefficients drawn from the survey data were adopted in HSM Ver. 3-(2), which resulted in HSM Ver. 4. Similarly, a web-based survey on ideal society was conducted in Sweden in 2008, and weighting coefficients drawn from the data were adopted in HSM Ver. 3-(2), which resulted in HSM Ver. 5.

3.2 The AHP method

The AHP method was refined by Professor T. L. Saaty of the University of Pittsburgh (Saaty, 1980) in 1970, and was applied to real social problems in 1973 (Warren, 2004). This is a method with multi-standards that has been utilized for most of practices in decision-making.

3.3 Method for calculating the weighting coefficients by using the AHP method

Abridged, see notes 4(b) (Page 124) -

4. Empirical methods and results in Japan, Sweden, and Bhutan

4.1 Web-based questionnaire in Japan

(1) Survey theme: Questionnaire on ideal society

The purpose is to find out how Japanese people value the six-category indicators

- (2) Respondents were asked to answer from global perspectives with consideration for sustainable development in both developing and developed countries, not only for Japan
- (3) The technical terms “ecological footprint” and “Gini coefficient” are explained when they are used
- (4) Survey methods
 - Questionnaire survey: conducted by Nikkei Research
 - Method: web-based survey; 6001 respondents selected by gender and age from five geographical blocks
 - Target group: between 20 and 69 of age
 - Time: from May 18 to May 23, 2007
 - Return rate: 2109 to the quantitative questions (with no invalid answers) (return rate 35.1%)
 - 1756 to the open-ended question F11
 - 948 to the open-ended question F12

4.2 Web-based questionnaire in Sweden

- (1) Survey theme: Questionnaire on ideal society in English
- (2) and (3) are the same as the case in Japan
- (4) Survey methods
 - Questionnaire survey: conducted by IID (Tokyo)
 - Method: web-based survey
 - Target group: between 20 and 69 of age
 - Time: from April 11 to April 22, 2008
 - Return rate: 300 to the quantitative questions (male 30 and female 30 in each age group)
 - 227 to the open-ended question Q20

4.3 Questionnaire answered by five experts in Bhutan

- (1) Survey theme: Questionnaire on ideal society
- (2) Questionnaire: the questionnaire used in Japan was translated into English
- (3) Time: from September to October, 2007

4.4 Consistency Index (C. I.) of the pair-wise comparisons

Consistency Index (C.I.) assesses the consistency in the evaluation values given in the pair-wise comparisons conducted in Japan, Sweden and Bhutan, and can be obtained by the following equation:

$$\text{C.I.} = \frac{\lambda_{\max} - n}{n - 1} \quad (\text{Equation 3})$$

□ λ_{\max} : maximum eigenvalue of pair-wise comparison

n : number of eigenvalue (6 in this case)

C. I. in the pair-wise comparisons of the six categories obtained from Japan is 0.092, which barely cleared the acceptable level of 0.1 or below. This may indicate that the pair-wise comparisons of the six categories were rather difficult for ordinary Japanese. C. I. in Bhutan was 0.098, which also barely cleared the acceptable level. There was a limitation of the survey by the small samples. On the other hand, C. I. in Sweden was 0.005, which shows a much higher consistency compared with the results from Japan and Bhutan. It seems that the transparency and consistency in the Swedish society affect the C. I.

5. The weighting coefficients of the six categories in Japan, Sweden, and Bhutan

5.1 The weighting coefficients of the six categories in Japan

Table 3: Evaluated values and weighting coefficients

	C1	C2	C3	C4	C5	C6	G. Aver.	W_i (1)	W_i (6A)
C1	1	1.460	0.910	3.370	0.910	1.200	1.30	0.20	1.21
C2	0.685	1	1.160	3.180	1.220	1.300	1.26	0.20	1.18
C3	1.099	0.862	1	3.590	1.180	1.330	1.32	0.21	1.23
C4	0.297	0.314	0.279	1	0.380	0.430	0.40	0.06	0.38
C5	1.099	0.820	0.847	2.632	1	1.180	1.15	0.18	1.08
C6	0.833	0.769	0.752	2.326	0.847	1	0.99	0.15	0.92
Total							6.43	1.00	6.00

C. I.=0.092

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Notes: C1=reduction of unemployment rate; C2=reduction of infant mortality rate; C3=increase in the primary school enrollment rate; C4=increase in female advancement rate to 4-year university; C5=reduction of ecological footprint; C6=reduction of the Gini coefficient; G. Aver.=the geometric average; W_i (1)=weighting coefficients calculated by equation; and W_i (6A) = weighting coefficients calculated for this time.

As the table 3 shows, the increase in the primary school enrollment rate got the highest evaluation, and followed by the reduction of the unemployment rate, the reduction of the infant mortality rate, the reduction of the ecological footprint, the reduction of the Gini coefficient, and the lowest evaluation is the increase in female advancement rate to 4-year university.

5.2 The weighting coefficients of the six categories in Sweden

Table 4: Evaluated values and weighting coefficients

	C1	C2	C3	C4	C5	C6	G. Aver.	W_i (I)	W_i (6A)
C1	1	1.167	0.735	1.329	0.764	1.194	1.01	0.16	0.98
C2	0.857	1	0.870	1.627	1.017	1.528	1.11	0.18	1.08
C3	1.360	1.150	1	2.053	1.126	1.775	1.36	0.22	1.33
C4	0.752	0.615	0.487	1	0.664	1.132	0.74	0.12	0.73
C5	1.309	0.983	0.888	1.506	1	1.611	1.19	0.19	1.16
C6	0.838	0.655	0.563	0.883	0.621	1	0.74	0.12	0.73
Total							6.15	1.00	6.00

C. I.=0.005

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In Sweden, as in Japan, the increase in the primary school enrollment rate got the highest evaluation, but followed by the reduction of the ecological footprint, the reduction of the infant mortality rate, and the reduction of the unemployment rate. What is characteristic with Sweden is that the reduction of the Gini coefficient and the increase in the female advancement rate to 4-year university show the same value, which shows that gender equality is more advanced in Sweden than in Japan.

5.3 The weighting coefficients of the six categories in Bhutan

Table 5: Evaluated values and weighting coefficients

	C1	C2	C3	C4	C5	C6	G. Aver.	W_i (I)	W_i (6A)
C1	1	0.725	0.678	0.725	0.415	0.141	0.52	0.08	0.47
C2	1.380	1	1.070	1.000	0.525	0.644	0.89	0.13	0.80
C3	1.476	0.935	1	2.809	2.002	1.000	1.41	0.21	1.26
C4	1.380	1.000	0.356	1	0.644	0.158	0.61	0.09	0.54
C5	2.408	1.904	0.500	1.552	1	0.889	1.21	0.18	1.08
C6	7.114	1.552	1.000	6.325	1.125	1	2.07	0.31	1.85
Total							6.71	1.00	6.00

C. I.=0.098

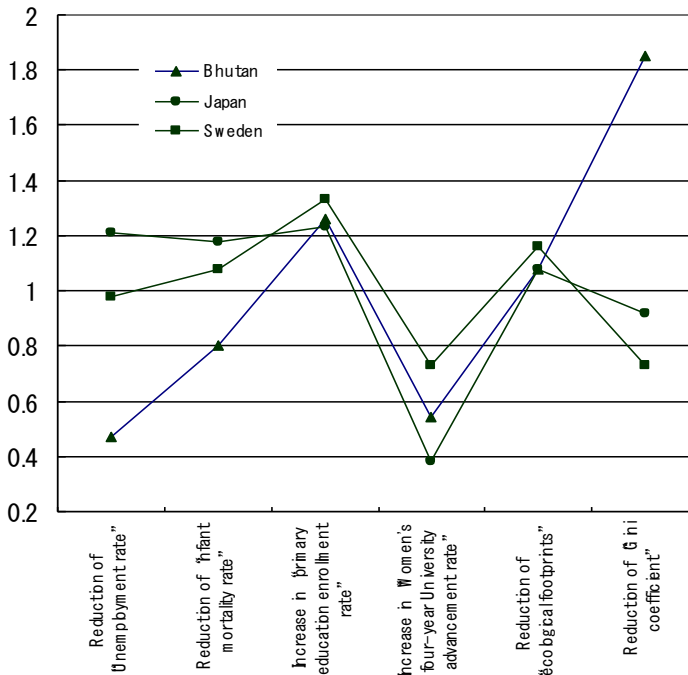
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In Bhutan, the country that has prioritized GNH over GNP for more than 30 years, the reduction of the Gini coefficient got the highest evaluation because of the dominant philosophy of equality deriving from Buddhism. And followed by the increase in the primary education enrollment rate, the reduction of the ecological footprint rate, reduction of the infant mortality rate, the increase in the female advancement rate to 4-year university, and the reduction of the unemployment rate got the lowest evaluation. The Bhutanese experts emphasized equality, and the increase in the female advancement rate to 4-year university showed higher rate than in Japan.

Weighting coefficients of the six categories in Japan, Sweden, and Bhutan

Although the three case countries show similar tendencies, what is eye-catching is that among the three countries, the evaluation on the increase in the female advancement rate to 4-year university is the highest in Sweden followed by Bhutan, and the lowest in Japan. As Gary S. Becker (1975) analyzes (Becker, (1975), the investment in higher education is reflected in employment and income, and affects social status and economic independence of people. In Japan, the fact that the evaluation on this category is the lowest is linked with the situation where the gap in social status and income between males and females are large, and shows the low consciousness of gender equality. That should be taken into consideration by Japanese policy makers.

Figure 7: Weighting coefficients of Japan, Sweden, and Bhutan



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Some social phenomena that exemplify the low gender equality in Japan are that among non-regular employment, female accounts for 54.2 percent, while male accounts for 18.6 percent (2008), and that the average income of females is 65.9 percent of that of males (2006), which show that the income gap between males and females is largest in Japan among developed countries. In addition, Gender Empowerment Measures (GEM) published by UNDP shows that Japan occupies the 54th place in the world, which means that the gender gap is largest in Japan among developed countries.

6. Calculation of HSM Ver. 5

6.1 Applying the AHP results to HSM Ver. 3-(2)

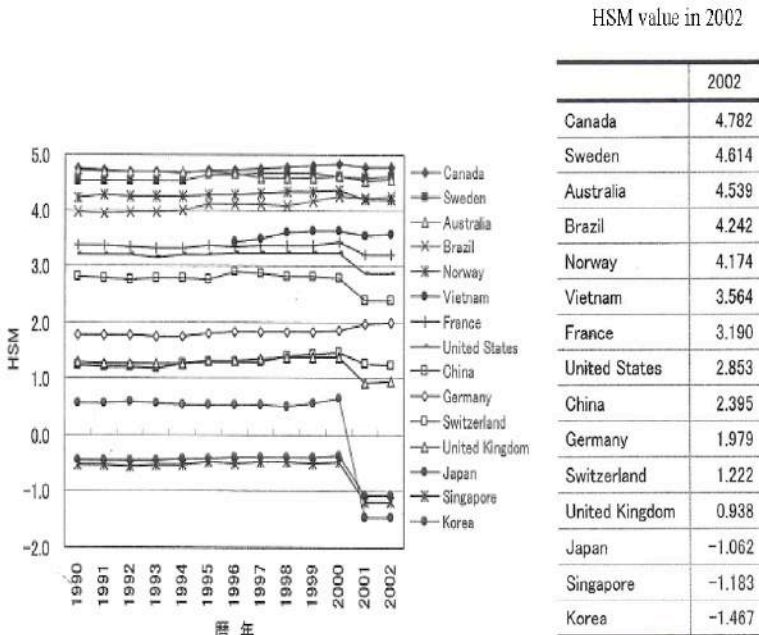
HSV, which is the weighting coefficients of the six categories obtained from Sweden ($W_1, W_2, W_3, W_4, W_5, W_6$) reflected in HSM Ver. 3-(2), was calculated by the following Equation 2, which resulted in HSM Ver. 5.

HSV = F(labor, health, education, gender, environment, income)

$$= W_1X_1 + W_2X_2 + W_3X_3 + W_4X_4 + W_5X_5 + W_6X_6 \quad (\text{Equation 4})$$

About X_1 to X_6 , see the note 4(b) (page. 125).

Figure 8: HSM Ver. 5 reflecting the weighting coefficients from Sweden



7. Weighting coefficients of the Triple Bottom Line

7.1 Weighting coefficients of the Triple Bottom Line in Japan

Table 6: The weighting coefficients of the Triple Bottom Line in Japan

	Society	Environment	Economy	G. Aver.	W_i
Society	1.000	0.719	1.060	0.914	0.301
Environment	1.390	1.000	1.316	1.223	0.403
Economy	0.943	0.760	1.000	0.895	0.295
Total				3.032	1.000

C. I. =0.00071

The weight of the Triple Bottom Line was the strongest in “environment”, followed by “society” and “economy”

7.2 The weighting coefficients of the Triple Bottom Line in Sweden

Table 7: The weighting coefficients of the Triple Bottom Line in Sweden

	Society	Environment	Economy	G. Aver.	W_i
Society	1.000	0.843	1.275	1.024	0.339
Environment	1.187	1.000	1.207	1.127	0.374
Economy	0.784	0.828	1.000	0.866	0.287
Total				3.018	1.000

C. I. =0.0028

In Sweden, like in Japan, the weight of the Triple Bottom Line was the strongest in “environment”, followed by “society” and “economy”. But weighting coefficient on economy is weaker, and on society is stronger than in Japan.

7.3 The weighting coefficients of the Triple Bottom Line in Bhutan

Table 8: The weighting coefficients of the Triple Bottom Line in Bhutan

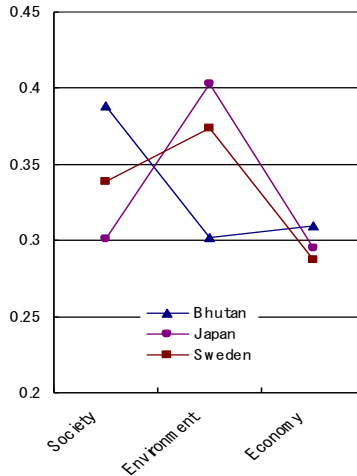
	Society	Environment	Economy	G. Aver.	W_i
Society	1.000	1.495	1.000	1.144	0.388
Environment	1.390	1.000	0.508	0.891	0.302
Economy	1.000	0.760	1.000	0.913	0.310
Total				2.947	1.000

C. I. =0.029

The weight of the Triple Bottom Line was the strongest in "society", followed by "economy" and "environment".

7.4 Weighting coefficients of the Triple Bottom Line in Japan, Sweden, and Bhutan

Figure 9: Weighting coefficients of the Triple Bottom Line in Japan, Sweden, and Bhutan



The coefficient of economy is weakest in Sweden, and Japan is also weak following Sweden. But Bhutan shows society first, second economy, environment last. It seems that citizens in developed countries put more emphasis on environment than on economy.

8. Analyses of the open-ended question on ideal society

8.1 Ranking of words from Japan and Sweden

The *True Teller* text mining software developed by the Nomura Research Institute (www.trueteller.net) was used for the analyses of the answers given to the open-ended question. Since this software requires at least 200 samples for its appropriate function, Bhutan, having only five samples, was excluded from the analyses. A question, “What is the ideal society that would give you a sense of wellbeing and a high degree of satisfaction?” was asked in Japan, and in Sweden. In Japan, 1756 out of 2109 respondents, and in Sweden 227 out of 300 respondents answered this question. *True Teller*, decomposes all sentences to words, and arranges an order according to the frequency of appearance of the words, that is the word ranking. See Table 9 and 10 for ranking of words from Japan and Sweden respectively.

Table 9: Ranking of words from Japan

	Word	Part of speech	Frequency	Ratio (%)	Number
1	Society	Noun	1331	61.22	1075
2	No	Adjective	335	17.54	308
3	Life	Noun	288	14.92	262
4	Have	Verb	299	14.18	249
5	Person	Noun	235	10.25	180
6	Environment	Noun	180	9.40	165
7	Gap	Noun	165	8.54	150
8	Think	Verb	188	8.43	148
9	Lead a life	Verb	145	8.26	145
10	Healthy	Adjective	112	6.38	112
11	I (myself)	Noun	136	6.38	112
12	Feel secure	Verb	114	6.26	110
13	Family	Noun	115	6.26	110

The Analysis of Results of Research into 'The Ideal Society'

14	Live a life	Verb	102	5.81	102
15	None	Adjective	120	5.81	102
16	Equal	Adjective	82	4.61	81
17	Crime	Noun	76	4.33	76
18	Mind	Noun	84	4.27	75
19	Ideal	Noun	79	4.16	73
20	Economy	Noun	75	4.10	72
21	Stabilize	Verb	74	3.99	70
22	Economical	Adjective	73	3.99	70
23	Fewer	Adjective	76	3.99	70
24	Old-age	Noun	68	3.82	67
25	Job	Noun	71	3.76	66
26	Income	Noun	68	3.70	65
27	Work	Verb	72	3.70	65
28	Education	Noun	71	3.64	64
29	Child(ren)	Noun	74	3.64	64
30	Welfare	Noun	63	3.59	63
31	Feel	Verb	65	3.36	59
32	Live	Verb	63	3.36	59
33	Safe	Adjective	58	3.30	58
34	Own	Verb	64	3.30	58
35	World	Noun	67	3.30	58
36	War	Noun	59	3.30	58
37	Anxiety	Noun	63	3.30	58
38	Enrich	Verb	58	3.25	57
39	High	Adjective	54	2.90	51
40	Who	Noun	50	2.85	50
41	Food, clothing, and Housing	Noun	47	2.68	47
42	Human being	Noun	51	2.68	47
43	Obtain	Verb	47	2.62	46
44	Reward	Verb	46	2.56	45
45	Peace	Noun	44	2.51	44
46	Wealthy	Adjective	45	2.51	44
47	Good	Adjective	51	2.51	44
48	Everybody	Noun	46	2.45	43
49	Individual	Noun	51	2.45	43
50	Nature	Noun	44	2.39	42

Table 10: Ranking of words from Sweden

	Word	Part of speech	Frequency	Ratio (%)	Number
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Practice and Measurement of Gross National Happiness

1	Society	Noun	183	63.00	143
2	Have	Verb	47	19.38	44
3	Person	Noun	54	19.38	44
4	Education	Noun	44	18.06	41
5	Equal	Adjective	42	17.18	39
6	Environment	Noun	35	15.42	35
7	Good	Adjective	41	14.98	34
8	Own	Verb	36	14.98	34
9	Job	Noun	32	13.66	31
10	I	Noun	34	13.22	30
11	No	Adjective	29	11.45	26
12	Who	Noun	28	11.45	26
13	Everybody	Noun	23	9.69	22
14	Receive	Verb	22	9.69	22
15	Food	Noun	22	9.69	22
16	People	Noun	23	9.69	22
17	Economy	Noun	14	6.17	14
18	Important	Adjective	15	6.17	14
19	Life	Noun	14	6.17	14
20	Necessity	Noun	16	6.17	14
21	Freedom	Noun	14	5.73	13
22	Reside	Verb	13	5.73	13
23	Democracy	Noun	13	5.73	13
24	Sweden	Noun	12	5.29	12
25	Healthcare	Noun	12	5.29	12
26	Opportunity	Noun	12	4.85	11
27	Healthy	Adjective	11	4.85	11
28	We	Noun	12	4.85	11
29	Income	Noun	12	4.85	11
30	Obtain	Verb	11	4.85	11
31	Equality	Noun	11	4.85	11
32	Give	Verb	11	4.85	11
33	Money	Noun	10	4.41	10
34	Do	Verb	11	4.41	10
35	Individual	Noun	10	4.41	10
36	High	Adjective	10	4.41	10
37	Human being	Noun	12	4.41	10
38	Poor	Adjective	11	4.41	10
39	Utopia	Noun	9	3.96	9
40	Think	Verb	9	3.96	9
41	Work	Verb	9	3.96	9

42	It	Noun	8	3.52	8
43	Balance	Noun	8	3.52	8
44	Level	Noun	8	3.52	8
45	Wish	Verb	8	3.52	8
46	Myself	Noun	9	3.52	8
47	Person(s)	Nous	9	3.52	8
48	Responsibility	Noun	8	3.52	8
49	Earth	Noun	8	3.52	8
50	Consider	Verb	8	3.52	8
51	Welfare	Noun	8	3.52	8

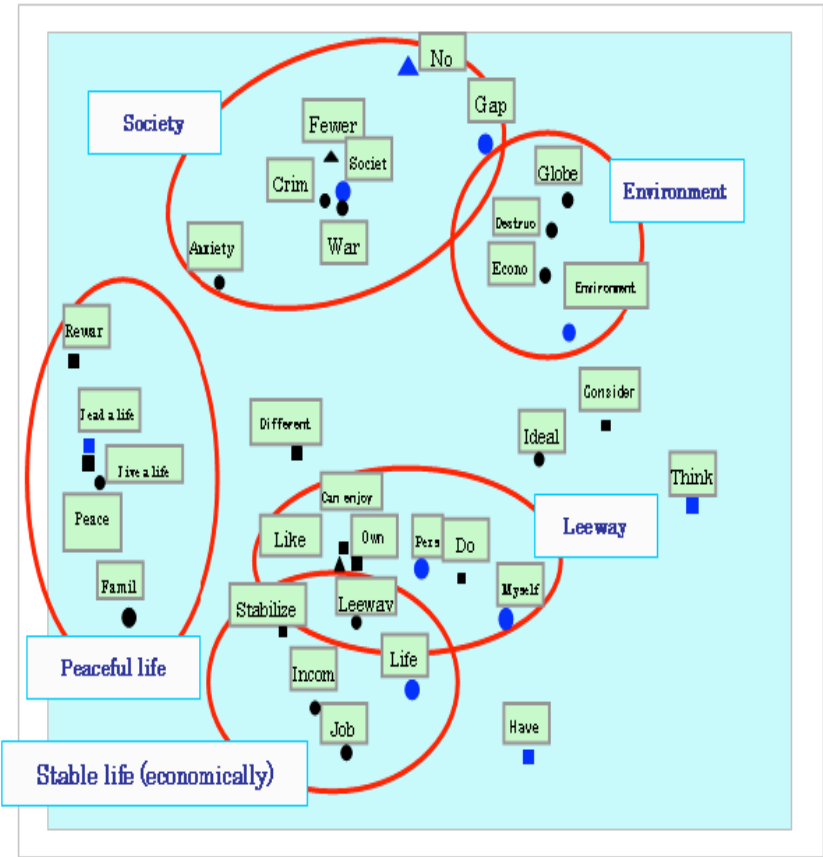
In the ranking of words from Japan, there are words related to life and mental peace, such as life, lead a life, health, security, and mind. In the case of Sweden, 33 of the top 50 words in the ranking are nouns (27 nouns in Japan), and there are more concrete words, such as education, environment, job, food, necessity, democracy, and opportunity, of which democracy does not appear in Japan's ranking.

8.2 Mapping of words from Japan and Sweden

The mapping of words is done with principal component analysis by using *True Teller* text mining software to show the two-dimensional relevance between words.

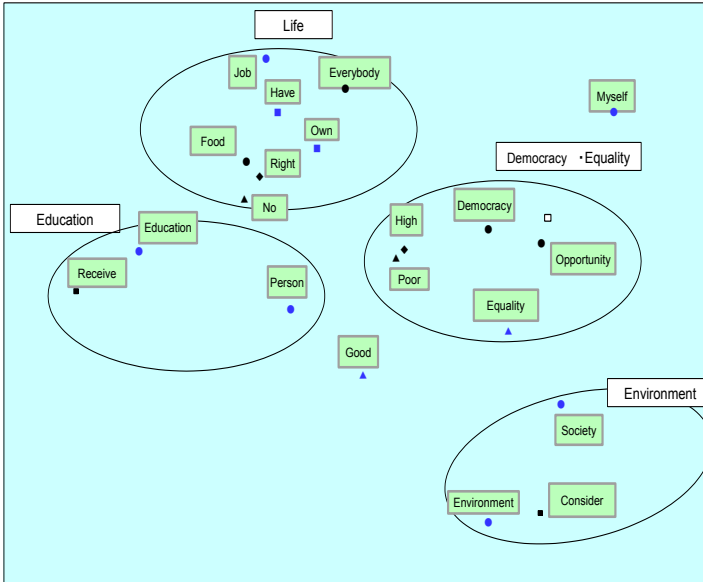
(1) Mapping of words in Japan, all respondents

Figure 10: Mapping of words in Japan, all respondents (n=1756)



(2) Mapping of words in Sweden, all respondents

Figure 11: Mapping of words in Sweden, all respondent (n=227)

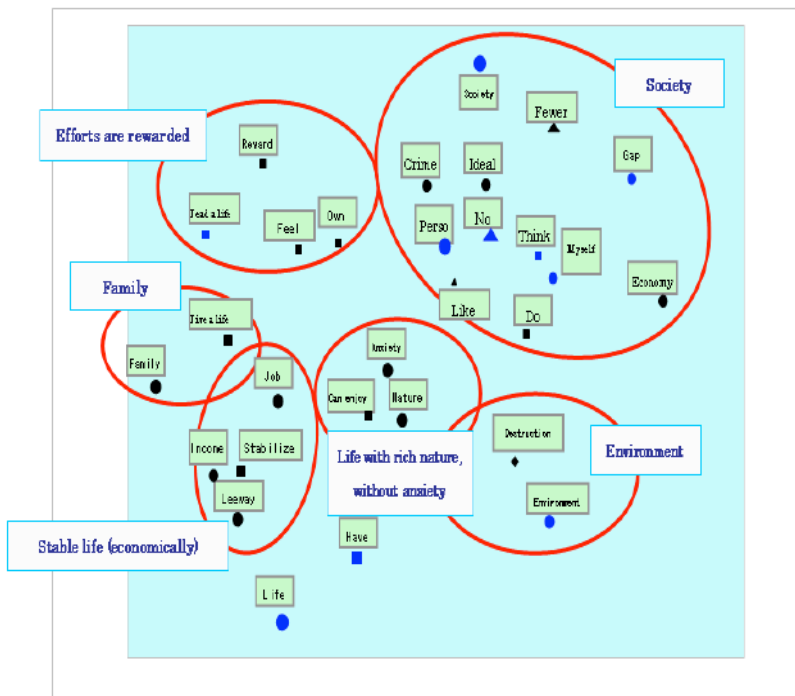


The mapping of words in Sweden shows that “ideal society”, everybody has the right to job and food, where much consideration is given to “environment”, and the society with “democracy” and “equality” and the right to “education”. Aspects of life and environment have common key words with the case of Japan, but the key words “democracy”, “equality” and “education” do not appear in mapping in Japan.

Aspects of “life” and “environment” have common key words with Japan, but the key words “democracy”, “equality” and “education” do not appear in Japan, but only in Sweden.

(3) Mapping of words, Japanese males

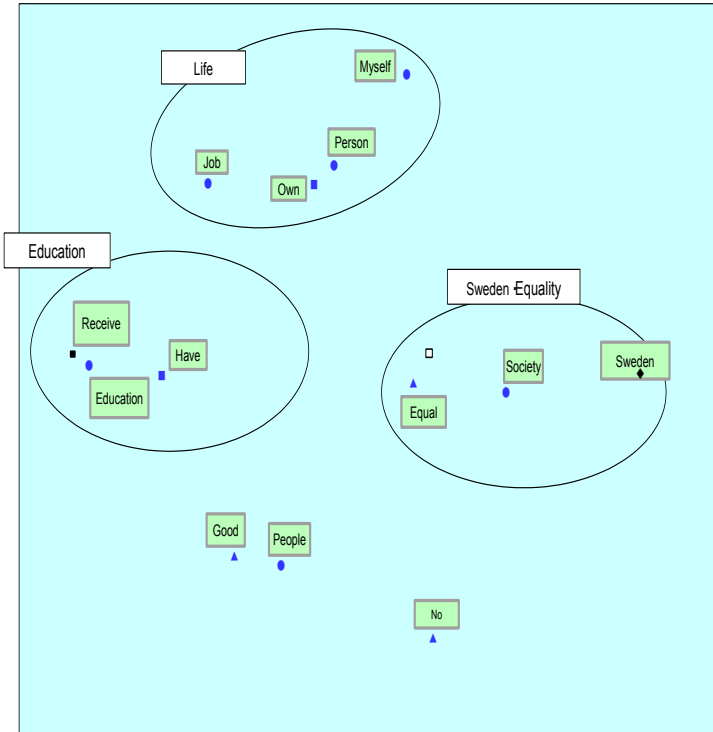
Figure 12: Mapping of words, Japanese males (n=936)



“Society” and “environment” are common with the case of all respondents. However, there are some key words that are characteristic for Japanese males, such as “efforts are rewarded”, “stable life (economically)”, “life with rich nature without anxiety”, and “family”.

(4) Mapping of words, Swedish males

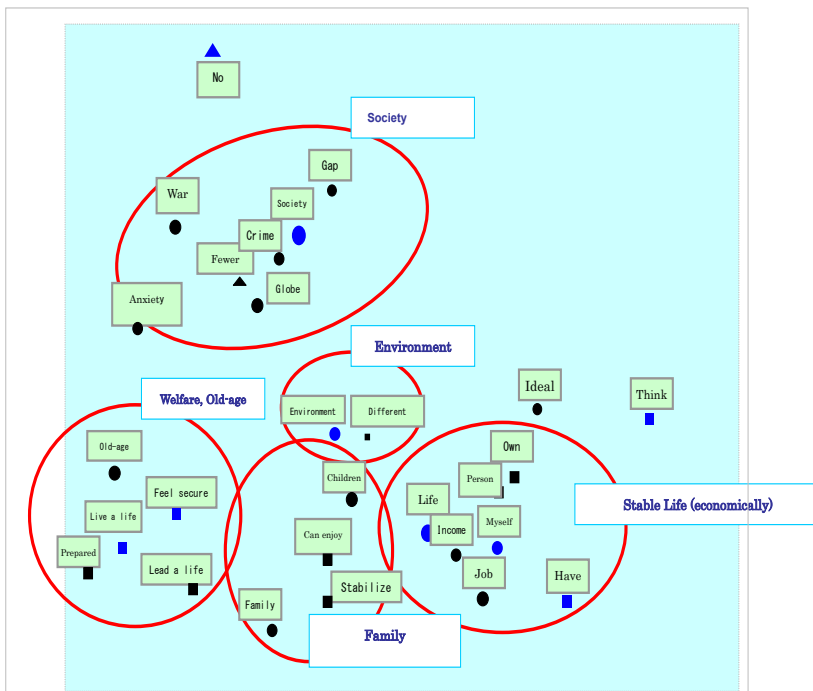
Figure 13: Mapping of words, Swedish males (n=116)



Those words such as to receive “education” and “equality” appeared, just like in the analysis of all respondents (Figure 11). Also, the Swedish society is depicted as ideal society.

(5) Mapping of words, Japanese females

Figure 14: Mapping of words, Japanese females (n=820)



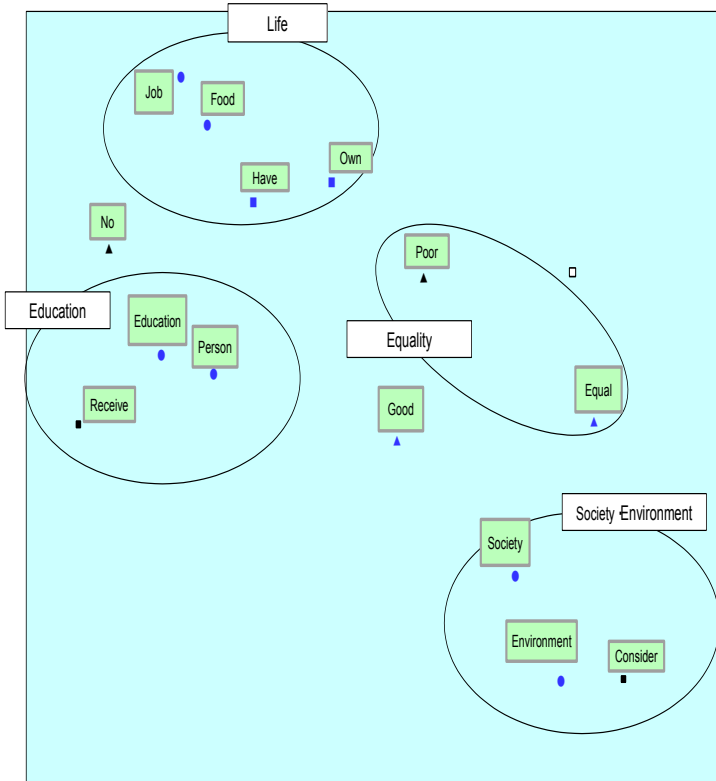
In this analysis, “society without gap, crime, war, and anxiety”, “environment”, “stable life (economically)” appeared. These words are common with the whole sample and Japanese males, but “welfare and old-age” appeared in the case of females.

“Society without gap”, and “environment” are common key words with all respondents and males of Japan.

But “welfare and old-age” appeared in the case of Japanese females.

(6) Mapping of words, Swedish females

Figure 15: Mapping of words, Swedish females (n=111)



Some characteristic key words are “life (with job and food)”, “society and environment” Those key words as “education” and “equality” consistently appear as in all respondents and males in Sweden.

8.3 Commonalities and differences between the Japanese and Swedish societies

“Consideration to environment” and “stabilization of life” are common keywords in Japan and Sweden. In Japan, “society without gap (or anxiety)” commonly appears in males, females, and all respondents.

The key words “democracy”, “equality”, and “education” appear only in Sweden. What is the social background where these words appear? It is necessary to further investigate the Swedish society. From the key words “democracy”, “education”, and “equality”, it is understood that an ideal society for the Swedish people is the society where democracy functions well, and everybody has equal opportunities, and that they put emphasis on education that passes democracy onto the next generation.

In fact, Law of School of Sweden defines that school activities must be based on democratic values (Chapter One), and chapters one and two of the Instrument of Government, one of the four basic laws in Sweden, emphasizes democracy as nation’s cornerstone. In other words, children in Sweden grow up with democracy being internalized in them. On the other hand in Japan, there is no word “democracy” in Constitution or in Fundamental Law of Education (both old and new versions). In Sweden, students are trained to debate where different interests are discussed in order to find democratic solutions, such as environmental problems that involve conflicts between different interests.

9. Summary and suggestions

From HSM version four, the weighting coefficients based on the AHP method were adopted to the indicators of the six categories, and using the new HSM values, HSM ver.4 and 5 were developed. Subsequently a more concrete picture of HSM emerged.

The order of the weighting coefficients of the Triple Bottom Line both in Japan and Sweden is “environment” as the highest, followed by “society”, and “economy”. Now in Japanese society, economy often receives a high priority, but respondents of this research put higher priority on environment than on economy, which is eye-catching. Through the mapping of words given to the open-ended question, it was possible to summarize ideal society depicted by the respondents in Japan and Sweden. A comparison of these two countries allows the author to consider future direction of Japan’s society.

The mapping of words shows that policies needed in Japan are “society without gap and anxiety”, “consideration to environment”, and “stabilization of life” that would construct a welfare society. Those words “democracy”, “equality”, and “education” that appeared in Sweden but not in Japan in the mapping, are suggestive for Japan. Considering sustainability of the Japanese society, it is necessary to increase transparency in the society, so that the young people can have a hope in the society. Although Japan is regarded as a democratic country, the low voting rate of 58.64 percent (The House of Councilors, 2007), does not deserve this perception, compared with Sweden that had 80.4 percent in national election in 2006.

Realizations of “society without gap and anxiety”, “consideration to environment”, and “stabilization of life” are essential for sustainability of Japan’s society, in which the government and administrations should engage. To work on “democracy”, “equality”, “education” is unavoidable to build a sustainable society for the future generation. The present author would like to continue this study to a farther step, because the study on HSM through comparison with other countries would provide lots of suggestions for Japan to pursue sustainability of the society.

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3

The Global Project on Measuring the Progress of Societies: A global movement for a global challenge

Jon Hall

Abstract

The Global Project on Measuring the Progress of Societies is an OECD hosted project that involves several international agencies working together to promote a deeper and broader assessment and understanding of progress in societies around the world. This paper describes the project's origins and plans for the future.

Introduction

Is life getting better? Are our societies making progress? Indeed, what does “progress” mean to the world’s citizens? There can be few questions of greater importance in today’s rapidly changing world. And yet how many of us have the evidence to answer these questions? For the greater part of the twentieth century, economic indicators - such as gross domestic product (GDP), gross national product (GNP) or the economic growth rate - came to be used as a proxy measure of a nation’s overall well-being. However, citizens are increasingly concerned with their quality of life.

In recent years, a consensus has emerged around the need to develop a more comprehensive view of societal progress, taking into account social, environmental and economic concerns, rather than focusing mainly on economic indicators. Such sets of progress measures can help governments focus in a more joined up way on what really matters: they can foster a more informed

debate on where a society actually is, where it wants to head, and – crucially – the choices it needs to make if it is to get there. By measuring progress we can foster progress.

The Istanbul Declaration, signed in July 2007 by the United Nations, the OECD, the World Bank and several other organisations, calls statistical offices to work alongside other stakeholders to take this agenda forward. A lot of work is already being done on the measurement of emerging phenomena, but the issue is not uniquely statistical: engaging societies in measuring and fostering progress touches upon several other dimensions, such as governance, communication, etc. The Global Project on “Measuring the Progress of Societies”, hosted by the OECD and carried out as “network of networks” among several international organisations and other institutions, seeks to become the worldwide reference point for those who wish to understand and measure the progress of their societies.

This paper briefly highlights why the measurement of societal progress is important, what the Global Project is planning to do and how it could be beneficial for the statistical work in the Asian and Pacific Region and the rest of the world.

Why is the measurement of societal progress important?

Information and democracy

Information plays a vital role in economic and political processes. The increase in available information, coupled with advancements in information and communication technologies (ICT), has changed the ways in which markets and societies work. However, the ideal of a “fully informed decision maker” is far from the case: although citizens are constantly bombarded by information, this information is not necessarily translated into knowledge. In fact, often people are unable to fully understand ongoing debates about public policies and feel threatened by the complexity of global issues and the polarity of ‘evidence’ used by those on different sides of the debate (climate change, migration, economic

globalisation, etc.). Yet, a healthy political process needs a citizenry with access to accurate information about the results of past policies (i.e. economic and social outcomes) or the expected results of the policies foreseen. This is a key issue for democracy. The better an electorate is able to hold its policy makers accountable through evidence of their performance, the greater the incentive for policy makers to make better policy. By encouraging transparent and rigorous methodology in all domains which affect the well-being of a society, commonly-agreed measurements of societal progress can encourage a culture of evidence-based decision-making and strengthen the link between statistics, knowledge and policy.

Statistical evidence plays a fundamental role in this respect, but to be influential statistics must be relevant, i.e. must be able to describe what societies and people really pay attention to. And it is quite evident that statisticians need to continuously make their measurement frameworks evolving over time, benefitting of the contribution of researchers. But today a lot of a data are also produced by non-official sources, often competing with the official ones. This multiplicity of sources and data may produce a “statistical cacophony” that does not help decision makers or may lead to intentional misuse of statistics by politicians and other lobbying groups. This challenge needs to be addressed looking at both technical and governance issues: if national statistical offices want to increase their role in the “information age” they have to be perceived as innovative and relevant institutions, investing not only on methodological aspects, but also on communications, literacy of users, etc. Providing a comprehensive statistical picture of the progress of a society may represent a fundamental tool to achieve a higher profile in today’s world.

In the last ten years, there has been an explosion of interest in producing measures of societal progress. Initiatives to develop sets of progress indicators are being run around the world, in rich and poor countries, at local, national and regional level, and by many different types of organisation including governmental

agencies, non-profit foundations, academic institutions, and community groups. More recently, the French President Nicolas Sarkozy has established in 2008 the “Commission on measuring economic performance and social progress”, chaired by Joseph Stiglitz and participated by four Nobel Laureates and several world experts. The World Economic Forum has established the Global Council on “Benchmarking progress in societies”, which is chaired by the OECD’s Chief Statistician. A number of national initiatives have also been launched to engage whole societies in the measurement of their progress using key statistical indicators. Hundreds of initiatives are assessing the progress of local communities.

In presenting his initiative, President Sarkozy underlined how for a long time there have been increasing concerns about the adequacy of current measures of economic performance, in particular those based on Gross Domestic Product (GDP) figures. Moreover, there are even broader concerns about the relevance of these figures as measures of societal well-being. The inadequacies of these figures from the perspective of sustainability - economic, environmental, and social sustainability - has been of particular concern: “The issue is extremely relevant for the future of our societies: the huge distance between standard measures of important socio economic variables (like growth, inflation, inequalities, etc.) and widespread perceptions are strongly affecting public opinions and can decide the future of a government. The gap is so large and so universal that it cannot be explained by reference to money illusion and/or to psychological characteristics of human nature. The issue here is both analytical and political, and current statistical systems, which may have served us well in a not too distant past, are in need of serious revisions.

Different approaches

Many approaches are possible to measure societal progress, but they generally fall into three broad types: the extension of the basic national accounts schemes to cover social and environmental

dimensions; the use of a wide range of indicators referring to economic, social and environmental dimensions (the use of composite indicators to summarise them in a single number is also possible); and the use of “subjective” measures of well-being, life-satisfaction or happiness. Each approach has some strengths and weaknesses, but the most promising (and feasible in the medium term) approach seems the second one – the use of indicator sets – with two important qualifications:

- first, the integration of objective and subjective indicators is now considered more positively than some years ago, as the latter have demonstrated to provide important and additional information to evaluate several dimensions of well-being (health, relational goods, etc.);
- second, the selection of key indicators is a political process and needs to be carried out in a democratic way, i.e. with the involvement of all components of the society (government, opposition, trade unions, business associations, civil society, etc.), to provide a “bipartisan” legitimacy to the indicators set, a necessary condition to have it trusted by citizens and recognised as shared knowledge.

The Istanbul Declaration

In recognition of the emergence of this world movement, the OECD, in collaboration with other international organisations, ran the 2nd World Forum in Istanbul in June 2007 taking as its theme: “Measuring and Fostering the Progress of Societies”. Some 1200 people, from over 130 countries attended. Presidents and ministers mixed with senior statisticians and civil society leaders and captains of industry met the heads of charitable foundations and leading academics. They all shared a common interest in wanting to develop better measures of how the world is progressing.

The conference led to the Istanbul Declaration, signed by the European Commission, the Organisation of the Islamic Countries, the OECD, the United Nations, the United Nations Development

Programme, UNICEF, UNESCO, the United Nations Fund for Partnership, the World Bank, and several other organisations. It calls for action to identify what “progress” means in the 21st century and to stimulate international debate, based on solid statistical data and indicators, on both global issues of societal progress and how societies compare. In particular, the Declaration calls for actions to:

- Encourage communities to consider for themselves what “progress” means in the 21st century.
- Share best practices on the measurement of societal progress and increase the awareness of the need to do so using sound and reliable methodologies.
- Stimulate international debate, based on solid statistical data and indicators, on both global issues of societal progress and comparisons of such progress.
- Produce a broader, shared, public understanding of changing conditions, while highlighting areas of significant change or inadequate knowledge.
- Advocate appropriate investment in building statistical capacity, especially in developing countries, to improve the availability of data and indicators needed to guide development programs and report on progress toward international goals, such as the Millennium Development Goals.

The World Forum participants shared the view that the world needs leadership in this area. With this in mind the OECD, in collaboration with various international organisations and other leading experts in this domain, decided to work towards the establishment of a Global Project on Measuring Progress to provide guidance and to encourage discussion at an international level on these key issues.

The global project on measuring the progress of societies

Goals and activities

The Project mission statement says that “the project is open to all sectors of society” and the Istanbul Declaration urges “statistical offices, public and private organisations, and academic experts to work alongside representatives of their communities to produce high-quality, facts-based information that can be used by all of society to form a shared view of societal well-being and its evolution over time”. The initiative aims to assist societies to measure their progress, by assisting with:

- **What to measure?** To measure progress one needs to know what it looks like. Progress undoubtedly means different things to different societies, and we will encourage and assist societies to have a dialogue about what progress means to them. The Project is developing guidelines on how to organise initiatives to measure level at national and local levels.
- **How to measure?** Working with experts from around the world the Project will develop a better understanding of how progress can be measured – especially in emerging and complex areas not yet covered by statistical standards. There is consensus that these areas (such as safety, human rights, different aspects of quality of life, etc.) are important but much less consensus about how progress in them should be understood and assessed. Developing an accurate and representative set of progress measures for a society can be challenging, especially for developing countries. The Project will prepare a handbook and deliver training courses and other support for those who need it. If information on progress is to be used, it must be trusted and seen as accurate and objective: therefore, the Project will develop quality principles for a set of progress measures and will use them to judge whether or not to accredit a set of measures that wants to be associated with the Project.

- **Ensuring that the measures are used.** When good statistics exist they too often go unnoticed or misunderstood by a broad audience. New ICT tools have the potential to bring dramatic improvements: the Project will foster the development of new tools and approaches to help decision makers and citizens develop a better knowledge of their society using statistical information.

The Global Project is a collaborative initiative, which aims to take a “network of networks” structure, providing a space for learning and exchange for all groups and individuals around the world interested in the measurement of societal progress. The main partners in the Global Project are the OECD, the World Bank, the United Nations Development Programme, UNICEF, the Inter-American Development Bank, the African Development Bank, the UN Economic Commission for West Asia, the International Association of Auditor Generals, the European Commission and the Council of Europe. Several research institutes, non-governmental organizations, and statistical offices from both developing and developed countries are also associated to the Global Project. The explosion of activity in this area around the world, and advancements in communications technologies, provide a significant opportunity to bring this vast wealth of experience together into a more coherent and structured network, and so provide a more solid answer to the question that more and more societies (and individuals) are asking: where are we heading?

The activities of the Global Project will be based around four separate pillars:

- statistical research;
- development of ICT tools to help in transforming statistics into knowledge;
- advocacy and institutional building; and

- development of a global infrastructure about progress.

Several outputs and activities are foreseen over the next biennium. They include the publication of handbooks on Measuring Progress at national and local levels; various training materials and courses; reports on how to measure relevant dimensions of societal progress and the development of “Wiki-Progress”, a global online platform to help everyone around the world understand and debate if the world itself or a particular region is making progress by means of statistical indicators.

The Global Project has gathered momentum since the second World Forum in Istanbul and is currently advising some national initiatives carried out by other institutions (in Australia, Hungary, Canada, Morocco, etc.).

What the global project is not

Some common misconceptions have been connected to the Global Project, and it is important to correct some of these ideas. The Global Project:

- Does not aim to develop a common set of progress measures for the entire world, rather it aims to foster discussion within each society about the meaning of progress.
- Does not aim to replace the vital statistical work which has been carried out in association with the Millennium Development Goals (MDG) and other existing strategies. MDG indicators are proving to be a useful tool for tracking progress towards the development objectives set out in the MDG strategy. The efforts of the Global project to encourage discussion in the developing and developed world on what progress means is intended to complement existing statistical projects, rather than replace them.
- Is not purely about measuring happiness. Societal well-being and change are highly complex phenomena which will never fully be encapsured by any number or set of numbers,

however sophisticated. The philosophy of the Global Project is to examine the value of new approaches which go beyond traditional, narrowly economic views of development in order to inform as rich and technically sound a measurement of progress as possible. This entails taking an interdisciplinary approach. Work on happiness in the economic and psychology literature is only one part of this. Other important areas of indicator development include: sustainable development, quality of life, social cohesion, multi-dimensional poverty, public health, social capital, citizen engagement, trust and many other topics.

- Is not excluding statistical offices: on the contrary, the Project aims to support them to better carry out their duties benefitting of research carried out all over the world, using innovative dissemination and communication tools, improving their human capital thanks to training courses, and advocating for higher investments in statistical capacity building, in close co-operation with PARIS21. Indeed, several statistical offices, both from developing and developed countries, strongly supported the Global Project's work since its beginning. The OECD Council established the Global Project following advice provided by the OECD Committee on Statistics, which has nominated three ex-officio members of the Project Board as technical advisors. The Korean national statistical office (KNSO) is the OECD partner in the organisation of the third World Forum in October 2009, while the Indian statistical office will be the partner for the organisation of the fourth World Forum, in 2012.

Measuring progress in the Asian and Pacific region: opportunities for co-operation

Asia and the Pacific as drivers of the global movement

The world's future will be determined to a significant extent by what happens in the growing countries of Asia and the Pacific: the sheer scale of population and economic growth will guarantee that

the path of the world's progress will be heavily influenced by developments in this region.

Many countries in the Asia and Pacific region are already playing a crucial role in the emerging global movement of 'measuring progress' initiatives. For example, the concept of Gross National Happiness (GNH) was first articulated by the Bhutanese king Jigme Singye Wangchuck in the 1970s. The idea of GNH puts the well-being of individuals at the top of the national development agenda¹. Although GNH was developed in the specific historical and spiritual context of Bhutan, it has nevertheless struck a chord worldwide. In collaboration with research and policy institutes around the world, the Centre for Bhutan Studies is currently promoting the idea of Gross National Happiness (GNH).

Another influential initiative in the region has been the Australian Bureau of Statistics' publication *Measuring Australia's Progress*. This statistical report (now called Measures of Australia's Progress in its most recent edition), considers some of the key aspects of progress side by side and discusses how they are linked with one another. It does not purport to measure every aspect of progress that is important, but it does provide a national summary of many of the most important areas of progress, presenting them in a way which can be quickly understood by all Australians. It informs and stimulates public debate and encourages all Australians to assess the bigger picture when contemplating progress. The Australian experience strongly influenced the whole design of the Global Project, but also stimulated other statistical offices to undertake similar work (Ireland, Italy, etc.).

¹ Dasho Meghraj Gurung puts the Bhutanese philosophy succinctly: "The ideology of GNH connects Bhutan's development goals with the pursuit of happiness. This means that the ideology reflects Bhutan's vision on the purpose of human life, a vision that puts the individual's self-cultivation at the center of the nation's developmental goals, a primary priority for Bhutanese society as a whole as well as for the individual concerned."

Towards the 3rd World Forum: A regional conference for Asia and Pacific

The 3rd World Forum on “Statistics, Knowledge and Policy” will be held in Busan, South Korea on 27-30 October 2009. The Forum will attract some 1 500 high level participants with a mixture of politicians and policy makers, opinion leaders, Nobel laureates, statisticians, academics, journalists and representatives of civil society, from over 130 countries. The 3rd Forum, organised by the OECD, the Korean national statistical office and the Government of Korea, builds on the outcomes of the previous World Forums and the Istanbul Declaration.

In the run-up to the Korean Forum, regional and thematic events will be organised around the world. In particular, an important conference will be held at Kyoto University, Japan on March 23rd and 24th 2009. The Kyoto conference will bring together international organisations, universities, businesses and foundations from the region to discuss the benefits of developing broader, shared visions of progress for Asian and Pacific societies – visions developed from the bottom up. It will also discuss the importance of turning statistical measures of progress into societal knowledge, as well as the latest thinking on how to achieve these aims, including how institutions can help to better measure and communicate shared indicators of societal progress. The conference will also analyse how better measures can lead to better policies to address issues of concern to the Asian and Pacific societies including: Globalisation and Human Resource Development, Energy Security and Poverty concerns, Security and Democracy, Vulnerability to Natural Disaster, Human Health and Medical Services/Technologies.

Istanbul Declaration

We, the representatives of the European Commission, the Organisation for Economic Cooperation and Development, the Organisation of the Islamic Conference, the United Nations, the United Nations Development Programme and the World Bank,

Recognise that while our societies have become more complex, they are more closely linked than ever. Yet they retain differences in history, culture, and in economic and social development.

We are encouraged that initiatives to measure societal progress through statistical indicators have been launched in several countries and on all continents. Although these initiatives are based on different methodologies, cultural and intellectual paradigms, and degrees of involvement of key stakeholders, they reveal an emerging consensus on the need to undertake the measurement of societal progress in every country, going beyond conventional economic measures such as GDP per capita. Indeed, the United Nation's system of indicators to measure progress towards the Millennium Development Goals (MDGs) is a step in that direction.

A culture of evidence-based decision making has to be promoted at all levels, to increase the welfare of societies. And in the "information age," welfare depends in part on transparent and accountable public policy making. The availability of statistical indicators of economic, social, and environmental outcomes and their dissemination to citizens can contribute to promoting good governance and the improvement of democratic processes. It can strengthen citizens' capacity to influence the goals of the societies they live in through debate and consensus building, and increase the accountability of public policies.

We affirm our commitment to measuring and fostering the progress of societies in all their dimensions and to supporting initiatives at the country level. We urge statistical offices, public and private organisations, and academic experts to work alongside representatives of their communities to produce high-quality, facts-based information that can be used by all of society to form a shared view of societal well-being and its evolution over time.

Official statistics are a key "public good" that foster the progress of societies. The development of indicators of societal progress

offers an opportunity to reinforce the role of national statistical authorities as key providers of relevant, reliable, timely and comparable data and the indicators required for national and international reporting. We encourage governments to invest resources to develop reliable data and indicators according to the “Fundamental Principles of Official Statistics” adopted by the United Nations in 1994.

To take this work forward we need to:

- encourage communities to consider for themselves what “progress” means in the 21st century;
- share best practices on the measurement of societal progress and increase the awareness of the need to do so using sound and reliable methodologies;
- stimulate international debate, based on solid statistical data and indicators, on both global issues of societal progress and comparisons of such progress;
- produce a broader, shared, public understanding of changing conditions, while highlighting areas of significant change or inadequate knowledge;
- advocate appropriate investment in building statistical capacity, especially in developing countries, to improve the availability of data and indicators needed to guide development programs and report on progress toward international goals, such as the Millennium Development Goals.

Much work remains to be done, and the commitment of all partners is essential if we are to meet the demand that is emerging from our societies. We recognise that efforts will be commensurate with the capacity of countries at different levels of development. We invite both public and private organisations to contribute to this ambitious effort to foster the world’s progress and we welcome initiatives at the local, regional, national and international levels.

We would like to thank the Government of Turkey for hosting this second OECD World Forum on “Statistics, Knowledge and Policy”. We also wish to thank all those from around the world who have contributed to, or attended, this World Forum, or followed the discussions over the Internet.

Istanbul, 30 June 2007

Signed during the II OECD World Forum on “Statistics, Knowledge and Policy”

4

Creating National Accounts of Well-Being: **A parallel process to GNH**

Nic Marks

As the Royal Government of Bhutan seeks to operationalise the inspirational concept of Gross National Happiness into robust and reliable indicators, it is worth keeping in mind that they are not alone in this quest to find more meaningful measures of societal progress. There is a burgeoning international movement questioning the utility of economic indicators and exploring what it might mean to capture true measures of well-being, not simply material wealth.

In January 2008, the French President Nicholas Sarkozy recruited Nobel-Prize-winning economists Joseph Stiglitz and Amartya Sen together with French economist Jean-Paul Fitoussi to form a special commission on the measurement of economic performance and social progress. Outlining the scope of their work they state:

There is a huge distance between standard measures of important socio economic variables like growth, inflation, inequalities etc...and widespread perceptions...Our statistical apparatus, which may have served us well in a not too distant past, is in need of serious revisions. (Stiglitz, Sen and Fitoussi, 2008)

The dismal state of Europe's 'widespread perceptions' is verified by the finding from the European Social Survey that in 2006 – which we would perhaps now regard as the peak of the economic boom years of the decade – 61 per cent of its inhabitants felt that for most people in their country life was getting worse. The situation was even starker in France itself, where more than 8 in 10

people (84 per cent) felt that life was getting worse for their fellow citizens (European Social Survey, 2006).

The establishment of the French commission is not an isolated case of a government paying attention to the idea that current measures of national performance are seriously defective. There is a gathering momentum behind calls from academics, policy-makers and the public for governments to measure well-being as part of their national accounting systems.

In 2004 and 2005 there were calls from both **nef**, in its well-being manifesto (Marks and Shah 2004), and from the prominent UK economist Richard Layard, for governments to monitor the well-being of their citizens. Layard's highly influential book *Happiness* argued that the economic model of human nature used by policy-makers is 'far too limited' and that '[h]appiness should become the goal of policy, and the progress of national happiness should be measured and analysed as closely as the growth of GNP' (Layard 2005). In the US leading psychologists Professors Ed Diener and Martin Seligman argued that policy decisions 'should be more heavily influenced by issues relating to well-being' and that '[p]eriodic, systematic assessment of well-being will offer policy-makers a much stronger set of findings to use in policy-making decisions' (Diener and Seligman 2004). Their call has been closely echoed by Nobel Prize winner Daniel Kahneman and colleagues (Kahneman, Krueger, Schkade, Schwarz and Stone, 2004) and is further developed in a forthcoming book *Well-being and Public Policy* (Diener, Lucas, Schimmack, and Helliwell, 2009), which makes a forceful and detailed case for subjective indicators of well-being to aid the policy process.

There is also considerable support among the public for governments to use broader measures of progress. A UK poll found 81 per cent of people supported the idea that government's prime objective should be the 'greatest happiness' rather than the 'greatest wealth' (BBC 2006). Similarly, an international survey found that three-quarters of respondents believed that health, social and environmental statistics were as important as economic

ones and should be used to measure national progress (Ethical Market Media, 2007). There is growing interest in alternative indicators such as the still-developing ecological footprint, which has had so great an influence that the expression 'footprint' has entered popular usage. Measures deriving from well-being research have also become widely known through international studies such as the World Values Survey and nef's own Happy Planet Index (Marks, Abdallah, Simms and Thompson, 2006), . The crisis in the global finance system in 2008 has only added to the groundswell of opinion that the direction of society has been led off course by traditional indicators, and that the need for alternatives is now urgent.

These expert and public views have been mirrored by a growing number of policy and government initiatives which have given an ever-more prominent role to well-being.

Although yet to devise systematic ways of capturing the well-being of citizens, the UK Government has been a leader in stimulating discourse about well-being and its measurement into the policy mainstream. This was initiated by the 2000 The UK Local Government Act which gave all local authorities the power to promote social, economic and environmental well-being in their areas. In 2002 the UK Prime Minister's Strategy Unit published a paper entitled *Life Satisfaction: the state of knowledge and implications for government* (Donovan and Halpern 2002) and in 2005 the UK's Sustainable Development Strategy, *Securing the Future*, committed the Government to exploring policy implications of wellbeing research (HM Government 2005). This was followed up when they published provisional national indicators associated with well-being as part of its sustainable development indicator set, drawing together a cluster of existing measures and new survey data on subjective well-being (Defra 2007). In addition there was an influential local government White Paper: *Strong and Prosperous Communities* which defined a new place-shaping role for local government and its partners as 'the creative use of powers and influence to promote the general well-

being of a community and its citizens' (Lyon 2007). And in 2007 a new duty (which in UK legal parlance is a stronger requirement than merely a 'power to') on English schools to promote the well-being of their pupils came into force. Later in the year the Office for National Statistics published a paper outlining its work on measuring societal well-being, floating the possibility that extensions to the current national accounts 'might eventually add up to a system of national wellbeing accounts' (Allin 2007).

In 2008 the momentum continued to build with The UK Government's Foresight Review on Mental Capital and Well-being releasing its findings from a two-year investigation, concluding that government policies 'need to nurture the mental capital and wellbeing in the wider population, so that everyone can flourish in their lives' (Foresight 2008). The report called for the 'radical step' of the development of an 'over-arching mental capital and wellbeing measure akin to the Communities and Local Government's (CLG) Index of Multiple Deprivation' to be explored. Finally, and perhaps most surprising, the HM Treasury in the UK published a working paper on Developments in the Economics of Well-being (Lepper 2008) which suggested the role of the Government is to achieve an appropriate balance between policies that promote well-being and policies that maintain economic incentives to support innovation and growth. Whilst raising concerns about intervening explicitly to influence well-being, in relation to measurement it concludes: 'Well-being – both subjective and objective – is an important issue. It provides a new framework with which to measure progress and analyse policy, providing new evidence for policy-makers to assess how material welfare affects well-being.'

All of this action by governmental departments was mirrored by some political interest with the UK Conservative Party's Quality of Life Policy Group (Conservatives 2007) calling for action across eight key policy areas, including well-being, stating '...we believe now is the time for the UK to agree upon a more reliable indicator of progress than GDP, and to use it as the basis for policy-making'.

In 2008 Jo Swinson, a Liberal Democrat MP (member of parliament), submitted an Early Day Motion to the UK House of Commons urging 'the Government to both endorse and participate in the French study, with the aim of improving the well-being, not simply the wealth, of all people in the UK' (Swinson 2008). This may be followed up by the setting up of an all party parliamentary commission on happiness and well-being in 2009, though at the time of press this has not been confirmed.

The interest at an international level has also been growing with the inter-governmental Organisation for Economic Co-operation and Development (OECD) hosting an international conference in Istanbul in 2007 on Measuring the Progress of Societies (as part of a broader programme of work) where participants affirmed a 'commitment to measuring and fostering the progress of societies in all their dimensions' and urged the development of data to help form 'a shared view of societal well-being and its evolution over time' (OECD 2007). Additionally the 2007 Europe-wide Beyond GDP conference included an opening address from the President of the European Commission, José Manuel Barroso, who calls for 'the sort of breakthrough that we saw in the 1930s, a breakthrough that adapts GDP, or complements it with indicators that are better suited to our needs today, and the challenges we face today' (Barroso 2007). More specifically on well-being the Statistical Office of the European Communities, Eurostat, has funded research to review the merits and shortcomings of existing examples of indicators related to well-being, to examine the feasibility of selected indicators at EU level, and to make recommendations for the most promising approaches for an indicator of well-being at an EU level.

To further these debates, we at the *centre for well-being at nef* (the new economics foundation) published in January 2009 a new report National Accounts of Well-being: bringing real wealth onto the balance sheet (Michaelson, Abdallah, Steuer, Thompson and Marks 2009). The report presents a radical, robust proposal to guide the direction of modern societies and the lives of people

who live in them. It demonstrates why national governments should directly measure people's subjective well-being: their experiences, feelings and perceptions of how their lives are going. It calls for these measures to be collected on a regular, systematic basis and published as National Accounts of Well-being. The measures are needed because the economic indicators which governments currently rely on tell us little about the relative success or failure of countries in supporting a good life for their citizens.

The report builds on the insights, more than seventy-five years ago, of the original architects of systems of national accounts who were clear that welfare could not be inferred from measures of national income alone. They were careful to document the range of factors national accounts failed to capture such as the unpaid work of households, the distribution of income and the depletion of resources (Kuznets 1934). Yet initial hopes for the development of better indicators of welfare were fast derailed. The demands of wartime prioritised maximising the productive capacity of the economy over other consideration, at just the time when the accounting frameworks themselves were being refined and improved. The size of the economy – as defined by Gross Domestic Product – was quickly seized on as a convenient measure of national achievement. In the aftermath of the Second World War, overall productivity became firmly entrenched as the key hallmark of a country's overall success and widely interpreted as a proxy for societal progress, with damaging consequences for people and the planet.

Advances in the measurement of well-being means that now we can reclaim the true purpose of national accounts as initially conceived and shift towards more meaningful measures of progress and policy effectiveness which capture the real wealth of people's lived experience.

As we enter a period of increasing economic, social and environmental uncertainty, this need becomes ever greater and more urgent. A myopic obsession with growing the economy has

meant that we have tended to ignore its negative impacts on our well-being such as longer working hours and rising levels of indebtedness. It has created an economic system which has systematically squeezed out opportunities for individuals, families and communities to make choices and pursue activities which play a role in promoting positive well-being and human flourishing. All this is underpinned by a fiscal system which, as recent events have exposed, has run out of control. Add to this the fact that the model we have been following – of unending economic growth – is taking us beyond our environmental limits and the case for very different measures of human progress and policy evaluation become compelling,

National accounting indicators such as Gross Domestic Product (GDP) have only ever revealed a very narrow view of human welfare. Worse, they have obscured other vital parts of the economy: the core economy of family, neighbourhood, community and society, and the natural economy of the biosphere, our oceans forests and fields. We now need to shift towards more meaningful measures of progress which capture the richness of people's lived experience. Do so and we also create a far more effective tool with which to guide policy.

The report aims to fundamentally re-evaluate orthodox ideas of what we should collectively value, and hence what we should measure. It lays out a framework for developing National Accounts of Well-being to provide:

- A new way of assessing societal progress. National Accounts of Well-being, by explicitly capturing how people feel and experience their lives, help to redefine our notions of national progress, success and what we value as a society.
- A cross-cutting and more informative approach to policy-making. The challenges now facing policy-makers, including the 'triple crunch' of financial crisis, climate change and oil price shocks, are unprecedented. Silo working has long been criticised; now – when the need for systemic change is clear

and present – it must be overcome. National Accounts of Well-being – by capturing population well-being across areas of traditional policy-making, and looking beyond narrow, efficiency-driven economic indicators – provide policy-makers with a better chance of understanding the real impact of their decisions on people's lives.

- Better engagement between national governments and the public. By resonating with what people care about, National Accounts of Well-being provide opportunities for national governments to reconnect with their citizens and, in doing so, to address the democratic deficit now facing many European nations.

nef's framework for national accounts of well-being

Well-being is most usefully thought of as the dynamic process that gives people a sense of how their lives are going through the interaction between their circumstances, activities and psychological resources or 'mental capital'. Whilst a combination of objective and subjective factors are important for assessing well-being, it is the subjective dimensions which have, to date, been lacking in any assessment by national governments. National Accounts of Well-being address this gap.

The challenge is to match the multiplicity and dynamism of what constitutes and contributes to people's well-being with what gets measured. Our recommended framework for National Accounts of Well-being is therefore based on capturing:

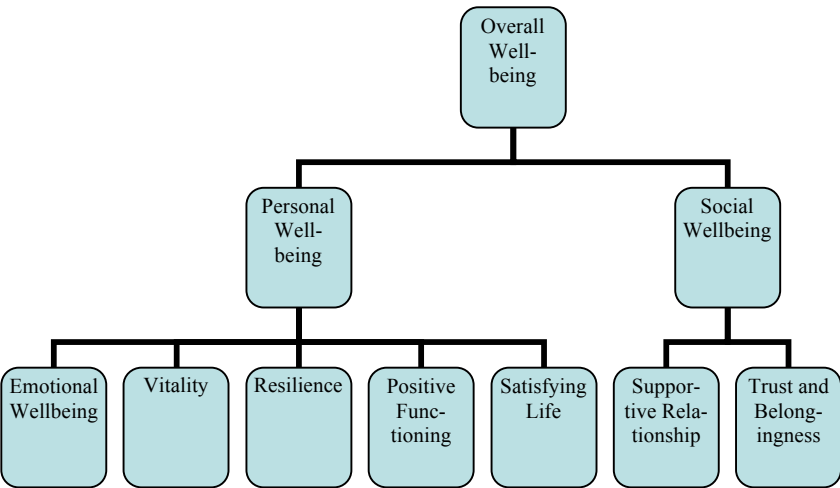
- More than life satisfaction. Understanding subjective well-being as a multifaceted, dynamic combination of different factors has important implications for the way in which it is measured. This requires indicators which look beyond single item questions and capture more than simply life satisfaction.
- Personal and social dimensions. Research shows that a crucial factor in affecting the quality of people's experience of life is the strength of their relationships with others. Our approach,

therefore, advocates a national accounting system which measures the social dimension of well-being (in terms of individuals' subjective reports about how they feel they relate to others) as well as the personal dimension.

- Feelings, functioning and psychological resources. The traditional focus on happiness and life satisfaction measures in well-being research has often led to an identification of well-being with experiencing good feelings and making positive judgements about how life is going. Our framework for National Accounts of Well-being moves beyond that to also measure how well people are doing, in terms of their functioning and the realisation of their potential. Psychological resources, such as resilience, should also be included in any national accounts framework and reflect growing recognition of 'mental capital' as a key component of well-being.

These elements have been incorporated to produce empirical findings from a working model of National Accounts of Well-being. The findings are compiled from data collected in a major 2006/2007 European cross-national survey through a detailed module of well-being questions, designed by the University of Cambridge, **nef** and other partners (Huppert, Marks, Clark, Siegrist, Stutzer, Vitterso and Wahrendorf, 2008). This represents the most comprehensive dataset on subjective well-being for any nation to date.

Figure 1: Indicator Structure



Our working model (see figure 1) is built on two headline measures which capture personal well-being and social well-being, reflecting crucial aspects of how people experience their lives. Personal well-being is broken down into five main components with a number of subcomponents: emotional well-being (positive feelings and absence of negative feelings); satisfying life; vitality; resilience and self-esteem (self-esteem, optimism and resilience); and positive functioning (which covers autonomy, competence, engagement, and meaning and purpose). Social well-being is made up of two main components: supportive relationships, and trust and belonging.

To enable analysis of how different nations are faring in relation to their well-being, indicators were created by standardising and transforming the data so that all results are presented on 0–10 scales, with a score of 5 always representing the average score across the 22 European countries included in the dataset.

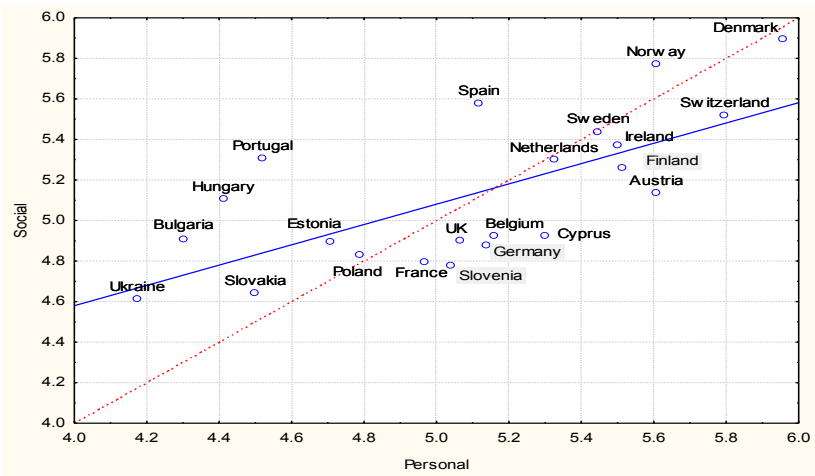
Findings from our working model

nef’s National Accounts of Well-being reveal some surprising results in the picture of the relative progress of European countries. Thus, whilst Denmark retains its oft-cited position as

having the highest levels of well-being in Europe, other rankings of countries on personal and social well-being deviate from what might be expected. Sweden, for example, so often singled out to be praised for its policy success is within the top five nations on social well-being, but does not feature as one of the highest performers regarding the personal well-being of its citizens.

The findings reveal that countries with high levels of personal well-being do not necessarily have high levels of social well-being, and *vice versa* – see fig 2. Denmark and Ukraine display unusual stability in coming at the very top and very bottom, respectively, of rankings based on both personal and social well-being scores. In between them, all but two of the other twenty countries change positions. It is striking, for example, that all the Central and Eastern European countries except Slovenia have higher scores for social than for personal well-being and the Iberian nations Portugal and Spain have considerably greater average levels of social well-being than personal well-being. A key task for policy-makers highlighted by this finding is therefore one of identifying the economic, social, and political structures in these countries which succeed in promoting the elements of social well-being beyond the levels expected from examining personal well-being.

Fig 2: Personal and Social Well-being in Europe



Solid line shows best fit line for personal and social well-being correlation ($r=0.55$)

Dashed line indicates notional position of countries scoring equally on personal and social well-being

In order to understand the constituents of well-being more fully, we developed diagrams – *Well-being Profiles* – which display the character of well-being for a particular country or group. These allow the different components of well-being to be examined and implications for policy-makers drawn out.

Comparing Well-being Profiles helps to uncover differences in countries which are similar on other measures of national welfare. For example, Finland and France have very similar levels of GDP per capita and have the same score on the UN’s Human Development Index (which combines measures of GDP, life expectancy and knowledge and education), but France ranks substantially below Finland on both personal and social well-being. Finland’s Well-being Profile shows it coming only slightly above average on all components of well-being, apart from the *emotional well-being* – *negative feelings* and *satisfying life*

components, where its performance is substantially above average. A similar pattern can in fact be seen in the Well-being Profiles of each of the Scandinavian countries. France's Well-being Profile, on the other hand, presents a much more consistent picture, with scores close to the average on all well-being components, and none that are particularly high or low. Well-being Profiles therefore provide a clear picture of how policy to bolster population well-being in each country might need either to be closely targeted on particular components, or aimed at improving well-being more generally.

Further important policy-relevant findings come from examining well-being within specific national contexts, and from looking at the relationship between the objective circumstances of people's lives and their well-being:

Within the UK, clear differences emerged in the character of people's well-being between population groups. The Well-being Profiles of the youngest and oldest age groups in the UK reveal some striking differences in their well-being composition and levels with particular disparity for the *trust and belonging* component, with a very low score for the youngest age group and a high score for the oldest. A question for UK policy-makers is therefore whether they should specifically aim to build feelings of trust and belonging among young people, or understanding that these feelings change through the life course, target their resources elsewhere?

Fig 3: France and Finland's Well-being Profiles

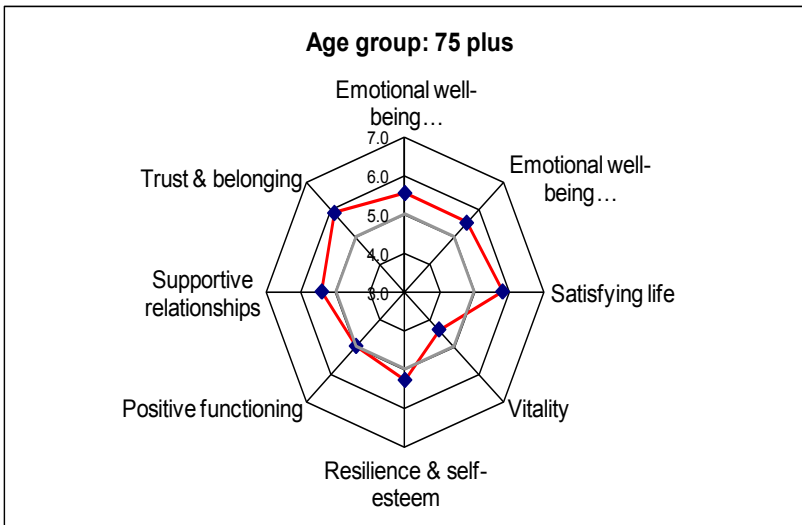
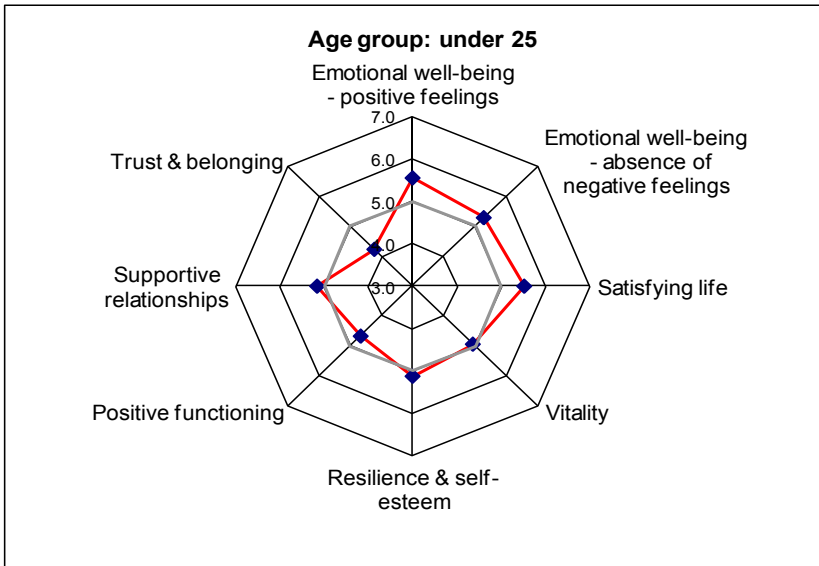
Country		Emotional well-being - positive feelings	Emotional well-being - absence of	Satisfying life	Vitality	Resilience & self-esteem	Positive functioning	Supportive relationships	Trust & belonging
DK	Denmark	5.8	6.7	6.7	5.4	5.52	6.13	6.02	5.87
CH	Switzerland	5.9	5.7	6.3	5.7	5.53	5.63	5.44	5.60
NO	Norway	5.6	6.7	5.9	5.6	5.13	5.53	5.52	5.98
IE	Ireland	5.8	6.1	5.7	5.4	5.34	5.32	5.28	5.45
AT	Austria	5.4	5.4	5.9	5.7	5.44	5.55	5.04	5.21
SE	Sweden	5.3	6.2	6.0	5.3	5.12	5.29	5.23	5.61
FI	Finland	5.3	7.1	6.1	5.4	4.91	5.40	5.09	5.39
NL	Netherlands	5.6	5.6	5.5	5.3	4.96	5.36	5.41	5.25
ES	Spain	5.3	5.0	5.5	4.9	5.21	4.77	5.84	5.45
CY	Cyprus	5.3	5.4	5.4	5.5	5.48	4.86	4.89	4.95
BE	Belgium	5.4	5.2	5.4	5.1	4.77	5.19	4.97	4.88
DE	Germany	4.6	5.4	5.1	5.2	5.38	5.09	4.74	4.97
GB	UK	5.4	5.4	5.4	4.8	4.95	4.88	5.15	4.73
SI	Slovenia	5.2	5.1	5.1	5.2	4.97	4.85	4.69	4.83
FR	France	5.3	5.0	4.9	5.1	4.71	5.01	4.77	4.81
PL	Poland	4.6	4.4	4.8	5.0	4.84	4.80	4.92	4.76
EE	Estonia	4.5	4.4	4.5	5.0	4.67	4.92	4.91	4.88
PT	Portugal	4.5	4.2	4.2	4.4	4.92	4.67	5.57	5.16
HU	Hungary	4.4	3.2	4.1	4.4	4.56	5.19	4.43	5.62
SK	Slovakia	4.6	3.9	4.3	4.7	4.44	4.76	4.63	4.62
BG	Bulgaria	3.6	4.1	3.3	4.9	4.72	4.89	5.27	4.67
UA	Ukraine	4.2	3.8	3.2	4.5	4.60	4.70	4.39	4.74
	Overall	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Fig 3: continues...

Country		Social progress	Personal	Social	WBI	Life Satisfaction	relations	Family relations	Close links
DK	Denmark	7.0	6.0	5.9	5.9	8.5	6.02	5.8	6.2
CH	Switzerland	5.7	5.8	5.5	5.7	8.1	5.44	4.9	5.8
NO	Norway	6.9	5.6	5.8	5.7	7.8	5.52	5.0	5.9
IE	Ireland	7.0	5.5	5.4	5.5	7.6	5.28	5.2	5.3
AT	Austria	6.5	5.6	5.1	5.5	7.7	5.04	4.3	5.6
SE	Sweden	6.4	5.4	5.4	5.4	7.9	5.23	4.7	5.6
FI	Finland	6.5	5.5	5.3	5.4	8.1	5.09	4.5	5.5
NL	Netherlands	6.2	5.3	5.3	5.3	7.6	5.41	4.9	5.7
ES	Spain	6.0	5.1	5.6	5.3	7.5	5.84	5.9	5.8
CY	Cyprus	5.9	5.3	4.9	5.2	7.5	4.89	5.0	4.8
BE	Belgium	5.2	5.2	4.9	5.1	7.4	4.97	4.8	5.1
DE	Germany	4.7	5.1	4.9	5.1	6.9	4.74	4.3	5.1
GB	UK	5.7	5.1	4.9	5.0	7.2	5.15	4.7	5.5
SI	Slovenia	5.1	5.0	4.8	5.0	7.1	4.69	5.0	4.5
FR	France	3.8	5.0	4.8	4.9	6.4	4.77	5.3	4.5
PL	Poland	4.6	4.8	4.8	4.8	6.8	4.92	5.9	4.4
EE	Estonia	6.1	4.7	4.9	4.8	6.6	4.91	5.2	4.7
PT	Portugal	4.1	4.5	5.3	4.8	5.6	5.57	5.8	5.4
HU	Hungary	4.4	4.4	5.1	4.6	5.5	4.43	5.0	4.1
SK	Slovakia	5.4	4.5	4.6	4.5	6.2	4.63	5.3	4.2
BG	Bulgaria	3.4	4.3	4.9	4.5	5.0	5.27	5.9	4.9
UA	Ukraine	3.8	4.2	4.6	4.3	4.6	4.39	5.1	4.0
	Overall	5.0	5.0	5.0			5.0	5.0	5.0

Fig 4: UK Well-being Profiles by Age

	15-24	25-34	35-49	50-64	65-74	75+
Emotional well-being - positive feelings	5.54787 1	5.23163 9	5.22877 7	5.40393 8	5.80419 1	5.54635 6
Emotional well-being - absence of negative feelings	5.27993 8	5.23987	5.40086 5	5.51083 5	5.63396 8	5.51525 8
Satisfying life	5.52946	5.18345 3	5.27993 1	5.27300 7	5.63732 9	5.81305 2
Vitality	4.93025	4.84211 6	4.88093 7	4.77654 4	4.56397 7	4.38830 9
Resilience & self-esteem	5.11949 8	4.95698 6	4.85413 9	4.80681 2	5.01441 4	5.28734 6
Positive functioning	4.66198 7	4.81545 9	4.77734 5	5.05025 5	5.11080 3	4.99120 7
Supportive relationships	5.16315 7	5.15931	4.92247 1	5.18145 1	5.53034 3	5.39430 2
Trust & belonging	4.22612 3	4.29096 9	4.51213 5	4.96084 5	5.36959 1	5.87456 7
ZSOCIAL	4.61499 2	4.65121 5	4.69214 4	5.04695 4	5.41580 2	5.66040 6
ZWBI	4.95245 1	4.88502 1	4.90404 8	5.05606 7	5.26619 5	5.34078 8



The relationship between the conditions of people's lives and their subjective experiences of life is complex and demands a textured assessment of well-being to be fully understood. by encouraging intrinsic values, trust in institutions and participation in local activities.

Where do we go from here?

So The Royal Government of Bhutan are not alone in recognising the need for, and calling for, a new approach. Creating a new systems of Gross National Happiness indicators or National Accounts of Well-being, however, are an ambitious and significant undertakings that will ultimately require extensive co-operation between the governments involved, academics, citizens and many others.

A number of key recommendations are identified in the report to stimulate further debate and action. Most of these are centred on what the national governments might do in Europe but there are parallels for the Royal Government of Bhutan as well.

Actions for national governments

- Make manifesto commitments to National Accounts of Well-being.
- Task national statistical offices to measure well-being.
- Measure and act on well-being within the broader context of societal and environmental sustainability.

Developing global, regional and local momentum

- Encourage the European Parliament and European Commission to take a leading role
- Work with the OECD's global project on 'measuring the progress of societies' and other such international initiatives.
- Promote greater dialogue between international, national and local actors in the development of well-being accounts.

Achieving broad engagement across society

- Mobilise public support in order to exert political pressure and to stimulate debate about the role of well-being measures in matters of national policy, greater mobilisation of the public is required.
- Stimulate further exploration, analysis and dialogue about both the early findings and potential structure of National Accounts of Well-being.

The ideas outlined in this paper regarding GNH and the development of National Accounts of Well-being speak to the very heart of what it is we value as a society, calling for a fundamental rethink about our notions of progress and a transformation in the way in which we plan, deliver and evaluate policies which aim to improve people's lives.

In Europe we now have compelling evidence to show that our current economic model and economic accounting frameworks are hugely limited, and that a shift to measuring success in terms of well-being is not only desirable, but necessary, if societies are to truly flourish. We, at the centre for well-being at **nef** are optimistic that European policy makers are finally beginning to notice this lack and will start to focus on how best to create new frameworks that start to measure what really matters to citizens – their well-being. But this paper must end on a note of caution in that it is vital to be aware that measurement itself is not enough to transform societies, for genuine change to happen the measures must be placed at the very heart of the policy making process.

This paper is based upon the full report: National Accounts of Well-being: bringing real wealth onto the balance sheet. Available to download free at the website (www.nationalaccountsofwellbeing.org).

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Psychological Wellbeing

5

Gross Natural Happiness:

Can we have both psychological and ecological well-being?

George W. Burns

Abstract

Addressing the positive links between nature and human well-being, this chapter poses two main questions, and seeks answers in a review of the research across various disciplines as well as in the author's 35 years of experience of using nature in psychotherapy. First, can nature enhance our well-being? In answer, the chapter explores the benefits of nature on our physical, psychological, social and spiritual well-being. Second, can we have both personal and ecological well-being? Though the two often appear in conflict, and are influenced by factors such as religion and culture, nature contact enhances happiness, and happiness enhances ecological responsibility.

Introduction

Let me begin by congratulating His Majesty the fourth King of Bhutan, His Majesty the fifth King of Bhutan and the new democratic government of Bhutan on their efforts to preserve the unique biodiversity of this very special part of the world. Bhutan's approach to conservation is not only a bold and advanced move but it is also one that recognises the close relationship between human happiness and our environment. And it is that relationship that I want to explore in this presentation.

Already we are aware that the loss of ecological well-being can lead to the loss of human happiness. In neighbouring Nepal, there are, unfortunately, examples of where deforestation has resulted in landslides that have wiped out many villages, taken

innumerable lives and caused a high degree of suffering. At a more global level, it is hard not to be aware of how climate change – the product of many factors including deforestation and the consumption of fossil fuels – is causing glaciers to retreat, food chains to break down, ocean levels to rise, and human suffering to increase - along with that of other living beings on this planet.

The western world has, for a long time, been aware of these problems and has approached them in terms of what David Suzuki referred to as “a matter of survival.” In pointing out the relationship between nature and happiness I believe that Bhutan has highlighted something a lot more subtle but, nonetheless, crucially important. That is: Long before the loss of nature becomes a matter of survival it will have an impact on our happiness and psychological well-being. Already many researchers and authors have claimed that the more detached people become from nature, as a result of increasing urbanisation, the more their health suffers both physically and mentally (Nesse and Williams 1996; Nesse 2005).

In this presentation I will pose two main questions: (a) Can nature enhance our well-being? And (b) Can we have both personal and ecological well-being at the same time?

Many people have hypothesised over recent decades that the distancing of the human species from nature through high urbanisation, indoor entertainment, and climate controlled homes, offices and cars, has led to a detachment of our historic and evolutionary contact with nature. Confirmation comes in studies showing that modern urban dwellers spend an average of 93% of their time indoors (Woodcock & Custovic, 1998). This in turn, it is claimed, has had a detrimental effect on our physical health, personal well-being, interpersonal relationships and relationship with our environment. And what does that mean for our levels of happiness?

Can nature enhance our well-being?

In answering this question, I will address some aspects of the theory, research and clinical data in the areas of physical, psychological, social and spiritual well-being. I will also incorporate some of the things I have learnt about using nature-based approaches to clinical psychology over the last 35 years.

In preface, let me point out that when I talk about nature I am primarily talking about positive, non-threatening interactions with nature. There are aspects of nature that, at times, are not user-friendly to human beings. Simply living on this planet puts us at risk of being swamped in a flood or tsunami, buried in a volcanic eruption or a landslide, or struck by lightning. We are also part of a food chain: to survive we must destroy – and this is true for other life forms as well. Many living organisms from lions and crocodiles down to bacteria and viruses are as happy to consume us as we might be to consume domestic animals or plants. When I speak of the human-nature relationship I am referring to interactions with non-threatening environments that have positive, emotional and aesthetic value.

Physical well-being

Evolutionary medical researchers claim that the rapid alienation from the environment in our species development has meant that natural selection has not had time to revise our bodies for coping with factors such as fatty diets, fast travel in motor vehicles, drugs, artificial lighting and air-conditioning. In other words, the natural ecology in which we evolved is a markedly different world from the modern city lifestyle that most of us, particularly in the western world, now live. Chronic diseases such as atherosclerosis, diabetes, hypertension and the complications resulting from smoking, alcohol, and over eating are ones that were rarely found in hunter-gatherer societies (Nesse and Williams 1996; Nesse 2005). In addition, communicable diseases were also much rarer in our distant ancestors due to the fact that they lived in small nomadic groups and were less likely to pass on

diseases. The contrast we see in rising rates of tuberculosis in the western world and the spread of diseases, such as the bird flu, occur where urbanised living is common. In fact, surprising as it may seem, palaeontologists tell us that our historic ancestors generally lived a healthier and more disease-free life than us, their current urbanised counterparts (Bowden et al., 1990).

If detachment from nature has a negative consequence on our health then does interaction with nature improve our physical well-being and or help prevent disease? Fortunately, research over the past few decades has enabled us to affirm this in a positive way.

First, there is the long and established body of evidence showing that contact with nature promotes healthy patterns of behaviour and thus serves a preventative role against the onset of health problems (Burns, 2005). Simple exposure to nature scenes tends to promote more health-oriented behaviours, increases pleasurable emotional states and, thus, reduces the desire for people to engage in unhealthy behaviours such as smoking and drinking. From a large and comprehensive study that included some 1400 subjects who participated in a two week long wilderness course, Greenway collated extensive data. Using approximately 700 questionnaires, 700 interviews and 52 studies that tracked participant's experiences over several years, he found that the nature-based course enabled 90% of participants to break old, unhealthy habits such as the consumption of alcohol and tobacco (Greenway, 1995).

Second, contact with nature serves a health-enhancing, disease-preventing role in that our bodies generally function more healthily in nature settings. If you look at indices such as heart rate, skin conductance, blood pressure and muscle tension, there is good evidence that measurement of all such physical responses show movements in positive physiological directions when people are exposed to nature scenes (Ulrich et al., 1991; Ottosson and Grahn, 2005b).

Third, nature contact is not just preventative, it is also healing. And these benefits may be derived from something as simple as looking out the window onto a view of trees, parks or gardens. The husband and wife team of the Kaplans have spent a lifetime researching these effects and have documented restorative benefits, both physically and emotionally, from interacting with nature (Kaplan & Kaplan, 1989; Kaplan, 2001). Hospital patients who have a view of a natural landscape rather than looking out onto a brick wall or the interior of a ward are discharged quicker, consume less painkilling medication and are rated more cooperative by the hospital staff (Ulrich 1984). There have also been documented cases where contact with nature may contribute to the treatment of patients such as those suffering with cancer (Burns 1998).

Finally, as we shall see in the next section there may also be secondary gains from nature contact in terms of physical well-being. If nature can promote psychological well-being we have good evidence that people who are psychologically robust, happy, positive and optimistic generally have higher levels of physical well-being, suffer less severe illness, live longer and - if they do become ill - have better recovery rates (Danner et al., 2001; Fredrickson & Levenson, 1998; Maruta et al., 2000; Ostir et al., 2000; Vaillant, 2004).

Psychological wellbeing

In terms of psychological well-being nature scenes evoke many responses that are conducive to happiness and contentment (Fredrickson 2000). In general we as humans show a preference to views of natural landscapes over human constructed landscapes (van den Berg, Hartig & Staats, 2007). We prefer to live and work in natural landscapes, and we tend to select nature as the environment in which we wish to holiday. Assumedly, we have these preferences because nature offers many enhancements to our well-being. Generally, these psychological benefits can be found at the emotional, cognitive and behavioural levels, and these are the three I will address here.

Emotional benefits

A long established and growing body of research, particularly in the area of environmental psychology, has demonstrated the benefits of nature contact to our emotional well-being. Greenway, whose study of 1400 subjects I have previously cited, found that some 90% of respondents reported a variety of psychological enhancements from their two weeks in nature. These included an enhanced sense of aliveness, well-being and energy. In addition, 77% reported initiating a major life change - in either a personal relationship, employment, housing or lifestyle - after returning from the wilderness (Greenway, 1995).

Gaining such positive emotional benefits seems to work in several ways. First, nature can enhance states of positive affect. Why do people pay significantly higher prices to live in homes with views of nature such as over the ocean or a lake? Why do developers create lakes and canals around which to build luxury housing estates? Why do people travel to countries like Bhutan to see the beautiful mountains, diverse forests and wildlife? Why do we spend our holidays trekking through forests, snorkelling over tropical reefs or skiing down mountain slopes? In some ways this is self-evident. We enjoy it. We get sensory-stimulation, positive emotions and pleasure from being in contact with nature.

Second, nature contact can provide a buffer against emotional distress, thus serving a preventative role in the area of mental health. Generally the happier we are, the greater our range of positive emotional responses, the less likely we are to slip into clinically unhealthy states of sadness, anxiety or anger (Fredrickson, 2005; 2008).

Third, even if we do experience distressing emotions, there has been considerable work done on the role of nature in the restoration of emotional well-being ((Kaplan, 1995, 2001; Ottosson and Grahn, 2005a, 2008). To name just a few of these benefits, interacting with nature can help reduce levels of stress, and improve parasympathetic nervous system functioning. Nature

contact can enhance feelings of self-concept, self-esteem and self-confidence, and has been used facilitate to treatment of the mentally ill. Case studies have shown the benefits of nature in therapy for depression, anxiety and post trauma disorders (Burns, 1998, 2005, 2008). Fredrickson claims – and demonstrates – that positive emotions such as we experience in nature, have an “undoing” effect on negative emotions (2005, 2008). In other words, using nature to help create emotional well-being is a way of overcoming emotional suffering.

Cognitive benefits

Does contact with nature also affect mental performance and cognitive functioning? And, if so, how? It would be easy to assume that college students who sat studying in front of a window that viewed onto nature could be easily distracted from their studies. But the opposite seems to be the case. The attentional performance of college students at examination time, was significantly better for those with a nature view than those whose window looked out onto a human-constructed scene (Tennessen & Cimprich, 1995). In another study the researcher addressed the post-operative attentional deficits commonly displayed by women recuperating from surgery for breast cancer. The control group received the normal post-operative care while the treatment group received the same standard care plus nature-based activities. These included activities (such as tending plants or sitting in a park) that were undertaken 3 times a week for a period of 3 months. The group undertaking the nature-based activities showed significant improvement in concentration as measured on standard neuro-cognitive instruments.

Does this effect hold for problems of chronic concentration difficulties as well as in the short-term areas of study and post-operative recovery? The answer seems to be that it does. If you give two groups of children suffering Attentional Deficit Disorder (ADD) identical tasks to perform, one group doing them indoors and the other in natural, outdoor settings, it is the second group that shows progress in (a) focus of attention, (b) completion of

tasks, and (c) following of the instructions (Taylor, Kuo & Sullivan, 2001; Kuo & Faber Taylor, 2004). As such, it seems that nature has the potential to serve as a nonchemical, easily accessible and inexpensive treatment for ADD. The researchers propose that natural environments assist in the recovery from "attention fatigue", because they have a restorative effect on our ability to focus and attend.

Behavioural benefits

I have already mentioned how interacting with nature can increase more health-oriented behaviours and eliminate less healthy behaviours such as those related to smoking and alcohol. Such interactions can also enhance pro-social behaviours that are basic to our ability to relate with other people and lead a psychologically healthy and functional life.

When we think of nature, we often think of the mountains, forests, oceans and such physical features, but nature is also made up of other living, sentient beings in the form of animals, birds, reptiles, insects and humans. There is a growing research and therapeutic interest in how animals can help in the treatment of mental health problems as well with the enhancement of well-being. We are seeing dolphins used in the treatment of depression, horses in riding activities for disabled children, and pets for people in geriatric care, to name just a few. Wildlife tourism, given its proclaimed benefits for human well-being, has expanded to an economically valuable growth industry (Burns, G. L, 2004, 2006).

One of the benefits of human-animal interaction is the promotion of pro-social behaviour in children. If you want your children to grow up with empathy, compassion and good social skills, you will enhance the development of those behaviours by buying them a pet or ensuring they interact with animals. Empathy and pro-social behaviours are often considered the essential building blocks in the development of psychological and social well-being among children. Following an extensive literature review on this topic, Thompson and Gullone (2003) proposed that direct contact

with animals is an optimal method for promoting the necessary pro-social behaviours for a successful adult life. Essentially this means that children who learn good relationship behaviours with animals are likely to have better relationship skills with fellow humans.

Social well-being

What happens when researchers take the top ten percent of happy people and ask, "What are the key happiness factors in these 'very happy' people?" The single most important variable to come out of that enquiry is that the 'very happy' have good social relationships with other people (Deiner and Seligman, 2002). Emmons sees "The ability to engage in close intimate relationships based on trust and affection" as "the hallmark of psycho-social maturity and a key component in psychological growth" (2003, p. 111). Reis and Gable clearly assert, "Relationships are an important, and perhaps the most important, source of life satisfaction and emotional well-being" (2003, p.129). If relationships are so important to our happiness, the next questions become, 'Does nature have a role in the facilitation of positive social relationships? If so, what sort of influence does it have? And how can we make use of this in therapy, social activities and community planning?'

Kuo and Sullivan have undertaken a series of studies that have explored these very questions and found both a positive and a preventative role of vegetated environments for social relationships. In the positive role, they found that spending time in the treed public spaces served as a significant predictor of community bonds. Their subjects were residents of urban public housing developments. Those residents who preferred and frequented treed public spaces – as compared to those who spent more time in treeless areas – spoke more to other people, communicated better, were more likely to know their neighbours by name, and reported feeling a greater sense of community (Kuo, 2001; Taylor, Wiley, Kuo and Sullivan, 1998).

On the preventative side, they discovered something that all architects and urban planners should be aware of: a view of nature can negate negative social behaviours. Domestic violence - whether toward adult partners or children - was significantly lower when families had a window view of nature (Kuo and Sullivan, 2001).

Case studies are often considered the poor cousin in the domain of scientific data that aims to show bigger population trends and, in design, is more controlled. However, case studies can highlight possibilities. If something is possible for one person, then it may also be possible for another. This preface is to say that case study material has also shown nature to be of benefit in facilitating therapy for couples presenting with marital or relationship problems (Burns, 2001, in press). Couples often begin their relationships in natural settings, courting under a full moon, watching a sunset across the ocean, or taking a drive in the countryside. As relationships develop they are often caught up in the responsibilities of looking after the house, paying the mortgage, getting ahead at work, and tending to the children. Time spent in relationship-enhancing activities in nature tends to dwindle and the relationship begins to flounder. Helping couples reconnect with nature can help the relationship flourish once again (Burns, 1998, 2001, in press).

Spiritual well-being

Spirituality has long been a shunned topic in the field of science. It is hard to define, approaches knowledge from a different route, and has not been considered readily accessible by the investigative methods of hard science. At times, science and religion have not been the most amiable of companions, even conflicting strongly over their different approaches to understand life and its meaning.

Perhaps one of the most influential figures in bridging this gap is the Dalai Lama who has organised and participated in meetings around the world for scientists and religious practitioners to engage in mutual dialogue. In these he has actively invited (a)

scientists to investigate religion, and (b) religious practitioners to be open to science (Goleman & Thurman, 1991).

Some scientists are now acknowledging that there are “compelling” empirical and theoretical reasons to ensure spirituality is included in any thorough account of human well-being (Emmons, 1999; Piedmont, 1999). Some have applied rigorous disciplines like neuroscience to the investigation of what is happening in the brain during mindfulness and meditation practise, such as with monks (Davidson, 2005).

One of the things we are discovering is that spirituality rates as one of the high correlates of a life well-lived. This relationship between religious belief and human flourishing is born out in research across gender, age, religion and nationality (Myers, 2008). If you want to experience higher levels of subjective well-being, particularly in regards to greater positive emotions and higher satisfaction with both life and marriage, then having a strong sense of spirituality will be of direct assistance (Emmons, 2003; Emmons, Chueng, & Tehrani, 1998). In summing the research in this area, Burns and Street claim “numerous researchers have found that those of us with strong spiritual beliefs are happier and better protected against depression than those who have no particular sense of spirituality. Similarly it seems that people cope better with major adversity in their life and major physical illness if they have a sense of established spirituality (2003, p.197).”

If spirituality is an important factor in human happiness, where does nature fit into the picture? From the very origins of our species nature has shaped how we live and how we perceive the world in which we live. Nature has always been a source of awe, a source of survival, a source of pleasure, and a source of fear. Nature has given us the sense of being a small speck in the universe, and of there being something bigger, more powerful than us. As such our ancestors learned to respect it, appease it, make offerings to it, and deified it. Many cultures have looked on the sun and moon as deities, or seen features of the natural landscape as the abode of various deities. Mountains and

waterfalls, animals and trees have either become gods and spirits or the home of such beings. Across all cultures we see the defining of natural places as sacred sites attributed with qualities of power and healing, as we as a species have sought to understand the processes of nature and form a relationship with them.

Regardless of whether we follow our ancestors' beliefs or not, regardless of what deity we may believe in or not, regardless of what religion we attend or not, nature can contribute much to our sense of spiritual well-being. In nature people commonly describe a sense of awe when standing at the base of a powerful waterfall, gazing up at towering tree, or sitting quietly on a clear evening looking at a canopy of sparkling stars. In nature we may experience a feeling of connectedness with forces bigger and more powerful than ourselves. In nature we may encounter experiences of transformation (Burns, 1998). Contact with nature can add to inner reflection and contemplation (Fredrickson and Anderson, 1999). It can facilitate personal growth (Burns, 1998), build a sense of spiritual well-being (Heintzman, 2000), and contribute to feelings of wholeness or belonging (Williams and Harvey, 2001).

Given that nature can contribute such well-defined enrichments to our happiness and well-being, physically, psychologically, socially and spiritually, this leads us into the next question.

Can we have both personal and ecological well-being?

In a journal of Social Indicators Research article, Brown and Kasser raised an important question: Are psychological and ecological well-being compatible? (2005). Initially contemplating their question, it seemed to me that it had an apparent cultural bias. Western cultures have long been known for the promotion and the protection of the rights of the individual. Western psychology, since the time of it's founding father, Sigmund Freud, has focussed on the inner workings of the individual. In doing so, it has not only paid less attention to the relationships and systems in which that person exists but has also actively rejected the values of interacting with nature. In fact, Freud made his views on the

ecology very clear when he declared, "Nature is eternally remote. She destroys us – coldly, cruelly, and relentlessly" (cited in Roszak 1996, p.22). This has resulted in a succession of psychotherapeutic models with a mammoth conceptual schism between person and planet. They have been based in the common-place metaphor that locates the psyche 'within' and the real world 'outside.'

This western dichotomy of mind and nature contrasts markedly with predominant eastern views. In 1992, I was both honoured and privileged to be invited to participate in a symposium with His Holiness, the Dalai Lama of Tibet, on the topic of Mindsience: A dialogue between East and West. After the Dalai Lama had spoken about Tibetan Buddhist concepts of the mind, one of the other participants, a senior professor of neurosurgery who had spent his professional career studying and operating on the physiology of the brain, asked the Dalai Lama, "Where is the mind?" The Dalai Lama pointed to his head with both hands, as if he knew that was what his audience of Western scholars might expect. "I think it is somewhere...", he said, pausing for effect. Then with a mirthful laugh he swept both arms in a broad, encompassing circle around his body, adding "here." His gesture took in not only his brain and every cell of his body but extended beyond his fingertips to the surrounding environment. It swept in the audience, the lecture theatre, and the world outside while, at the same time, sweeping away the notion that the mind resides solely in the brain. His gesture suggested that mind was part of a wider integrated knowing, part of an interconnectedness of all things.

Another aspect of the western focus on individual happiness has arisen from a philosophical trend that probably reached its peak in the 1970's but continues to permeate our consciousness. This trend was epitomised in the title of Robert Ringer's book, *Looking Out for Number One*. It seemed to imply that one needed to put one's self first, regardless of other people or the environment. Advertisers have picked up on this self-focussed route to

happiness and cunningly associated individual happiness with materialism and consumerism (Burns and Street, 2003).

Part of the popular western attitude of happiness may also arise from the west's religious background in the Jewish/Christian tradition. This tradition sees life as a linear process: you were born, live, die and go on to heaven or hell. There are many sayings that life is not a dress rehearsal and that you only live once so you need to make the most of it. If I am only here for the length of this short lifespan it doesn't matter that I destroy the trees, kill off the wildlife, or contribute to global warming. If I am not coming back I don't need to be responsible for the mess that I might leave the planet in.

From the combination of these influences, many people see individual happiness as distinct from - and maybe even in opposition to - the well-being of the ecology. They have adopted an attitude that it doesn't matter how much petrol my car guzzles, how much fossil fuel I consume in living the lifestyle I want, or where the nuclear waste is dumped for the energy I need to power the appliances in my home - as long as I get what I want, I will be happy.

At first glance, the apparent cultural bias of the question about individual well-being versus ecological well-being does not seem so relevant in the east - for several reasons. First, Buddhism advocates the protection of the life of all sentient beings and thus implies that nature needs to be protected to this end. Second, Buddhism has a cyclic concept of life in its philosophy of reincarnation. If I am going to be coming back to this planet, in whatever form, then it is wise and prudent for me to look after it.

However, in further reflecting on this question of individual versus ecological well-being, I think it holds relevance for both east and west. Who in the world wouldn't want the possessions that make life that much more comfortable and enjoyable? Indeed, shouldn't we all have equal rights to the health benefits of

refrigerators, the convenience of cars, or access to computers and larger television screens?

In broad terms, individual happiness is often perceived in terms of getting my personal needs and wants met. Ecological well-being, on the other hand, is often presented in terms of sacrifice: I have to give up my wants or possessions for the good of the ecology. Interestingly, studies that have explored this perceived dichotomy have not necessarily found that it is upheld. In both adult and adolescent populations it appears that people indicating higher levels of subjective well-being also reported more ecologically responsible behaviour (Brown and Kasser 2005). There is also evidence that people who engage in activities of environmental conservation experience less depression and greater levels of subjective well-being (Burls & Caan, 2005; Townsend, 2006)

Mindfulness seems to be one of the variables here that helps bridge the gap. People who engaged in mindfulness practice simultaneously reported high levels of both subjective well-being and behaviours that were caring of the environment. Contrary then to the dualistic thinking that, on the one hand, says *To be happy I must consume* and, on the other hand, *To look after the environment I need to make sacrifices*, the current research is offering hope that there can be a mutually beneficial relationship between personal and planetary well-being. Helping people have a greater connection with nature is also likely to have them engaging in more ecologically friendly behaviours *and* experiencing a greater level of subjective well-being (Mayer & Frantz 2004).

Again, there is nothing new about the fact that we as humans are both happier and healthier as the result of interacting with nature. Two decades ago, the Kaplans concluded, 'People with access to nearby natural settings have been found to be healthier overall than other individuals. The longer-term, indirect impacts (of 'nearby nature') also include increased levels of satisfaction with one's home, one's job and with life in general' (Kaplan and Kaplan, 1989, p. 173).

To me it seems that if we want to derive those benefits from our relationship with nature, we need to consider it in the way we do any other relationship. It needs to be dynamic, interactive and positive. If another person gives to you in the way of positive comments, positive feelings or positive behaviours, you are more likely to give back in kind. If that person is receiving similar things from you then they in turn are willing to give more - and the relationship works on a positive, caring and mutually supportive basis. Similarly, if we allow ourselves to enjoy the positive benefits that we get from nature, and acknowledge those benefits in terms of our physical, psychological, social and spiritual well-being, we are likely to want to give back in a caring, supportive way toward nature. If we, in turn, give back to nature then that helps ensure a sustainable environment that will contribute back to our well-being. In this way we all benefit.

In conclusion, let me once more applaud Bhutan in its recognition of the relationship between nature and human happiness as well as for its actions to preserve such a beautifully biodiverse part of the world for the future happiness of each and everyone of us on this planet.

I can think of no better way to draw this discussion to an end than with the words of the Lord Buddha.

The forest is a peculiar organism of unlimited kindness and benevolence that makes no demands for its sustenance, and extends protection to all beings, offering shade even to the axe man who destroys it.

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6

The Nature-Nurture Debate: New evidence and good news

Ragnhild Bang Nes

Abstract

How can behaviour genetics contribute to the future of public health and prevention? This paper reviews the new evidence from behaviour genetic studies on happiness and well-being and discusses its implications for public health care challenges. Most policy makers seem to be unaware of the important implications this research has for our understanding of the environment. It is concluded that we may benefit from greater use of genetically informative designs due to their potential for advancing our understanding of both genetic and environmental risk and protective mechanisms, which is necessary for making better, more fully informed policy decisions.

Behaviour genetics and happiness

Why are some people happy and others not? Why do people differ? This is the fundamental question of behaviour genetics which studies how genes and environments influence naturally occurring individual differences. By means of genetically informative data (adoption, twin, and family data), a mature mathematical framework, and sophisticated modelling techniques, observed differences between family members are apportioned into sources of variance due to genes, shared, and nonshared environments. Over the past decade, behaviour geneticists have entered the positive mental health field aiming to delineate the magnitudes and mechanisms by which these aetiological influences affect human happiness and well-being. This paper summarizes the recent behaviour genetic findings, and broadly

discusses the theoretical and practical implications of such research for public health and happiness.

The recent background

Recognition of the importance of genetics is one of the most profound and dramatic changes within the behavioural sciences during the past few decades (Plomin, DeFries, McClearn, & McGuffin, 2001). The behaviour genetic findings are impressively robust and indicate that virtually all psychological traits are at least moderately heritable. Quantitative genetic methodology and principles of population genetics were developed at the beginning of the 20th century. Since then there have been considerable changes in the prevailing views on the relative importance of genetic and environmental influences. A preoccupation with environmental influences on health and behaviour characterised the behavioural sciences until the 1960s (Rutter, Moffit, & Caspi, 2006). The behaviourist movement, which studied behaviour entirely independent of biology and evolutionary history, had a profound influence on most theories of learning and development from the 1920s to the 1960s. The idea of irreversible effects from early childhood experiences was highly influential (Rutter et al., 2006), and numerous studies reported profound effects from environmental risk factors such as adverse life experiences and parental behaviour on later development of mental health (e.g. Ainsworth, 1962). From the late 1960s, there was a considerable growth in behaviour genetics. Methodological strategies improved, and a large number of twin, adoption, and extended family studies clearly showed that mental health are caused by multiple genetic and environmental factors. By the early 1980s, environmental factors were considered less influential than previously assumed. This major shift was largely due to research documenting that:

1. Children have a strong impact on family functioning, not only the other way around (e.g. Bell, 1968).

2. Environmental experiences tend to make children growing up in the same family different rather than similar (Plomin & Daniels, 1987).
3. Correlations between environmental risk factors and mental health are often genetically mediated (Rutter et al., 2006).

These important findings underscore that i) separating environmental effects on the person from person effects on the environment (i.e. testing for the direction of causal influences) is necessary, ii) environmental influences often work in ways different from previously assumed, and iii) many claims in the research literature on environmentally mediated risks may be questionable due to considerable genetic influences on individual differences in exposure to life events.

Development and refinement of molecular genetic strategies in the 1990s led many researchers to believe in the possibility of identifying specific genes with causal effects on mental health and happiness. These expectations have not been met, perhaps largely because the traits relevant to biological psychology are characterised by a continuous distribution and influences from multiple genes and environmental factors that are often immeasurable, or entirely unknown. Due to small effects, genetic heterogeneity, and complex patterns of interplay with environmental factors, as well as psychometric difficulties, identification of susceptibility genes to psychological characteristics, in a robust and replicable manner, is highly complicated, if at all possible in the near future (Merikangas & Risch, 2003). Identification of single genes would also not elucidate the causal pathway of mental health and happiness. Genes operate in co-action with environmental factors as part of a multifactorial causation process, with effects usually being contingent on a multitude of environmental circumstances. Behaviour genetic designs do however offer novel tools and methods, including a mature mathematical framework and specialized computational tools, to address central issues in well-

being research with important implications for public efforts aiming to alleviate suffering and promote happiness and health.

New evidence

Focus on well-being research in behaviour genetics, is a fairly recent development, reflecting the more general reorientation within the mental health field today towards a growing focus on positive indicators of mental health. So far only a few behaviour genetic studies have ventured into the positive mental health field, and most studies are based on simple, self-report measures of positive indicators such as *satisfaction with life* and *subjective well-being* (SWB). Although there are a limited number of studies, the findings are generally consistent and based on thousands of twins from several different countries, of which the majority is reared together, but some also reared apart. Results indicate that genetic influences are important for happiness and well-being, accounting for 35-50% of time-specific variance (heritability),^{*} and as much as 80% of long-term levels (Lykken & Tellegen, 1996; Nes, Røysamb, Tambs, Harris, & Reichborn-Kjennerud, 2006). These results are consistent with a theory positing a general positivity factor, or readiness to perceive and interpret the world more or less positively, which is stable across time and strongly influenced by genes. Behaviour genetic studies have also recently indicated that the well-known association between well-being and stable personality traits such as extraversion (Lucas & Fujita, 2000) and neuroticism (Fujita, 1991) may be due to common genes (Weiss, Bates, & Luciano, 2008; Eid, Riemann, Angleitner, & Borkenau, 2003) possibly involved in susceptibility to experience positive and negative affect (Watson & Clark, 1997). Happiness and

* These percentages represents amount of difference between people (i.e. in a particular environment at a particular time) attributable to genetic causes.

personality thus appear to be influenced, at least partly, by the very same set of genes.

The non-genetic influences on well-being and happiness largely reflect transient environmental effects which are individual-specific (Nes et al., 2006). This indicates that only minor, or negligible, influences are due to *shared environmental factors* which refer to environmental influences that make family members similar. The behaviour genetic findings thus convincingly show that familial resemblance essentially is due to shared genes, and not shared environments (Plomin & Daniels, 1987). These results fit well with findings on related variables, such as personality traits and liability to depression and distress (e.g. McGue, Bacon, & Lykken, 1993; Rijdsdijk, Schnieder, Ormel, Sham, Goldberg, & Spector, 2003). The findings are similarly consistent with the vast research literature on well-being outside of the behavioural genetic domain which has documented surprisingly little influences from shared environmental factors (e.g. demographic factors) on subjective happiness despite most theoretical perspectives in psychology, ranging from psychoanalysis to social learning theory, assuming that major causes of individual variation are associated with shared aspects of the family.

Findings of mainly transient environmental effects on happiness and well-being are confirmed by different methods (Kahneman, Krueger, Schkade, & Schwartz, 2004). Along with findings from longitudinal research on related constructs (e.g. anxiety, depression, personality), the results collectively suggest that environmental influences are important, but do not exert long-lasting redirection or enduring changes unless exposure is continuous (e.g. Nes, Røysamb, Reichborn-Kjennerud, Harris, & Tambs, 2007; Rijdsdijk et al., 2003; McGue et al., 1993; Diener, Sandvik, Pavot, & Fujita, 1992; Merikangas, Zhang, Avenevoli, Acharyya, Neuenschwander, & Angst, 2005).

Good news

Specific policy recommendations do not usually flow from behaviour genetics, and behaviour geneticists rarely make explicitly clear how their findings can be applied to prevent psychological problems or promote happiness and health. The behaviour genetic findings are commonly misunderstood, perhaps partly because the findings are poorly explained to policy makers and the general public. Results are simplified by researchers as well as the media, leading to inaccuracies, misapplications, and polarizations. Misunderstandings may also be due to the counterintuitive meaning behaviour geneticists assign to their concepts, such as the “shared environment”. To behaviour geneticists, the shared environment does not refer to family-wide influences that are objectively shared. It is a measure of environmental *effects* and used in a broad sense, encompassing prenatal influences, nutrition, and illness - not just family socialization processes. The behaviour genetic results most clearly communicated are usually the heritability estimates, which have few policy or practice implications. Workers in the social policy arena are thus often unaware that the most important discoveries made in behaviour genetics are concerned with how the environment, and not genes, affects human behaviour. Due for instance, to permitting control of genetic and social endowments that are unobserved in social science data sets, behaviour genetic research may be indispensable for testing hypotheses about environmental risk mediation. In the following I will outline some of the more specific contributions and potentials of behaviour genetics.

The relativity of heritability

All of the biometric studies on happiness-related constructs have provided massive evidence against predetermination, reporting heritability estimates in the 30-50% range. Large-scale family studies have found even less genetic contributions. Genetic determinism is thus not warranted by the evidence. This is also no surprise. Pre-programmed well-being or despair would be

incompatible with the principle of evolution, which raw material is adaptation. The complexity of most behavioural systems necessarily implies that genes are not destiny - they contribute to probabilistic propensities. Far from representing the ultimate limits of what we may achieve, genes determine only the likelihood or probability of a particular outcome.

Heritability estimates are *relative* estimates, referring to genetic influences on individual differences, and indexes not only the direct genetic effects, but also the effects of gene-environment interplay. Heritability is estimated from correlations between family members, mostly identical and fraternal twins, and represents the amount of total variance in a given trait attributable to genetic factors - in a specific population at a specific point in time. Caution must therefore be taken in generalizing the heritability findings across populations. Heritability describes what is in a particular population at a particular time (Plomin et al., 2001), and refers to differences in populations, never to single individuals. This can best be illustrated with a concrete example. Heritability for body height is shown to be high, with heritability estimates up to about 0.90. This means that 90% of individual differences in body height in a specific population at a specific time are attributable to genetic differences. Despite body height being highly heritable, however, average height has increased over the last generations, leaving us on average taller than our grandparents. This is most certainly due to changes in nutrition; not changes in our gene pool. Behaviour genetics is not equipped to study causes of average height, or the causes of changes in average height, however. Behaviour genetics deal with the causes of individual differences. Environmental factors may thus have profound influence on average body height despite high heritability for body height. In many countries, including Norway, environmental factors inhibiting growth is not very prevalent. Due to the environment being fairly similar for most, environmental factors contribute little to individual height differences in such countries today. In societies in which some citizens have a poor diet and others not, environmental factors may have a substantial

impact on individual differences in height, and consequently the heritability estimate will be less.

The same holds for behaviour genetic research on happiness and well-being. High heritability does not necessarily limit the effectiveness of policy efforts aiming to raise average happiness. If environments change, so may the relative impact of genes and environment. Indeed, the more we improve our society, often the greater the genetic component in the remaining variation – thus, high heritability might reflect a social good, that is, of the successful elimination of much environmental inequality.

Genetic stability and environmental change

The vast research literature on happiness and well-being indicates that happiness is fairly stable across situations and the life span. This may partly reflect a dispositional tendency to experience life positively or negatively, and partly a cumulative effect of positive and negative life events (Brief, Butcher, George, & Link, 1993). Behaviour genetic research has shown genes to influence dispositions as well as exposure to life events. The few longitudinal behaviour genetic studies of happiness related constructs have reported two salient findings: i) genetic factors are important for generating stability, and ii) the environment is important for generating change. Whilst the genetic findings are commonly broadcasted, the environmental effects are often overlooked. Do strong and stable genetic effects indicate that opportunities for change are futile? Not at all! Well-being levels are not set in concrete. In fact, usually less than 50% of the time-specific variance is due to genes. At any given moment in time, environmental circumstances are as influential in determining our affective valence as genetically based dispositions. Long-term stability is also not accounting for more than half of the total variance, leaving change an important and constant factor in life. The limited stability of most environmental influences indicates that circumstantial boosts in well-being usually are short-lived, however, and that most people adapt to new circumstances. Thus,

we seem provided with an internal buffer which prevents drastic mood changes and defends against the negative potential inherent in the environment. How this genetic buffer works, is yet unknown. Genetic effects often operate on a level far removed from the DNA, and various indirect pathways (through individual choice of environments or exposure to life events), physiological, or biochemical processes may provide important links between happiness and genes.

The longitudinal results also highlight the importance of using both subjective and objective well-being indicators when monitoring populations and individuals. Measures of subjective happiness offer a break from conventional principles of utility, and happiness is irrevocably grounded in mental first-person experiences. However, global self report measures of well-being and happiness do not only reflect the objective quality of people's lives *per se*, but also the workings of our brains and our genes, which shape perceptions and responses to events. Global well-being measures may therefore be fallible estimates of the objective quality of people's lives, and "objective" (e.g. physical and mental health, environmental preservation and social wellness, individual and political freedom, etc) as well as subjective measures are necessary when surveying and monitoring populations. This also implies that policies improving meaningful, good, or pleasant experiences should be pursued also when there are no apparent changes in subjective happiness.

The findings may also remind us that happiness and unhappiness are not ends, but means. Negative feeling states, although subjectively unpleasant, provides us with a necessary signal mechanism, a wake-up-call system to our consciousness to take notice of an adaptive problem in need to be solved, which subsequently motivates action to solve it (Hill & Buss, 2008).

The shared environment

The behaviour genetic finding of negligible influences from the shared environment on happiness and mental health is widely debated. Despite their shared upbringing, sibling similarity in well-being and mental health appears to be largely, or entirely, attributable to shared genes and not to shared environments. This claim is sometimes believed to indicate that family wide adversities, including hazards such as poverty, loss, and discord have little, or negligible, impact on risk and protection for mental health. This common misunderstanding may partly be caused by the counterintuitive meaning of the shared environmental construct. To behaviour geneticists, the “shared environment” signifies an inference derived from any evidence of sibling similarity which is not caused by genes. It reflects an effect from some “black box” environmental component which includes all non-genetic influences that produce family resemblance. If an objectively shared family wide factor, such as conflict or poverty, impinges differently on siblings in a family, the effect is classified as “non-shared”. The effect is only classified as shared if it in general – across families – tends to make siblings similar. Thus, lack of evidence for shared environmental influences should not be taken as indication that family factors are not important for our well-being or ill-being. Family features might quite possibly exert large effects, but tend to influence the different family members differently. What the behaviour genetic studies imply is essentially that environmental influences do not operate on a family-by-family basis (e.g. parenting style do not have general effects), but rather on an individual-by-individual basis (affect siblings differently), which clearly underscores the importance of studying more than one child per family when investigating environmental risk and protective factors.

Nevertheless, shared environmental contributions are sometimes found to be evident in designs assessing vulnerability factors more directly even when not apparent when treated as unmeasured inferred variance (Kendler, Neale, Prescott, Kessler, Heath, Corey,

& Eaves, 1996). And although many twin studies have stopped short at testing statistically for the existence of an environmental “black box” component (Caspi, Taylor, Moffitt, & Plomin, 2000), behaviour genetic methods do enable inclusion of measured environments in their models. For example, Caspi et al. (2000) explored whether neighbourhood deprivation could explain familiar aggregation of behaviour problems, and the extent to which this risk factor in fact was environmentally mediated. A major strength in this design was its potential to separate the “real” effect of deprived neighbourhood conditions which is difficult, if not unfeasible, in samples that are not genetically informative. The results clearly evidenced a significant effect from deprived neighbourhood conditions on children’s mental health above or beyond a genetic liability to behaviour problems.

Genetic effects on the environment & control for endowments

Behaviour genetic research has indicated that the vast literature on environmentally mediated risk is questionable. Many environmental measures widely used in psychology and public health work show genetic influences, because people create their own environments partly due to genetic reasons (the nature of nurture). Some supposedly environmental factors influencing happiness and health are in fact genetic (or at least partly so). This is due to environmental measures commonly being indirect measures of behaviour or personality. Such genetic effects on the environment do not disqualify intervention attempts, but certainly has implications for effective public health work. Correct measures of real effects from environmental risk and protective factors are critical when aiming to design effective interventions and promotion programs, or when monitoring the effects from such efforts. An important strength in behaviour genetic designs concerns its potential to control for confounding factors, like genetic endowments when investigating possible risks. Twins share the same womb, are born at the same time, live in the same family, and when identical, they are essentially genetic clones. Data from identical twins therefore allow us to control for

unobserved endowments such as preferences and capabilities due to genes, family background variables, and neighbourhood effects affecting well-being and happiness. Designs permitting control for such endowments have been shown to reach different conclusions on the effects from environmental factors. For example, Kohler and colleagues (2005) explored the effects from partnership and children on happiness using data from Danish identical twins. Several previous studies have shown children to produce decrements in marital satisfaction in most subpopulations in the US culture (Glenn & McGlanahan, 1982) with happiness levels rising to former levels first after the children leave their childhood home (Hakim, 2003).

In addition to exploring the “pure” effect from children and partnership on happiness, Kohler’s analyses enabled i) exploration of economic or rational choice fertility models that may be important in understanding continued partnership formation and childbearing in low fertility contexts, as well as ii) the set-point theory of happiness - as it pertains to partnership and childbearing. If happiness and well-being is partly dependent on genetic influences, personality, and family/childhood background, *and* these factors also affect selection into partnerships and the propensity to have children (which both literature and research suggests), results based on genetically uninformative data may be distorted. Kohler’s results show that partnership formation and childbearing do have persistent positive effects on happiness. His results thus contradict previous findings and raise questions about the primary dominance of genetic influences on long-term happiness as suggested by the set-point theory. His study also showed that men (at least Danish) gain greater happiness from partnership than women, and that a first-born child is an important, direct source of well-being in women, whereas additional children reduce their happiness levels. In contrast, a first child was found to contribute only indirectly in male respondents through increasing the probability of a current partnership, and additional children left their happiness unaffected. The results are discrepant with many

previous studies based on standard samples, and demonstrate the importance of controlling for endowments in research on risk and protective factors for happiness and health. They are also highly informative to social policy planners by showing that happiness gains are primarily associated with a first child and not additional ones. Such results corroborate demographic findings of low levels of childlessness in countries with fertility rates below 1.3, and indicate that women's (or couple's) motivations to have additional children might be more influenced by the costs and benefits of children, than their motivation to have at least one child. Desires for additional children may consequently be much more dependent on socioeconomic conditions and family policy. The results also suggest that changes in family policy aiming to increase fertility may not necessarily increase well-being in parents.

Conclusion

Understanding of how aetiological factors act at a population level may be an important step towards development and utilization of tools to improve health outcomes. The synthesis from The international Conference on Happiness and Public Policy (2007) points out that "a shift of development goals from economic prosperity to subjective well-being requires good measures of well-being and thorough studies of how public policies can impact these measures" (p. 40). Refined, accurate, and quantified knowledge on how environmental factors operate may be a critical step in this direction. Recommendations on policies have often assumed environmental risk mediation without testing alternative possibilities, such as genetic mediation. As environmental risks and protective factors appear to operate in rather different ways than previously assumed, failure to control for genetic influences on the environment, may lead to erroneous conclusions. By permitting control for genetic endowments, behaviour genetic methods may provide one of the best methodologies for studying environmental risk and protective mechanisms necessary for informed policy decisions. So far we are only in the beginning of

theorizing and testing models including such mechanisms in the field of happiness and well-being, and we need further knowledge on how the aetiological influences interplay to make appropriate societal actions.

Overwhelming focus on the reporting of genetic findings may divert interest and attention from the important work behaviour geneticists have done on the environment, which contrary to the many genetic findings do have important policy or practice implications. More behaviour geneticists should therefore try to make explicitly clear how their findings can be applied to prevent psychological problems and promote happiness and health. This might act to place the field more firmly within the environmental context, and stimulate further advanced research into the workings of gene-*and*-environment interplay which is necessary for making fully informed policy decisions.

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Time Use and Balance

Time Use and Happiness

Karma Galay

Part one: Introduction

Time is an important resource for everyone. It is also a limited resource in that we have only 24 hours in a day to put to competing uses. How we use this limited resource is important and has implications to our economic and social well-being.

Given this importance, the use or allocation of time has been studied by academics and policy analysts since the early twentieth century (Harvey & Pentland, 1999). However, more systematic collection of time use data originated only in 1924 when significant quantities time use data were collected by Soviet Union (Juster & Stafford, 1991). Since then, smaller “bits and pieces of information” on time use were collected with a focus on specific activities such as leisure and travel patterns, but it was not until 1960s that more systematic attempts was made to collect comparable data for large group of countries. The first such study was conducted by Alexander Szalai in 1963 for a group of 13 countries (Harvey & Pentland, 1999).

Eventually as research progressed, academics formulated a theory of time allocation, providing a proper framework to study time. In 1965, Gary S. Becker introduced the theory of allocation of time in which time was considered to have a cost on the same footing as the cost of market goods. At the heart of his analysis were households which were seen as both producers and consumers. He propounded that households produced commodities by combining inputs of goods and time according to the cost-minimization rules of the traditional theory of the firm. Quantities

of commodities produced are determined by their utility maximization function subject to prices and constraints on resources. In other words, time is seen as a scarce input which is allocated between alternative productive activities as determined by utility maximization and its cost in relation to other factors.

Since the 1960s, time use studies have been carried out in most of the industrialized countries, and lately in developing countries as well, in five to ten year intervals (Juster & Stafford, 1991). Much bigger multinational time use studies have been carried out recently; the EUROSTAT conducted time use studies in 18 European countries in 1996 and 1997 (Harvey & Pentland, 1999).

Turning now to the context of the study, i.e. the rationale of choosing time use as an indicator for Gross National Happiness, let me begin by saying that time use studies provide useful information missing in conventional economic accounts. System of National Accounts which is used to calculate GDP does not measure productive activities accurately. A national accounting system that fails to recognize the total productive capacities could lead to conception and implementation of policies that are useless and harmful. In addition to paid work, productive activities include a series of unpaid activities such as household work, childcare, care of sick and old, and time allocated to various other activities for the upkeep of societies. In addition to activities done for oneself and members of one's household, productive activities also include voluntary activities carried out for members of the community or for people outside one's community. These activities are fundamental to the well-being of both those who provide and receive such services. A true picture of well-being can be obtained only if these activities are taken into account. Time use studies provide information on such activities that are fundamental to the well-being of society.

The detailed nature of information collected by time use studies enables policy makers to understand the needs of special groups of people such as the old or disabled. As people age, their demands for assistance and care increase. If these demands are not

satisfied, the well-being of the old and sick will deteriorate (Andorka, 1987). Similarly, it is important to have adequate information on time parents devote to their children. The quality of care children receive is correlated with their cognitive development (Hill and & Stafford, 1980). Sound policies related to these issues can only be formulated with the help of such detailed information.

Time use studies give information on what people actually do in their lives and, therefore, provide information on work and labor allocation (including that of children) within households both at a point of time and over a period of time. Time use studies are therefore, very useful for understanding the overall transformation or change experienced by societies. Such information is useful for designing comprehensive and balanced economic and social policies; needless to mention, the well-being of societies can only be improved by informed policy formulation.

Time use studies provide information on work life balance of individuals in society. They provide information on the number of hours an individual spends on work and other activities such as socialization with family and friends, sports, and other leisure activities. Imbalance in time allocation between work and other activities is caused by a number of factors amongst which the increased number of work hours is the most prominent. An increase in work hours, in turn, is, among others, caused by one's desire to make more money. Money becomes the focus or the driving force behind long hours of work to many individuals. These individuals exaggerate the importance of money to their well-being and get into a situation of what has been called "focusing illusion". As they devote more time to work they do not find time to do things that they enjoy. Such people are not happier but are much more stressed than others (Kahneman et al., 2006). The European Quality of Life Survey of 2003 revealed a strong correlation between time use and subjective well-being. In most of the countries covered by the survey, it was found that people who

had long work hours and poor work-life balance generally had low subjective well-being (Böhnke, 2005).

As individuals juggle to do so many things, they easily become stressed. Research has documented a series of stress related impacts on the health of workers. Workers in high-strain jobs have been shown to have a higher variety of disease than their fellow workers who are not or less stressed. Cardiovascular disease, gastro-intestinal disorders, musculoskeletal problems, and the immune system are all affected by stress. Behavioral problems such as poor relations with colleagues, absenteeism, and loss of self-confidence and self-esteem are often caused by stress. All these consequences affect both actual as well as perceived well-being of individuals.

Time use data enables academics, policy analysts as well as policy makers and implementers to understand poverty better. "A significant part of the survival of poor households in developing countries is through home production", for which time available to their members constitutes the main resource (Ilahi, 2000). The more time they spend at work, the less time they have for leisure and, to the extent leisure is important to well-being, it could be said that the poor not only suffer from economic poverty but also from time poverty and therefore low well-being. This has been substantiated in the findings of studies by the World Bank in Sub-Saharan Africa. These studies revealed that poor farmers, especially women, face competing demands for their time use (Blackden et al., 2005). They work in the farm, cook, attend to the sick, fetch water, tend to animals and do a host of other household activities. They do not find time to take up other productive activities even if there are opportunities to do so. They are often unable to take their sick children to health clinics because they are tied to several activities. They are not able to send their children to school even if there is an opportunity to do so. Children are required to stay back to help their parents who are caught up in unending cycles of work. In such cases, time poverty reinforces

economic poverty. Understanding such situations would enable formulating better policies to combat poverty.

In addition to the above utilities of time use studies, it merits to be included as an index of Gross National Happiness for a number of direct linkages they provide to assessing the well-being of individuals. Juster, Courant and Dow (1985) developed a concept called “process benefits” which refers to well-being derived from doing an activity independently of its end results. According to these scholars, “time plays a crucial role not only as an input into a variety of market and non-market production activities, including leisure, but that time use is equally important as a direct source of satisfaction.” In other words, activities that an individual engages in not only yield “observable and measurable outcomes in the form of market and non-market goods” but outputs in the form of satisfaction from doing those activities. Such information can be obtained and understood through time use studies.

In 2004 Kahneman, Krueger, Schkade, Schwarz, and Stone developed a method called Day Reconstruction Method (DRM) to quantify subjective well-being. Respondents, which comprised of 909 working women from Texas were asked to reconstruct their previous day in terms of how they spent their time and how they experienced a particular activity. It asked the participants to rate different activities in terms of levels of enjoyment they had and it was found that socializing with friends and other leisure activities topped the enjoyment scale while being with boss and commuting to work were at the bottom of the scale. They next used the scale to characterize effects of variety of circumstances and observed a very strong positive correlation between the scale of enjoyment and circumstances. For instance, women who did not sleep well the previous night did not enjoy activities they engaged in the next day. By enabling researchers to determine the way people spend their time and experience their activities, time use studies provide a meaningful lead to assess the well-being of individuals.

In 2006, Kahneman and Krueger developed another method to quantify or measure well-being. They developed a concept called

U-Index which is defined as “the proportion of time an individual spends in an unpleasant state”; “an episode is classified as unpleasant if the most intense feeling reported for that episode is negative.” Using time use data, they show that respondents “who report less life satisfaction as a whole spend a greater fraction of their time in an unpleasant state.”

From the above review of literature it is clear that time use studies provide critical information related to allocation of time (a scarce resource) and its distribution among different members of households. It provides data which could be used to assess the impacts of policies, compare cultures and societies, gauge lifestyle changes, and to assess the needs of special groups of people such as the old and disabled. From the perspective of the present study, time use studies address several shortcomings of GDP-based measures of progress or development. They provide information on unpaid work, voluntary work and other community activities. These activities are all very vital to the well-being of individuals. More importantly, time use studies enable researchers to assess or understand the well-being of individuals directly.

Within the context of above literature, this study intends to address three objectives: i) to find out amount of time respondents allocated to various activities and, by doing so, to identify the amount of household work, care work and other unpaid work normally not included in conventional economic accounts, ii) to find out how patterns of time use differ by gender, age, and other social and demographic characteristics of respondents, and iii) to assess how patterns of time use relate to reported levels of happiness. The remaining part of the paper is organized into parts three through seven. Part three provides an overview of the survey questionnaire and describes the methodology of the survey and its analysis. Part four reports the time spent on various activities. Part five discusses time allocation to these activities in terms of demographic, economic and social characteristics of the respondents. Part six studies the relationship between time use and the reported level of happiness or well-being that people

enjoy in their life. Part seven summarizes the findings and points out some policy implications as well as some directions for future time use surveys in Bhutan.

Part two: The survey

The survey was conducted between October 2006 and January 2007. It was carried out in nine districts of Dagana, Tsirang, Wangduephodrang, Samtse, Zhemgang, Samdrupjongkhar, Pemagatshel, Trashigang, Trashy Yangtse, Gasa, Haa, and Thimphu. Within districts, careful attention was paid to select samples from both urban as well as rural areas. A total of 950 individuals were interviewed but for the purpose of this paper, data for only 937 respondents could be used.

Data collection

Data on activities carried out by the respondents during the day preceding the interview and the amount of time spent on each of them was collected through recall method. People were asked to recall in sequential order all the activities that they carried out during the day before the interview with the begin time and end time for each activity.

Data classification

Unlike conventional time use surveys, activities were not classified before hand. In order to classify them, various classification systems used in time use surveys both in developed as well as developing countries were referenced. Classification systems used by developed countries were mostly designed on the basis of activities in fully monetized economies and often had a specific focus such as to capture unpaid or non-economic work. The purpose of this survey, however, was to capture all economic and non-economic activities performed by respondents. So, the classification system used by developed countries was not relevant. Of the ones from developing countries, those used by

India provided a good insight (Hirway, 1999). Drawing ideas from this, activities were classified according to the type of sectors they belonged to. The following categories of activities were obtained.

- 1) Agriculture related activities; 2) Livestock related activities; 3) Forestry and horticulture; 4) Processing of food and drinks; 5) Construction and repairs) 6) Craft related activities 7) Business, trade, and service; 8) Household maintenance; 9) Quarrying; ; 10) Care of children, old and sick household members; 11) Community participation; 12) Social and cultural activities; 13) Religious activities; 14) Education and learning; 15) Sports, leisure and mass media use; 16) Personal care; 17) Travel/commute; and 18) Waiting

The above activities can be furthered categorized into two broad categories: work activities (activities 1-10) and non-work activities (activities 11-18). The following sections first analyze time use in terms of these broad categories and eventually in terms of detailed activities.

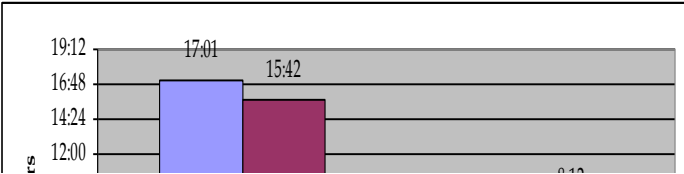
Part three: Empirical results

4.1. Analysis of time use by broad categories of work and non-work

4.1.1 Gender analysis of time use

Data shows that burden of work is significantly higher for women than that for men. Women worked an average of 8:12 hours during the day preceding the interview while their male counterparts worked only 6:54 hours. Contrarily, men spent much longer time (17:01 hours) at non-work activities as compared to women (15:42 hours). As the data clearly shows, the cushion for this excessive amount of time that women spent on work came from reductions in non-work activities.

Figure 1: Time allocated to work and non-work by gender

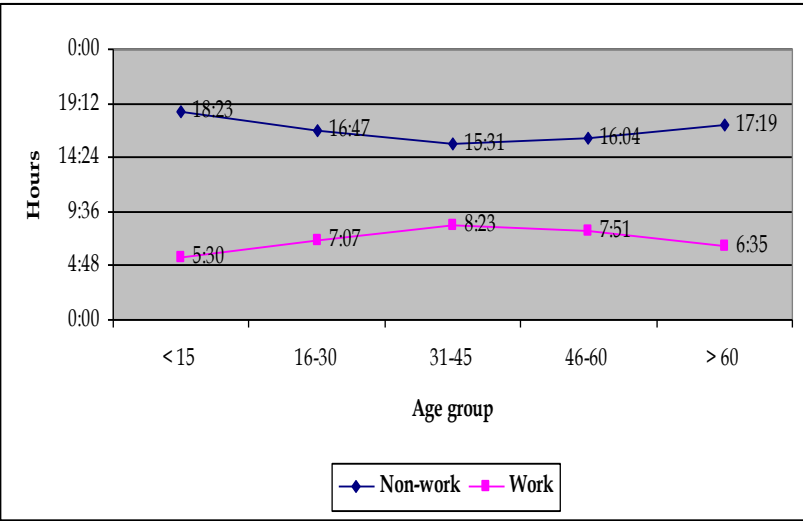


4.1. 2 Age analysis of time use

Skills and strengths that one commands play an important role in determining what one does. The skills and strengths in turn vary by one's age. For instance, participation in active sports or strenuous farm work will vary substantially by one's age.

Data shows that respondents in the age group of 31-45 years, i.e. people who were in their prime working age, worked the longest (8 hours and 32 minutes). The shorter duration of work is recorded for respondents below 15 (5 hours and 30 minutes) and those above 60 (6 hours and 35 minutes).

Figure 2: Time allocated to work and non-work by age group

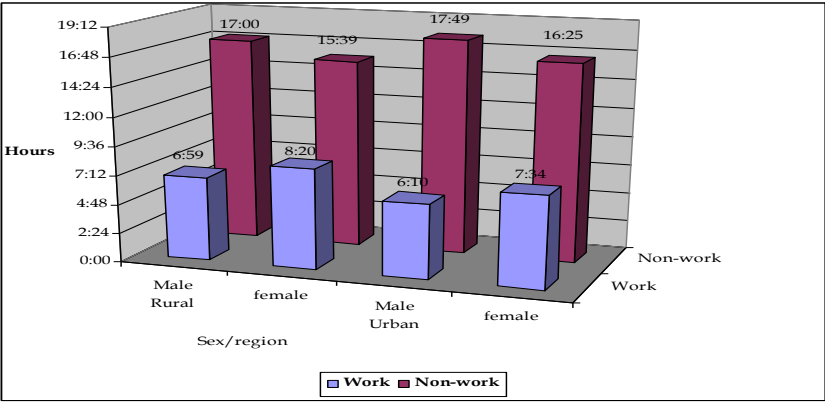


4.1.3 Time use by area of residence and gender

What one does is often decided by where one is located or based. For instance, in areas where farming is a predominant activity (due to favorable climatic factor) or absence of alternative activities, it is likely for people of such areas to spend long hours working on their farm as compared to people of other areas.

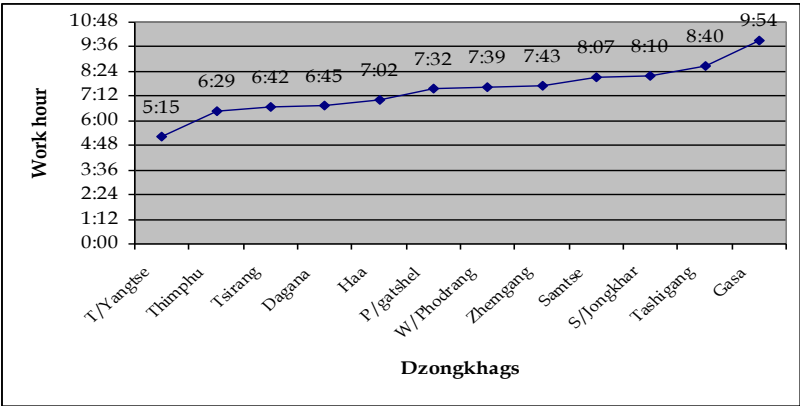
When work and non-work hours are analyzed in terms of respondents' area of residence and gender, we observe that women in rural areas worked the longest (8:20 hours). Women in urban areas have the next longest work hour (7 hours and 34 minutes). Men in rural areas worked longer their counterparts. It is interesting to note that women in urban areas have longer work hours than men in rural areas.

Figure 3: Time allocated to work and non-work by gender and area of residence of respondents



Variations in time use can be extended further to districts. When we do so, highest work hour is observed for respondents of Gasa (9 hours and 54 minutes) and shortest work hour is observed for respondents of Trashigangtse. However, given the seasonality of activities, variations between districts should not be seen as binding.

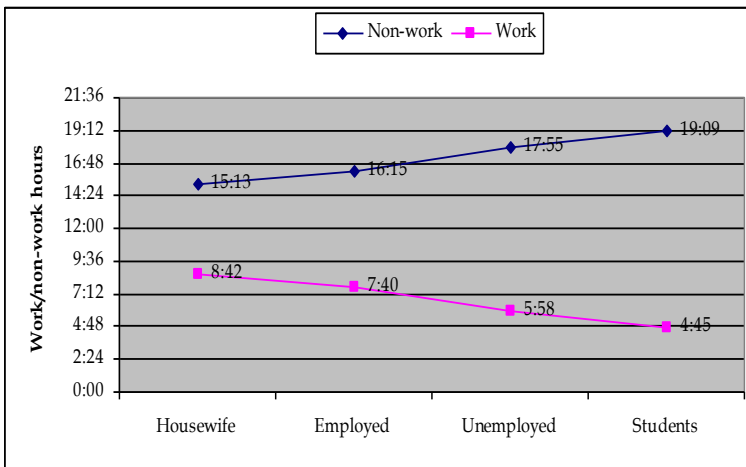
Figure 4: Work hours by districts



4.1.4 Time use by status of employment

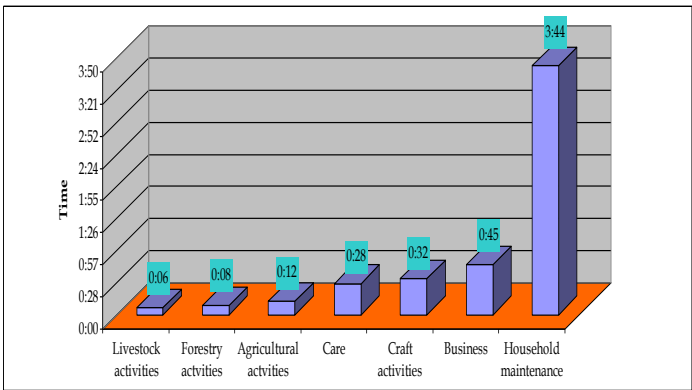
One's employment status affects the way one allocates time to various activities. Usually, total hours of work or burden of work is more for employed respondents than unemployed, housewife or students. Data shows a finding which is contrary to this a priori expectation. It shows that house wives had worked the longest (8:42 hours) followed by employed people (7:40 hours). It also shows that unemployed respondents worked for fairly long (5:58 hours). (hours).

Figure 5: Time use by status of employment



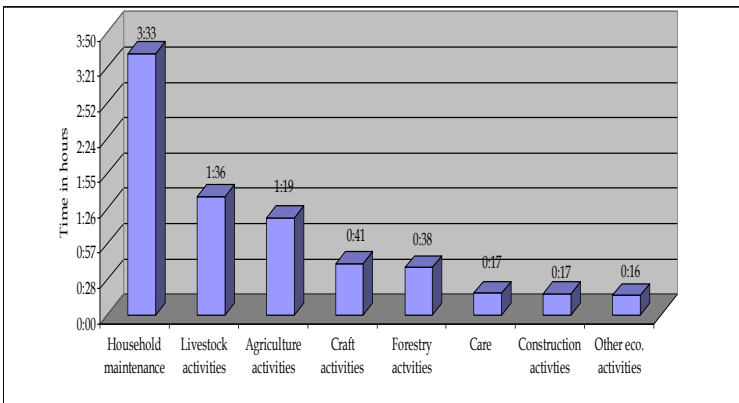
Two issues are quite striking in the above figure: housewives working the longest and unemployed people working for fairly long (5:58 hours); they merit further analysis. When the work hours of unemployed are broken down by activities, it is observed that they spent 3 hours and 44 minutes on household maintenance activities such as cooking, sweeping, dishwashing, etc. This shows that unlike in other countries, unemployed people are not a big burden to the society; they are not unproductive people without any meaningful contributions to the society.

Figure 6: Time allocation of unemployed to various activities



Likewise, when we look at the distribution of time by housewives to various activities, we observe that they spent bulk of their time (3:33 hours) on activities related to household maintenance. This shows the important role that housewives play in upkeep of the wellbeing of members of the family.

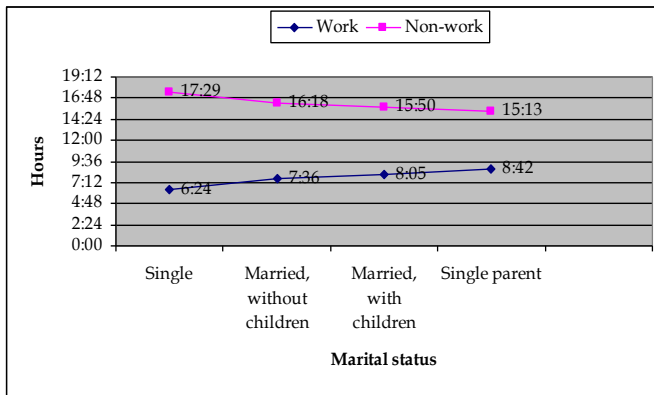
Figure 7: Time allocation of housewives to various activities



4.1.5 Time use by structure of family

The type of family structure one belongs to could also influence how one allocates time significantly. For instance, studies have found that the presence of 'young children substantially reduces mother's sleep time' (Biddle & Hamermesh, 1990). The study shows that that time spent on work is longest for single parents. It also shows that couples with children work longer than their counterparts without children indicating that the presence of children increases one's work, particularly those related to household maintenance.

Figure 8: Time use by structure of family

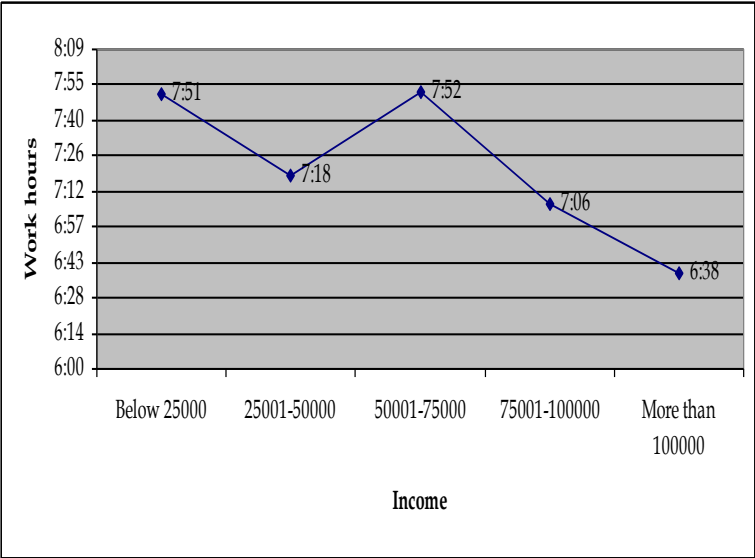


4.1.6 Time use by different income groups

How an individual put his/her time to use is a function of income. As mentioned earlier, in many developing countries home production constitutes the main source of livelihood for which time available to their members constitutes the main resource. The more time they spend at work, the less time they have for non-work activities such as leisure. Likewise, high income people also face time crunch- multiple things that demand their attention leave them with very little time for family and friends.

The study shows an inverse relationship between level of income and hours of work; work decreases as income increases. See figure 9.

Figure 9: Time use by levels of income



4.2 Analysis of time use by disaggregated activities

So far the paper analyzed time use at aggregated levels of work and non-work activities. This section will look at time spent on various activities under each of the two categories. Like the aggregated activities, these activities can also be analyzed in terms of gender, age, income, family structure, etc., but the paper would get lengthy and so the analysis is confined only to gender differences. Table 1 presents the distribution of respondents and the amount of time spent on various work activities.

Table 1: Time spent on various activities under work category

Activities	Frequency		Time	
	Male	Female	Male	Female
Agriculture related activities	96	93	05:26	05:01
Business, trade and services	95	80	05:05	06:13
Care of children and sick	29	81	01:41	01:35
Construction related	52	17	06:36	05:41
Craft related activities	38	74	04:17	05:04
Forestry and horticulture	135	99	03:44	02:34
Household maintenance	329	440	01:36	03:05
Livestock related activities	190	204	02:51	02:38
Quarrying work	7	5	04:45	05:42
Processing of food	34	32	01:38	02:12
Transporting	2	4	06:35	02:10

4.2.1 Agriculture related activities

This category includes activities such as clearing fields, digging or plowing fields, applying manure, weeding fields, and the harvesting, and threshing. 96 men and 04 women were involved in agriculture related activities. Time spent on these activities by male and female respondents is not significant.

4.2.2 Business, Trade and Services

This category includes activities such as selling vegetables, fruits, and other farm products; selling livestock products such as butter, cheese and meat; selling food and drinks; tending to shop; activities of officials of government and private organizations (office work); driving and ferrying people; and travels related to them. 95 men and 80 women reported engaging in these activities. Time spent on these activities is slightly higher for women than men. See table 1.

4.2.3 Care of children & sick household members

Included in this category are activities such as feeding children, bathing and dressing children, looking after children, putting

children to sleep, accompanying them to playgrounds and parks, transporting children to and from schools, supervising or helping children with their homework, and teaching children. Various forms of help provided to sick or old members of the households are other activities that constitute this category. Number of women (81) engaged in these activities is significantly more than men indicating the important role women play in providing care work in our society.

4.2.4 Construction and repairs

This category comprises of activities such as the construction of a new house, animal sheds, and toilets, minor or major repair of dwellings, and *woola*^{*} activities- construction and repair of public infrastructure such as bridges, schools, health clinics, drinking water supply scheme, mule tracks, roads, temples, offices of community leaders, etc. In these activities, not only more men are engaged but also spend longer time on them as compared to women.

4.2.5 Craft related activities

Painting, knitting, spinning wool or yarn, dyeing wool/yarns, making yarn rolls, setting up looms, weaving, making bamboo baskets, making ropes, carpentry, and blacksmithing. As we see in table 1, these activities are dominated by women in both numerical representations as well as in terms of time spent on them.

4.2.6 Forestry and Horticulture

Activities included under this category comprise two sub-groups. Under forestry related activities are included chopping or sawing of wood, collection of timber, and fetching of fodder, firewood, leaf litter, and other forest products. Horticulture related activities include the preparation of beds for horticulture plants, weeding,

^{*} Labour contribution required of from beneficiaries of development projects.

irrigation of orchards, and the harvesting of fruits. These activities are dominated by men; 135 men reported undertaking these activities and spent an average of 3 hours and 44 minutes while only 99 women were engaged in these activities and spent 2 hours and 34 minutes.

4.2.7 Household Maintenance

Household maintenance activities include cooking, setting up and serving meals, washing dishes, cleaning the inside and outside of the house, making fire, fetching water, and laundry related activities (washing, drying and folding clothes). Also included under this category are shopping, packing and arranging household stuffs. This set of activities is clearly domain of women; more of them were engaged in these activities and spent much longer time on them than men. Refer table 1.

4.2.8 Livestock related activities

Activities included under this category are preparing feed, feeding animals, milking cows, grazing animals in forests, putting animals to shed, cleaning sheds, shifting cattle from one pasture to other, mating of animals, and putting up tents for the herders. In these activities too, more women were involved and spent longer time on them than men. See table 1.

4.2.9 Processing of food and drinks

This category consists of activities such as grading or sorting of grains, drying grains, pounding of paddy, grinding maize, milling paddy or maize, churning milk, and brewing alcohol. Normally, these activities are dominated by women but the data shows that more men were involved in them although time spent on them by women is much longer.

Table 2: Time spent on various activities under non-work category

Activities	Frequency		Time	
	Male	Female	Male	Female
Community participation	33	33	03:37	03:24
Education and learning	31	39	05:20	04:38
Sleep	470	467	08:34	08:33
Personal care (excluding sleep)	470	467	03:19	02:56
Religious activities	170	169	01:44	01:22
Socio-cultural activities	283	247	02:10	02:04
Sports and leisure	190	189	02:58	02:27
Travel/commute	366	299	01:39	01:25
Waiting	20	21	01:54	01:45

4.2.10 Community Participation

Community participation includes participation in community meetings, briefings by government officials on various issues, political activities such as voting, voluntary work and informal help provided to neighbors and other households in the community. There is no significant difference between male and female respondents both in terms of frequency and amount of time devoted to community participation.

4.2.11 Education and learning

This category includes time devoted to both activities of formal and informal learning. Attendance of class, doing homework, reading and studying for the class (either at home or school), attendance of non-formal education (NFE) class, group work and discussions, and informal education such as oral narration of information are included. Here too, there isn't much difference between men and women respondents. See table 2.

4.2.12 Personal Care

Personal care comprises activities such as sleeping, eating and drinking, washing, dressing, napping, sick in bed and medical care of self, looking for job for oneself, rest and relaxation. Since

this category comprises of biologically necessary activities such as sleeping and eating, the rate of participation is 100% (937 respondents). Average time spent on personal care is high is largely due to of sleep in this category.

There is no significant difference between male and female respondents in hours of sleep. However, there is significant difference between men and women in other personal care activities which include activities such as eating, rest and relaxation.

4.2.13 Religious Activities

Religious activities consist of reciting prayers and mantras, offering water and incense to the altar, lighting butter lamps, burning incense outside the house, conducting or organizing rituals, meditation, prostrations, and hoisting prayer flags. Other activities such as attendance of religious teachings, pilgrimages to religious sites or lamas within and outside the community, and circumambulation of *chortens* or *lhakhangs* are included in this category. No significant difference is observed between men and women in their time devoted to religious activities. See table 2.

4.2.14 Social and Cultural Activities

Social and cultural activities include socializing with members of the family, relatives, friends and neighbors, attendance of *tsechus*, festivals, religious ceremonies of neighbors, community religious ceremonies, cultural shows, and the spectatorship of sports activities. It also includes going to see a new born and celebrating *losar* (New Year) with families, friends and neighbors, and attending funeral ceremonies. In terms of time spent on these activities, the difference between men and women is very small. However, more men (283) reported engaging in these activities than women (247), indicating that their extended work hours keep them away from social and cultural activities. See table 2.

4.2.15 Sports, leisure, & mass media use

The sports and leisure category includes both active and passive leisure activities. Active leisure comprises activities that require physical exertion such as playing archery, *khuru*, tennis, *taekwon-do*, snooker, and going for a walk. Passive leisure include activities such as watching TV and video, listening to radio and music, reading books, telephonic conversations, writing diaries, and playing cards. Hobbies such as playing guitar and other musical instruments are included here. Not much difference is observed between men and women in these activities. Refer table 2

4.2.15 Travel and commute

This sub-category includes travel undertaken for all categories of work and non-work activities. For instance it includes travel to and from work, visiting public offices and functionaries such as: the *gup*'s office to pay tax, obtain permits for firewood and timber or resolve disputes; the court to settle disputes; and the *tshogpa*'s house for his/her views on certain matters. More men reported undertaking this activity and also the amount of time spent travel and commute by men is higher than that of women's. See table 2.

4.2.15 Waiting

This category includes time spent on waiting to see a doctor, extension agent, census and immigration officials, *gups*, civil servants, etc. 41 respondents reported spending close to two hours on waiting for the delivery services by public officials.

Part five: Relationship between time use and happiness

Analysis so far has focused on patterns of time use and various factors that determine them. In doing so, we have been able to find the average amount of time allocated to all categories of activities. These findings present a good picture of the nature of economic and non-economic activities that are commonly pursued by Bhutanese. The findings also show how activities differ by age, gender, employment status, residential status, and the type of family one belongs to. This section looks at how the use of time in

different areas of life interacts with subjective well-being or happiness of the respondents. Following the past studies on this topic, I discuss below how time spent on work, socialization, community participation, religious activities, and sports and leisure by the respondents relate to their reported level of happiness.

5.1 Total hours of work and reported level of happiness:

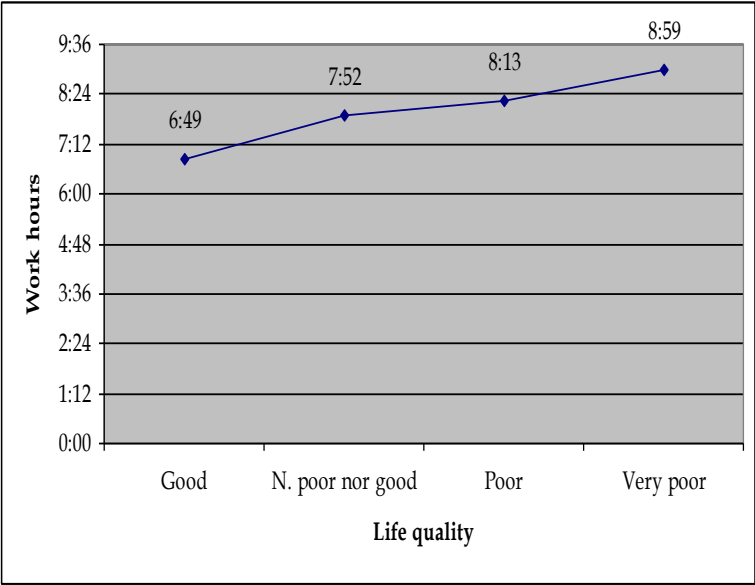
A brief review of studies that revealed strong association between time use and happiness was provided at the beginning of this report. These studies found that people who worked long hours were usually less happy or satisfied with their life in general compared to people who worked fewer hours. Our study reveals findings that are consistent with these studies. It shows that women respondents who worked much longer than their male counterparts are less happy. See table 3.

Table 3: Cross tab between work hour and mean happiness

Sex	Mean happiness	Mean work hours
Male	6.3	6:54
Female	6.0	8:12

It is also observed that respondents who work for long have poor quality of life. See figure 10.

Figure 10: Work hours vs. life quality



The channels through which long duration of work affects well-being are stress and the related health problems that people suffer. Studies carried out in Japan revealed a positive correlation between long work hours and ‘*karoshi*’ (a syndrome of cardiovascular attacks such as strokes, myocardial infarction or acute cardiac failure). Uehata (1991) studied over 200 *karoshi* victims and found that two-thirds of the victims had worked more than 60 hours a week and more than 50 hours overtime work per month prior to the attack. This study shows similar link between time use and health problems. Respondents who worked for longer duration reported higher stress level and did not rate their health as high as their counterparts who worked for shorter duration. See table 4.

Table 4: Relationship between work hour, stress and health status

Work hour	Stress level	Health status
07:42	Very	Good
07:37	Somewhat	Excellent
07:27	Not at all	Excellent

The other channel through which long duration of work affects well-being is not being able to maintain a balance between work and other aspects of life such as spending time with family and friends, doing exercise, praying, and other activities that one enjoys.

Figure 11.a: Work hours vs. frequency of Praying

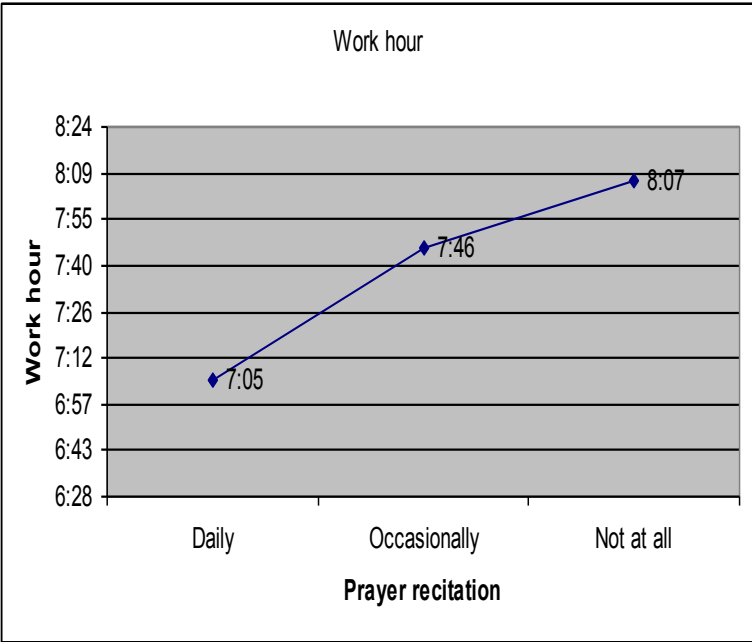
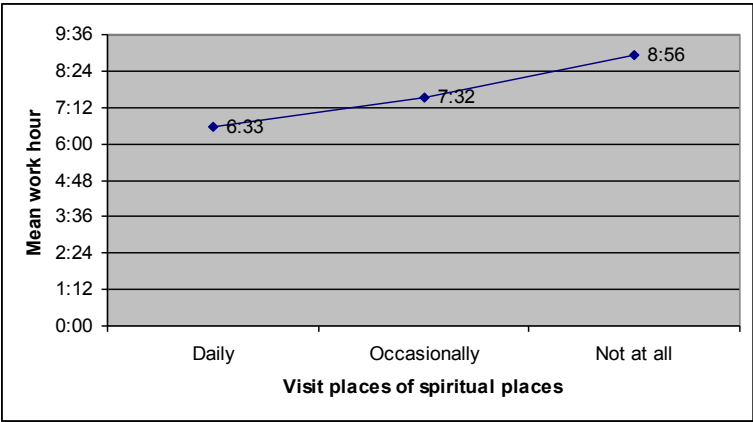
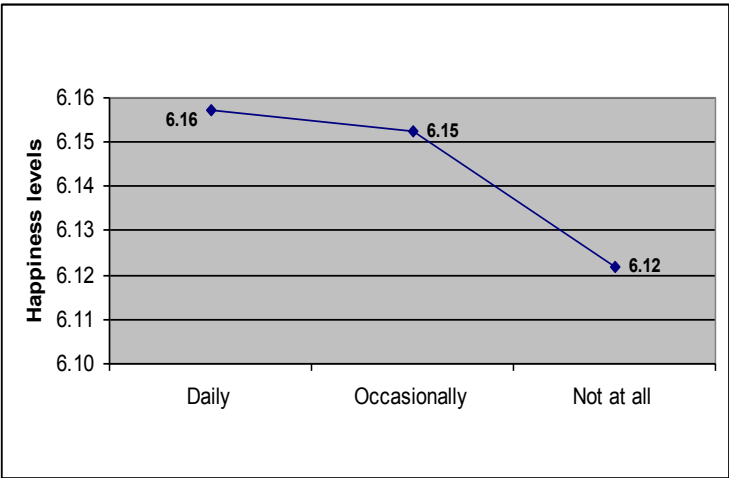


Figure 11.b: Work hours vs. visit to spiritual places



As we see in the above charts, respondents that have longest hours of work did not pray or visit religious places. Being unable to pursue such activities does affect one’s wellbeing. See figure 12.

Figure 12: Happiness vs. frequency of praying



5.2 Socialization vs. reported level of happiness

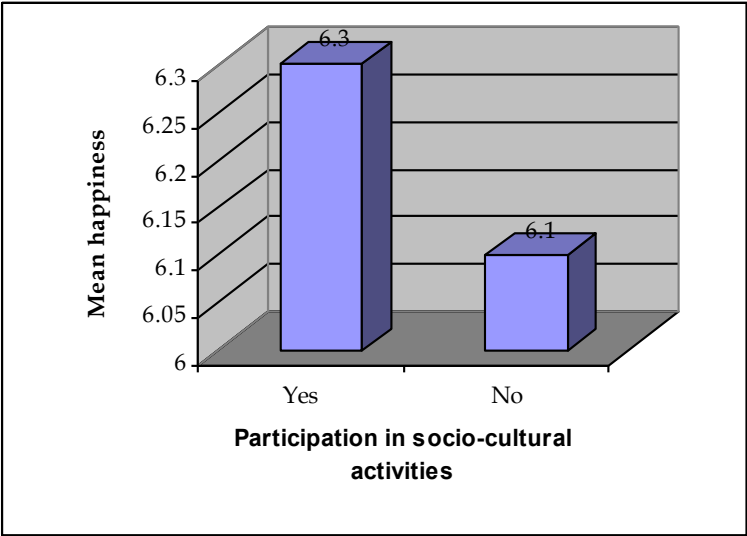
Participation in social and cultural activities is “a resource which contributes to social cohesion and enables communities and societies to survive and grow”. Social capital, which contributes to the well-being of the society, arises out of participation in informal social networks such as interactions with friends, colleagues or families, and participation in community events. Social networks that one develops through such interactions help one in times of adversities.

The importance of social network or social capital to one’s well-being can be found in several recent research publications. European Quality of Life Survey (2005) found that subjective well-being declined significantly in population groups who could not count on social support compared to those who were socially integrated. The study also found that people with limited opportunities to contact friends suffered low subjective well-being.

Apart from instrumental support such networks provide during times of difficulties, they also provide intrinsic benefits. One always enjoys time with family and friends and being able to enjoy one’s time is crucial to well-being or happiness. One study found that people with higher rate of social participation had a higher frequency of positive feelings, and that contacts with friends tended to increase positive feelings more than other contacts (Phillips, 1967).

The survey reveals findings that are in conjunction with above studies. Respondents who socialized during the previous day reported higher level of happiness than those who did not participate in any social and cultural activities. The mean happiness score for those who participated in some social and cultural activities was 6.3 points whereas it was 6.1 points for those who did not engage in any social and cultural activities. See figure 13.

Figure 13: Mean happiness vs. socio-cultural activities

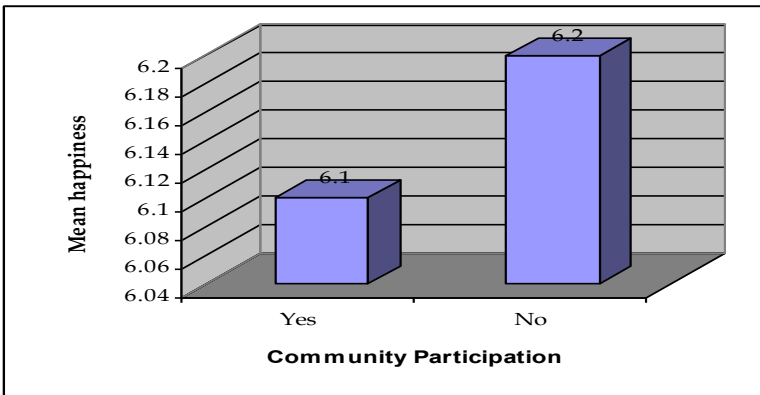


5.3 Community participation vs. happiness

Participation in community meetings and political activities are seen to yield both intrinsic and extrinsic benefits that eventually affect the happiness of individuals. Intrinsically, through participation in such community meetings and events people experience self-worth and self-efficacy. Extrinsically, community participation in development activities and political events are expected to yield results that are balanced and sustainable.

The data reveals a finding that is in contrast to these a priori expectations. We observe that respondents who participated in community activities reported lower happiness (6.1 points) than those who didn't (6.2).

Figure 14: Mean happiness vs. community participation



What could be the reasons behind why Bhutanese dislike participation in meetings? More research would be required to find out the exact reasons but I would dare to state here that participation in such events distract people from doing their farm work. People see participation in such meetings as more of a burden than a privilege. Another possible reason could be low political consciousness among the Bhutanese population, especially the rural residents. People are yet to associate any kind of pride or meaning to time they are required to spend in participating in such meetings. Also, the number of people who participated in community activities is very small as compared to those who didn't and so a true picture would require more comprehensive data.

5.4 Sports and leisure vs. level of happiness

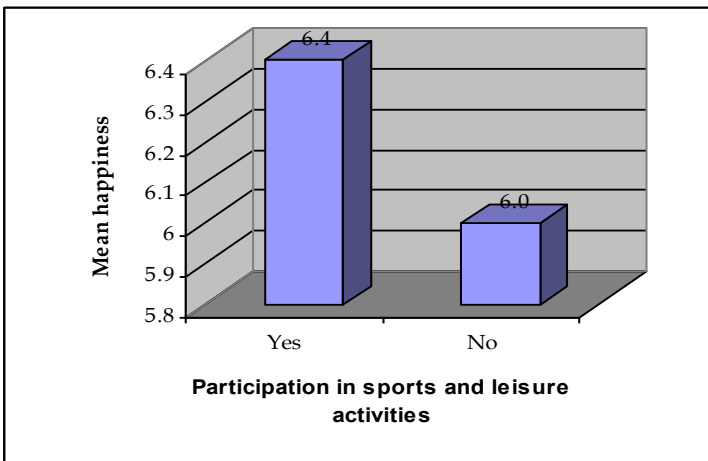
The role of sports and leisure in affecting the well-being of individuals has been widely studied. These studies have found sports and leisure, particularly the active ones, to have positive causal effects on the well-being of individuals. Schnohr et al. (2005) found people with sedentary leisure patterns to report high levels of stress, dissatisfaction and less psycho-social well-being. In their study of working Brazilian women, Ponde and Santana (2000) found that those with active leisure schedules in addition to

their commitments to work, childcare and household maintenance, tended to test higher on routine measures of mental health than those without much or no involvements in leisure and sports. A study by Biddle and Mutrie (1997) found that exercise such as aerobics for 8 to 10 weeks, two to four times a week, increased happiness and reduced clinical depression and anxiety. Exercise and sports are effective through the release of endorphins, social interaction, and the experience of success and self-efficacy.

Leisure activities such as dance and music affect well-being by inducing positive moods and social interaction. Cinema attendance has been found to have positive effects on happiness and negative effects on self-reported anxiety and depression (Uhrig, 2005). The type of visual stimulation that films provide provokes an emotive response holding therapeutic properties. "The collective and controlled experience of this emotive response promotes well-being generally." On the other hand, excessive engagement in leisure activities such as watching television have been found to affect well-being or happiness negatively. Frey et al. (2005) found that heavy television watchers experienced lower well-being than others. Many individuals lose control over their behaviour and watch TV in excess. Such behaviour leads individuals to regret when the opportunity cost of their time is high. Long hours of TV watching leads to higher anxiety and material aspirations, thereby lowering life satisfaction. Also, excessive watching of TV crowds out other activities, particularly relational activities, which matter significantly to one's well-being (Bruni and Stanca, 2005).

Supporting the general idea of a positive relationship between sports and leisure and happiness, the data reveals that respondents who engaged in sports reported higher levels of happiness than those who did not. See figure 15.

Figure 15: Mean happiness and participation in sports and leisure

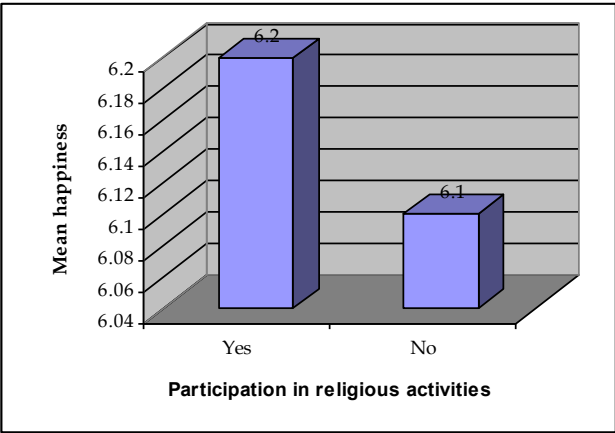


5.5 Religious activities

Studies have found engagement in religious activities to affect happiness of the people positively. Barkan and Greenwood (2003) cites three channels through which religious activities affect wellbeing or happiness of individuals. First, engagements in religious activities facilitate building social contacts. These social ties yield emotional and instrumental support during times of difficulties and problems. Second, by turning to their faith, people are better able to cope with stress and other problems in their life. Engaging in religious activities bolster self-esteem and efficacy. Religious engagements offer a sense of meaning in life leading to increase in perceived wellbeing of individuals. Third, through denouncement or discouragement of unhealthy behaviors such as use of alcohol, tobacco and drugs, engagement in religious activities promote healthy life styles.

Data reveals results that support the above findings. Respondents who engaged in religious activities reported a mean happiness of 6.2 points as opposed to 6.1 points for those who did not engage in religious activities. See figure 16.

Figure 16: Religious activities and mean happiness



Part seven: Summary and conclusion

To sum up, we found that the total burden of work for women was more than that for men, largely due to a greater time commitment of women to household maintenance, childcare, and craft-related activities. We have noted distinct sex specificity to some activities; weaving was carried out exclusively by women. We also noted that men largely carried out activities that required more physical exertion while women engaged in activities that were less physically demanding. Men spent more time at sports and leisure.

We observed patterns of time use consistent with life-cycle variation in time use. Confirming an a priori expectation, work hours peaked for the respondents that were in their prime age ranges, 31-45. It was observed that patterns of time use differed between the rural and urban residents. We also observe differences in time use between various types of family structures. Families with children had longer work hours, largely amounting from more household and childcare work associated with the presence of children.

The study provides a very good set of information on the type and amount of unpaid work- like household maintenance, care of children. We observe that women play important in providing most of these services. If we assign monetary value to these services and calculate an aggregate figure for a year, the amount would constitute a significant percentage of GDP. As mentioned earlier, these activities affect well-being directly but are somehow excluded from the accounts that are used to measure our well-being.

Important contributions women make toward production of other goods and services at home were also highlighted by the study. Women's role in home production, particularly in producing handicraft products by engaging in weaving and other craft-related activities is crucial to maintaining the economic security of many households in rural and urban Bhutan. Such information could be very useful for formulating specific policies related to improving the economic conditions of women.

The study presents a wide array of information related to public policy issues. For instance it was found that rural people spend quite a substantial amount of time on travel and commute as well as waiting for services to be delivered. This amounts to a waste of people's precious time since they are not able to work in their farms during such days. Such information could be very useful to our policy makers involved in planning rural roads and transport and communication facilities and those engaged in instituting effective governance.

Finally, the study provides a clear picture of how time use affects wellbeing or happiness. To the extent we know that there is such a relationship we can design policies towards affecting time use pattern that would bring greater happiness or wellbeing to the society.

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Cultural Diversity and Resilience

8

Internalizing the Other:

A cross cultural understanding in arts and education

Sharon Lowen

Abstract

Education, community interactions and the experience of the inner world that we all share through the sharing of culturally specific performing arts enable the transformation of “other/foreign” to the comprehensible with which we can personally identify, without fear or apprehension and even embrace. Connecting to others, from within our own cultural background expanding out to those less familiar is essential to inhabit a world where we live at ease within our global communities. An opportunity to enter into the cultural space of others dissolves the defensiveness of fear of the “other” and enables a sense of security and the happiness of connection, understanding and even celebration of sharing a larger human landscape. Cross cultural education, interactions and carefully framed introductions to cross cultural essence through performing arts build understandings that can go beyond the intellectual to a more intrinsic, even visceral, connection.

Joseph Campbell said “To change the world Change the metaphor”. Another theory that stuck with him is that happiness isn't personal — it's relational. Study after study has found that the answer is — in two words — other people. While we all know this to be true, the challenge is to extend this understanding from the warm caring relationships and high levels of trust we strive for in our immediate circle of family and friends to our wider communities in ever expanding inclusiveness of world communities to strive to eliminate the reservations and suspicions of “other” as we come to appreciate diversities as not intrinsically dissimilar from ourselves.

On a previous visit to Bhutan over 30 years ago I had the opportunity to witness a ceremony in which Bhutanese from across the country gathered in patient rows as a clairvoyant lama told each person that they had been the parent, spouse or sibling of those on either side of them in the gathering. The functional result, whether or not one believed in the spiritual truth of the exercise, was that each individual then felt the trust and care normally reserved for immediate family members for others who had been strangers from far flung communities a moment before. The differences of dialect, local custom and practices paled in the connections created.

Over the past 35 years my work as performing artist and educator has revealed the importance and possibilities of inner transformation through facilitating the sharing of cultural metaphors. The inner world that we all share can be experienced as the apparent diversities are explored, understood and appreciated. The pathways to achieve this are as varied as the cultural “onions” to be unpeeled. Here, my intention is to share a few of the pathways I have used toward this aim.

My initial belief that coming to India from the United States to study a classical performing arts genre would be an excellent way to enter into the culture was borne out by eventually having the opportunity to make it accessible to those both within and outside of the culture. As Indian classical dance traditions arose from a spiritual consciousness rather than a simple aim of entertainment, the artist has the option of going beyond the modern concert setting to create a sacred space and communicate metaphysical meaning. The shared experience of an audience, in a live performance existing in a moment of time, created in conjunction with the performing artist or artists is important enough. Beyond this, the interpretation of text through movement enables an emotional, even visceral, understanding that goes beyond intellectual understanding. The artist’s intention can be to serve as a conduit to transform the audience through an experience of metaphysical love, truth and beauty. The specifics of aesthetics

and philosophy function as a framework and palette to communicate through a living and growing tradition that has already been refined over centuries and even millennia.

Without going into technical details, the fact that classical Indian dance forms balance pure movement with dramatic interpretations of ancient, medieval and modern texts can communicate on many levels to any audience; uninitiated or connoisseurs, villagers or scholars, children or theatergoers, Western college students or devotees in a temple. The key is to express the content through the form, rather than “leaning” on the form. Ideally, the artist should be able to interpret and communicate the poetry without presuming that the audience knows or can understand the language of the text, which is quite often the case these days. A brief, clear introduction is all that is needed for audiences to have enough of a “hook” to stay involved in following the performance.

Besides the obvious importance of keeping the shared imbedded cultural metaphors present and alive within India, or any country, in a fast changing world, the performing arts can also be one of the most effective ways of communicating culture internationally. Yet it is critically important that cross-cultural performances are framed in ways to provide deeper understandings into their cultural import beyond mere colourful spectacle. Sensitive introductions can create a cultural context for the presentation of folk traditions; succinct background of philosophy and movement vocabulary of dramatic interpretations are essential for the “aha” of connection. For example, in the West dance is not commonly connected to spiritual consciousness and sacred and profane love have long been separated in the prevalent systems of belief. If the danced poetry is about a heroine making elaborate preparations to meet her lover, secretly leaving her home in the night and then pining till dawn as her beloved has a tryst with another, it is essential to add that the heroine is a metaphor for the soul seeking union with the divine and that her yearned for lover, the

unknowable ultimate reality in the form of a charming lover, can never belong to one alone.

The cross-cultural understanding through performance can be greatly enhanced by sponsoring arts bodies, universities, museums, government bodies, etc. making the effort to schedule lecture-demonstrations as another interaction that draws on both right and left sides of the brain to reach both heart and mind for more levels of connection. A one hour workshop for school children or university dance students will lead to discovery of muscles and different ways to feel energy and space that they will never forget. Just as seeing a craft making process enables an individual from another culture to “see” the craft, attempting to move within another physical tradition creates a respect and understanding that no amount of words could communicate.

When we begin to understand the “other” we, of course, learn about ourselves. This is a vital part of seeing that what we unreflectively consider innate may well one of a variety of cultural choices, not the “givens” we have taken them for. It is easy to imagine the delight of school children seeing their peers and teachers struggling in an unfamiliar movement language, or college dance majors discovering that their coordination, strength and flexibility are actually culture specific; something they never would have considered before. A wonderful set of circumstances allowed me to have an academic group in Pakistan make an effort to perform some Odissi classical Indian dance movements and gestures. Afterwards I discovered that a few of the male participants from Peshawar had never even seen dance in their lives, let alone danced themselves. The shining eyes of a veiled participant, and her greeting of “*Namaste*” when we passed, exemplify the happiness of cross cultural connection in many ways.

The younger the age that awareness and education about other cultures starts, the more likely one is to incorporate empathy, and potentially even trans national cultural identities, into one’s own

internal landscape. Sesame Street, which airs in 120 countries, has Big Bird and South Africa's Zikwe promoting cultures across the globe with a new Putumayo Kids CD of songs and Muppets from every corner of the world. If you were fortunate enough to grow up in a country that already had Sesame Street, then Kermit the Frog and Cookie Monster are part of your internal world. Children growing up with the new global Sesame Street may be happier in the world they inhabit with the new metaphor of Muppets from all over the world.

Cultural performances for children have a profound effect of their connection to the world in which they inhabit and therefore their sense of unity with others. If they "discover" cultures other than their own only at the young adult or college level, these cultures are unlikely to enter into seeds of a shared mythology and aesthetics with the greater world. Being able to identify/empathize with another's culture widens one's ability to understand one's own and is quite different from experiencing other's as exotica. Crossing over from exotica to "like me but different" extends one's sense of self. Parents, schools, governments and N.G.O.'s should multiply opportunities to include children in experiencing and understanding cultural performances and it would create a world community based on more intrinsic values than offered as part of globalized consumer values.

Around 30 years ago, the United States provided national funding for cross-cultural education for the arts in the schools. Primarily aimed at reducing tensions through cultural performances by the predominant minority communities, Afro-American and Hispanic, other cultures were widely represented wherever capable artists were available. Once a soloist or group auditioned a presentation tailored for school age children in front of educational specialists and a willing school's audience, they would be scheduled for approximately fifty presentations over six weeks with pre and post performance materials created for schools to broaden the experience.

Over two or three years the Los Angeles Unified School District program sent me to over 200 schools to introduce Indian culture through dance to approximately 70,000 students. Every school had 8 different cultural performances per school year. These India through its Dance lecture demonstrations hopefully left the understanding that India had a rich and varied culture with textiles, ornaments, crafts and performing arts changing across neighboring regions. While teachers may have harbored stereotypes of a land of poverty and beggars, their students came away from this celebration of wonder and diversity with knowledge of a place where the Gods dance; where the earth is formally respected before we perform on "Her"; where the desire for wisdom to smooth our path before new endeavors or studies is articulated through the metaphor of a chubby young elephant; where dances may move in continuous circles, curves and elegant figure eights or another classical genre may accent sculptural poses with ankle bells adding to orchestral accompaniment of the dance. Masks, embroideries, marionettes, percussion instruments and costumes inspired by 200 year old royal visions "Change the metaphor", as Joseph Campbell said, "To change the world".

Witnessing pre-pubescent Balinese dancers perform a subtle and sophisticated dance that they would be too old to perform in a few years taught me, at the age of 9, that the age restrictions on sophistication of cultural expression in my own culture were just that, limited to my own culture and not universal. The school program introducing American school children to Indian Culture through Dances of India was presented to another 200 schools across rural Michigan and urban Detroit, Milwaukee, Wisconsin, up scale Beaverton, Oregon, Louisiana's Shreveport and New Orleans Schools and San Diego's Mexican border schools of Chula Vista hopefully changed some metaphors for young minds. So many artists in every part of the world would be as thrilled to share their art with young audiences as the youth would value experiencing them. This is fertile ground to enhance the happiness, quality of life and connection to other peoples of the world we share.

A parallel path of promoting cross cultural understanding is by integrating cross curricular material woven into all academic subjects in schools, with vertical articulation to build these grade by grade. A model K-12 program has been created at the American Embassy School, New Delhi to introduce the host country-India's culture. This is an interactive and dynamic curriculum designed to impart a comprehensive knowledge base and develop positive attitudes about India, a “new” country with a 5000 year old history. Based on an articulated K-12 scope and sequence, the curriculum is taught through scheduled classes, interdisciplinary integration at all levels, and proactive community partnerships.

The purpose of this cultural integration is to:

- Foster an understanding and appreciation of India,
- Create an awareness of cultural diversity and commonality,
- Enhance students’ understanding of their roles as global citizens.

Classroom and special subject teachers have access to an Indian Studies Resource Center which has a wealth of realia and resources for classes as well as being an idea bank of resources for parents. Cultural programs, films, guest speakers, museum and other field trips, interactions with children of other cultures, are made available for every age level. There is an annual Discover India Focus Week for the Elementary School that offers exhibitions, hands-on craft, drama, dance and music activities, an Indian book fair and other appropriate curriculum based changing themes that have included in past years: Textiles of India, India's Contribution to the World, Performing Arts of India, Science and Technology: Old and New, Crafts of India, Regions of India, Architecture Designs of India, India Through Stories and Legends, and Animals and The Natural Habitat.

K-12 Indian studies program outcomes

All students will:

Internalizing the Other-Cross Cultural Understanding

- Develop appreciation of geographical and cultural diversity as well as unifying features of India.
- Understand the history and beliefs related to major festivals and celebrations.
- Explore the traditional and contemporary literary, visual and performing arts.
- Understand the impact of significant individuals and historical events on India.
- Communicate in basic Hindi.
- Pursue individual interests using India as a focus.
- Understand basic systems of belief in India.
- Recognize ecological and environmental issues as they relate to India.
- Understand the government and political system.
- Become aware of India's current issues
- Gain an understanding of India's contribution to the world.
- Understand the importance of and be involved in community service.
- Gain understanding of Indian economic factors.
- Make connections between home and host country.
- Experience India through activities outside the school.
- Recognize continuity (traditions) and change (modern systems) in India

A wonderful starting point to enable the transformation of "other/foreign" to the comprehensible is sharing examples of how strange we may appear to other communities when we lay in the sun for hours until we turn red and peel, bathe in bathtubs immersed in the grime of our entire body, and other examples. This shift of perspective, without clear right or wrong can eliminate the presumptions and even hostilities toward practices that we don't understand.

Permission to question, wonder and understand frees us to tolerate what we don't appreciate and to connect and enjoy what

we do appreciate once we understand. Cross cultural education, interactions and carefully framed introductions to cross cultural essence through performing arts throughout our lives increases the happiness of an expanding internalization of other.

Role of Meditation in Achieving Gross National Happiness

Khenpo Phuntsok Tashi

Introduction

Bhutan is just a small nation, but it is a nation where peace and happiness are deeply enshrined by centuries of living in harmony, following a path of non-violence, respect for the unique culture, and preservation of its pristine environment. Today Bhutan is gaining a reputation as the land of happiness on earth, due to the enlightened concept of Gross National Happiness, introduced by the visionary Druk Gyalpo Jigme Singye Wangchuck, the king of Bhutan. It is the most precious gift ever given to the people in our history.

There are many components and factors through which Gross National Happiness can be realized. But this paper attempts to explore the role of meditation in achieving Gross National Happiness. In general terms, happiness is defined as a positive mental state, the opposite of suffering.

If Gross National Happiness is to be achieved by every citizen, then basic meditation practice needs to be introduced in educational institutions like schools and colleges, community temples and farm houses as a part of their daily programmes. In this way, every citizen can have equal access to meditation to find happiness and peace of mind. It is not necessary to practice for very long hours. Short and accurate practices can dispel the delusion from the mind so that everybody can awaken and develop further according to their inspiration and interest.

There are many types of meditation for temporary and long-range purposes. More specifically, there are many levels of Buddhist teachings suited to a practitioner's interest and need.

Desire for happiness

All sentient beings, particularly human beings want to be happy. Yet they do not know how to put into practice what brings about happiness, a positive attitude. Nobody wants to suffer, but most do not know how to abandon the root cause of suffering. The deepest wishes for happiness and a person's actions thus contradict each other. Therefore, one's own happiness gets destroyed due to absence of meditation.

According to Buddhist philosophy, everything is dependent on the right causes and conditions to have result and outcome. When the cause and conditions are rightly met, things get activated and function as desired. With regards to happiness, inner calm and a peaceful mind are the causes; outer objective phenomena are the conditions or circumstances.

There are many skillful means for developing wisdom and a positive mind, but meditation is seen as one of the most important ways for attaining happiness. Delusions and obscurations characterize the inner landscape of an unenlightened being. These delusions inhibit happiness; instead they obscure and defile our calm and perfect true nature.

What is meditation?

Meditation is a practice using awareness and mindfulness to sustain the continuity of mental calmness and the right view of penetrative insight. In this state, the body abstains from negative action, gossip and harsh speech are suspended, and the mind remains present, not mentally wandering into past and future. The body remains motionless and majestic like a mountain, workable and supple; speech remains quiet and wordless like the stopping of a grinding mill, mind remains awake and stainless like sunlight.

There are two main types of meditation practice that bring about calmness and clarity: calm abiding meditation and penetrative insight meditation. These two practices are indispensable and common to all teachings of the Buddha, from the Theravada to the Mahayana tradition.

We could say that calm abiding mind functions as a pair of strong legs of concentration and it is the first and most important step to train the corrupted mind and overcome negative thoughts. If the mind reaches a state of steadiness and tranquility, it becomes like limpid water in a quiet place. Then the next step is penetrative insight meditation, enabling us to eliminate obstructions to our innate omniscience. The Dawadronme Sutra says:

The mind becomes immovable by the power of calm abiding meditation

And the mind becomes steady like a mountain, by the power of penetrative insight meditation

These two meditations form the basis and essence of all paths leading to the ultimate fruition of concentration. We could say that calm abiding meditation is like the leg of concentration, or Samadhi, with which we walk up swiftly to the fully enlightened state. Penetrative insight meditation is like good sight, with which we clearly see the true nature of all phenomena.

Three opponents of happiness

The three root causes that destroy happiness are desire, anger and ignorance. As long as the root causes are within us, we have less chance of achieving happiness. For example, our mind is bombarded by serious desire, which leads to frustration and further problems if the desire is not fulfilled. In the first place, desire can never be fulfilled as we expect, and even if our desire is fulfilled, bad outcomes may result, creating further suffering.

Anger brings destruction to self and others. Anger is one of the main causes of suffering and even worse than weapons. Weapons are not harmful unless anger drives person to use them. Inanimate

objects like weapons do not kill others by themselves if anger is not the fuel behind their use.

Buddhists look at ignorance as the basis of all evil for it lacks the light of wisdom. It is just the opposite of enlightenment and the awakened state. A man tainted with ignorance is like a blind man walking with no direction.

Direct antidote

Meditation is the antidote to the root cause of all suffering arising from desire, anger, ignorance, pride, jealousy, and miserliness. According to Abhidharmakosh, these six delusions are called the six subtle root causes of cyclic existence or Samsara. These root causes need to be fully abandoned or transformed by practicing meditation and by analyzing the origin, existence and cessation of its mental state. Meditation is a key factor for attaining happiness and the ultimate goal of realizing full enlightenment. Meditation helps one to abandon the root causes of suffering, creating happiness on many levels: individual, community, national, and even worldly. If we create a happy nation, there is no other pure land and paradise than this very world. Psychologically, when everyone feels happy, they will see the good and pure in others. This is why Buddhists call it pure vision.

Meditation deactivates delusions, rendering them inoperative. When the mind remains in a state of meditation, happiness rises naturally above the cloud of delusion. The mind becomes more awake, like a man turning on a light to see clearly the nature of things without depending on words and objective phenomena for verification. When deluded mind is pacified by the power of meditation, there will be no longer any destruction taking place.

Meditation is inexpensive and easily accessible, both for one's own happiness and others' benefit. It can be practiced at any time, any place and by whoever is interested. Meditation could bring a whole society and its rulers to a peaceful and happy state of mind.

If everyone is trained in calm and peaceful abiding, many resources could be reduced. For example, police forces would not be required to control our fellow beings because criminal behaviour would disappear. There would also be financial implications as we would no longer need to cure ill health and rebuild damaged infrastructure damaged by negative mindsets. People would be subdued by meditation. No corruption would take place because meditation makes a man honest and trust worthy. Once men become trustworthy and reliable, there would be no crime and violence. Eventually the court and legal systems would also have no pressure from the criminals because every citizens would do the right thing without harming others. Manmade problems would certainly be solved by humans following the right path and action which is meditation.

Who needs meditation?

In general, whoever is interested in achieving happiness should practice meditation. More specifically, leaders, decision makers, businessmen and ordinary people are desperately in need of meditation practice, because they regularly deal with so many people and problems. These people's minds are thickly obscured by being pre-occupied with so many worldly activities: plans, aims and objectives for themselves and others. In particular so-called modern educated people should know more about meditation and spend more time calming the mind, since they have more pride than the illiterate people. Their egos do not allow them to realize happiness. If their plans are not working out, they have tensions and worries. These tensions will find their way into workplaces and homes, where misery and discord will prevail due to psychological imbalance.

Once under the influence of stress, people often make wrong decisions. Sometimes they attempt suicide and end this beautiful life since they do not know how to cope with problems, or cannot find solutions in time to make critical changes. Therefore, to overcome suffering due to stress and worries, meditation is the best way to find peace and happiness. The state of meditation is

free from stress and tension; it is pure and calm, not like the calm resulting from drugs.

Many people think that meditation belongs to monks and priests; they think it is monk's daily practice and responsibility. In reality, monks and priests are sober and calmer, not requiring as much practice as ordinary and educated people. The more untamed and bewildered the mind, the more time needed for meditation. Of course monks do practice, but they do not own meditation. It is a path for everybody to follow to enter the mansion of happiness. Monks and priests are not usually found implicated in crimes or guilty of transgressions in society, because of mind training through meditation.

Therefore, to make a happy society and a happy people, lay people have more responsibility for practicing meditation daily, because they live among the confused masses.

Nine stages of calm abiding meditation

When you are ready to begin your meditation practice in a suitable place, first calm down both physically and mentally. Take a natural breath in and out for a couple of seconds on your comfortable cushion. At this time you must be pleased and smile with great rapture for getting such a golden opportunity. If there are holy objects in your room, you may pay homage and confess before them with great reverence. If not, you can imagine or remember that a band of Buddhas and enlightened beings including your spiritual teacher, are flying in the space before you as witnesses and are rejoicing in your meritorious action. Then your motivation, which is a primary consciousness directed towards a goal, has to be transformed into bodhimind, the mind of enlightenment. You should say silently; for the benefit of all sentient beings, from now onwards, I shall meditate on calm abiding meditation. May all sentient beings be free from all suffering and attain the state of complete enlightenment. This is a Mahayana tradition to think that others are more important than

oneself. Then start meditating through the nine stages of setting the mind:

- mental setting
- continual setting
- patch-like setting
- close setting
- controlled setting
- pacification
- complete pacification
- single pointed setting
- equal setting.

First you meditate on the present mental setting. Narrow down and focus on the object of meditation or on the present mind over and over again. Do not let the mind wander off and become dull. When you are focusing on the object or your mind, if you find your mind is still and calm you should not disturb it by putting in more effort to set the mind. Let it leave alone as quiet as possible. As soon as you notice that your mind wanders off, call for alertness and mindfulness. Whenever you have any mental distraction you have to apply the power of knowledge and painstaking attention to bring it back to the state of mental setting.

When you practice mental setting, you say to yourself in a soft tone 'Mental setting, I know that I am mental setting right now.' Or you say 'Calm the mind, I know that I am calming the mind.' You say it again and again for sometime. When your mind becomes stable and calm you stop saying it and stay quiet and calm as long as you wish.

At this first stage, the meditator must aim at mental setting like the archer, aiming only at the target. Once the mind becomes a little stable, then the second technique for the continual setting of the mind must be practised.

If one is not following the continual setting after the first stage, the mind may become stagnant and no development of meditation will be gained. So the second stage of continual setting of the mind must be practised through the power of contemplation and repeated attention. Meditation on continual setting the mind is to be like an even flow of a river. At this stage sometimes the mind gets exhausted and is inclined to discontinue the practice. At this time, the third stage of patch-like setting is required to keep the development of meditation going forward.

After the second stage, mental distraction will be less than in the first two stages, but it will come occasionally, so the antidote should be applied from time to time to reduce the distraction as far as possible through the power of mindfulness and repeated attention. The third stage of patch-like setting of the mind is like a skilled tailor, who makes a patch for torn clothes whenever it is needed.

After the third stage, the mind, almost unnoticeably, gets many subtle distractions. During this time it is very necessary to practise the fourth stage of close setting of the mind. If you look at the mind closely it never stays still. It moves and wanders off through subtle mental agitation. At this time we also need to apply extra power of mindfulness and repeated attention. Here the technique of close setting the mind is like a cowherd who keeps his cows close to the grazing land.

The fifth stage of controlled setting of the mind is needed at the time when too much conceptual cognition is coming to disturb the close setting of the mind. At this time the power of mental alertness and repeated attention should be applied to control the conceptual cognition. Here controlled setting of the mind is like an untrained horse getting trained under the control of a master.

During the sixth stage of pacification, wandering thoughts must be caught and brought back to the state of single pointed mind through the power of mental alertness and repeated attention. At this time the mind becomes more pacified and sober.

In the seventh stage of complete pacification the covetous mind, desire, and mental unhappiness must be completely pacified to keep the mind in the state of complete pacification through the power of mental alertness and repeated attention. Until this stage, repeated attention is an antidote to distracted minds.

In the eighth stage, the mind becomes stable in the state of single pointed mind by the force of previous constant practices of meditation. At this time, the single pointed mind should be kept in the state of equanimity without applying an antidote and by putting more effort into bringing back the mind to the state of meditation. Here the equanimity of the mind must be taken care of by uninterrupted attention and the power of enthusiastic perseverance. If the mind is not interrupted, then calmness and tranquility appear naturally, as the sea remains quiet without waves when there is no wind blowing on the surface of the sea. But it is possible to get mental distraction from dullness and agitation, if the enthusiastic perseverance does not remain with uninterrupted attention.

The last stage of setting the mind is equal setting. During this stage the mind is very sober and becomes equal in concentration. The mind has become more powerful than the previous mind, which remains in the state of equipoise whenever needed. So that in this stage, the mind is often compared to an immovable mountain. This is the last stage and the calm abiding meditator can attain complete calmness and stability in six months if he practices in the perfect and precise way according to instructions. At this stage the mind gains special powers like clairvoyance and the ability to read another's with no mental distraction. Every action can become perfect and meaningful to life. This is the real blessing of happiness! This is the real blessing of happiness!

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The Semantic Structure of Gross National Happiness:

A view from conceptual metaphor theory

Abstract

In this study, I make several observations on how conventionalized metaphors used in public discourse regarding Gross National Happiness shape the semantics of development in Bhutan. On this basis, I propose ways in which the field of cognitive linguistics might contribute to planning and education for Gross National Happiness. The theoretical basis for this approach is Conceptual Metaphor Theory, as formulated by University of California Berkeley linguist George Lakoff and other cognitive linguists (Lakoff & Johnson 1980, Fauconnier & Turner 2002, Langacker 2008). Conceptual Metaphor Theory analyzes the patterns of meaning reflected in idiomatic figurative language and predicts that these semantic patterns can influence patterns of non-linguistic conceptual structure, including patterns of moral reasoning (Lakoff & Johnson 1999).

Introduction

Broad concepts such as happiness are essentially contested, without clearly defined meanings shared by all speakers (Gallie 1956). This allows for multifaceted and variable understandings according to individual, cultural and historical circumstances. If we as individuals feel or understand happiness differently, how do we still manage to communicate about it? Or do individuals imagine that they experience the same emotion only inasmuch as they talk about it in similar terms? If so, how universal or distinct are expressions and understandings of happiness across cultures? I propose that the semantics of happiness can be understood in terms of the phrases that situate the emotion within the conceptual landscape of a given language. Often, these phrases are figurative. For example, Gross National Happiness has become a discourse

metaphor² for economic development, first in Bhutan English, and now emergent in Worldwide English.

Our encyclopedic understanding of the world expressed in language is, according to the view of Conceptual Metaphor Theory (Lakoff & Johnson 1980), ultimately rooted in the cumulative analogy of experience and meaning. Working as a cognitive shortcut, enabling communication by grounding new concepts onto conventionalized shared experiences, analogy becomes encoded in language as metaphor (Kövecses 2002). Abstract concepts including emotions are psychologically real conceptual mappings to sensory experiences, which are in turn encoded in the brain as perceptual symbols (Lakoff & Johnson 1999, Barsalou 1999). Since concepts are grounded in physical experience, language denoting concrete entities is more accessible – closer to the tip of the tongue – than is language denoting abstract ones. Conceptual Metaphor Theory predicts that, because sensory experiences precede abstract understanding, the conceptual mappings that reflect the structure of conventionalized metaphor in language will therefore be unidirectional from concrete to abstract. That is, abstract concepts are predicted as being understood *in terms of* concrete words, but not vice versa. For example:

(1) Conceptual Mappings for the Metaphor IDEAS ARE OBJECTS

Concrete	→	Abstract
an object	→	an idea ("I get the idea.")
a container	→	a mind ("What do you have in mind?")
object manipulation	→	Thought ("She toyed with the suggestion.")
object transfer	→	communication ("It went right over his head.")
taking apart an object	→	Analysis ("He teased apart the concept.")
combining objects	→	Synthesis ("Her constructive approach set
a building	→	a theory ("the foundation for a new theory.")

² Zinken (2007) defines "discourse metaphor" as a technical term for linguistic corpus analysis.

Conventional metaphors are so pervasive in language that speakers often are not conscious of the extent to which these mappings structure and filter their thought (Lakoff & Johnson 1980). And yet metaphor is nonetheless highly regular. By delineating the structure of metaphor, we can gain insight into the structure of thought for a given language community.

Emotions are expressed figuratively in common ways across different languages. For example, across languages and cultures, it is common for spatial predication to underlie language describing positive and negative emotions, whereby happiness is associated with upward directionality ("*He was in high spirits.*" "*They were on cloud nine.*" "*Things are really looking up for her these days.*"), while in contrast sadness is expressed in terms of downward directionality ("*Why so low today?*" "*He felt so down everyday.*"). This conflation of space and emotion is not unique to English or the Indo-European language family to which English belongs. Indeed, the upward/downward mapping is equally conventionalized in expressions for emotion in many other languages and language families. The universality of such mappings across unrelated languages implies that these semantic patterns reflect deeper structure of how we as humans think. As another example, figurative language regarding nations involves their conceptualization as a family or as a person ("*developing nation*" "*immature economy*": Lakoff & Johnson 1999:534) and, like people, nations are conceptualized as moving toward certain goals. As such, abstract concepts such as progress are understood in terms of metaphor (Lakoff & Johnson 1999:190ff):

Conceptual Mappings for the Metaphor PURPOSES ARE DESTINATIONS

Concrete	→	Abstract
a destination	→	a purpose ("The goal is <i>a long way off</i> .")
path	→	Means ("Do it <i>this way</i> .")
forward movement	→	progress ("Let's keep <i>moving forward</i> .")
backward movement	→	Failure ("We are <i>sliding backward</i> .")
distance moved	→	amt. of progress ("We've <i>covered lots of ground</i> .")
lack of movement	→	ack of progress ("We're going <i>nowhere</i> .")

Happiness as a Metaphorical Goal and Path

The Western concept of "the pursuit of happiness" situates wellbeing within the metaphorical framework of PURPOSES ARE DESTINATIONS, such that happiness is understood as a purpose for development within society. In Bhutan, however, the corresponding metaphors function as expressions of a strategy to increase Gross National Happiness, as introduced in 1972 by His Majesty King Jigme Singye Wangchuck. Gross National Happiness establishes qualitatively different metaphorical mappings from those associated with "the pursuit of happiness," in that the former links wellbeing not only with the goal of development but also with its means and source. Thus, discussions of Gross National Happiness in Bhutan highlight social wellbeing in terms of a quantifiable national or social resource, a substance apparently *both within and outside* the bodies of individual citizens.

The idea that habits of language reflect habits of thought is not new in psychology and linguistics (Whorf 1956). However, in the past several decades, experimental work in cognitive psychology has confirmed in behavioral studies how language influences non-linguistic thought patterns (Gonzalez-Marquez *et al.* 2006, Evans *et al.* 2007). Thus, I would suggest, Conceptual Metaphor Theory can contribute to a deeper understanding of the nature of Gross National Happiness as it is used in current discourse. For example, by measuring the statistical frequency of key terms and analyzing their collocations – that is, frequently used words and phrases

associated with "happiness" and "Gross National Happiness" in texts – we can begin to chart a semantic network for the concept of Gross National Happiness.

The table below lists the collocations for happiness and Gross National Happiness that are found in several recent Five-Year Plans of the Royal Government of Bhutan:

Sample Measurements of "Happiness" in Select Five-Year Plans of Bhutan

Plan	Dates	Freq. of "Happiness"	Freq. of "GNH"
6th	1987-1992	28.25 words per million (wpm)	0 wpm
Words in context (1 token): <i>"a comfortable house is a source of security, <u>happiness</u> and contentment"</i>			
7th	1992-1997	0 wpm	0 wpm
8th	1997-2002	0 wpm	13.30 wpm
Words in context (1 token): <i>"Income expansion and increased commodity production are only means that have the potential for enhancing human capabilities. They are useful only to the extent that they can contribute to [GNH]"</i>			
9th	2002-2007	134.08 wpm	134.08 wpm
Words in context (14 tokens, 7 each): <i>"[GNH] is the overarching development philosophy of Bhutan."</i> <i>"[GNH] is more important than [GNP]"</i> <i>"All development efforts must seek to contribute to both the material and spiritual well-being of the person to enhance [GNH]."</i> <i>"the maximization of [GNH] is a philosophy and objective"</i> <i>"a wide range of factors contribute to human well-being and <u>happiness</u>"</i> <i>"the country has identified four major areas as the main pillars of [GNH]"</i> <i>"breadth and quality of social relations also lie at the root of <u>happiness</u>"</i> <i>"an individual's quest for <u>happiness</u>"</i> <i>"a system of governance that promotes well-being and <u>happiness</u>"</i> <i>"A Vision for Peace, Prosperity and <u>Happiness</u>"</i> <i>"contribute to the well-being and <u>happiness</u> of the people"</i> <i>"impact of development efforts towards achieving the indices of [GNH]"</i> <i>"[GNH] as the key development philosophy and planning objective"</i> <i>"way of life based on the principle of achieving human <u>happiness</u>"</i>			

These data reflect how happiness and Gross National Happiness emerged as discourse elements of Bhutan's 6th and 8th Five-Year Plans in the 1980s and '90s, and then rose to prominence in the 9th Five-Year Plan, written largely the early 2000's. The figurative language expressed in the collocations for happiness and Gross National Happiness in these documents revolves around two main metaphors, namely:

(4) Metaphors for Happiness as Expressed in Bhutan's Five-Year Plans

1. HAPPINESS IS A GOAL

"quest for happiness"

"achieving human happiness"

2. HAPPINESS IS A NATURAL RESOURCE

"source of ... happiness"

"contribute to Gross National Happiness"

"maximization of Gross National Happiness"

"root of happiness"

Common metaphorical expressions recruited from other political and rhetorical discourse, such as A THEORY IS A BUILDING ("*Gross National Happiness is the overarching philosophy*" "*pillars of Gross National Happiness*"), also play a role in shaping how it is conceptualized.

In certain aspects, the construal of happiness as a type of goal and resource may appear at first glance to be quite similar to the Moral Accounting metaphor that underlies much of Western philosophy and ethics. Under the Moral Accounting metaphor, social and personal wellbeing is conceptualized as a form of wealth, such that "we understand an increase in wellbeing as a *gain* and a decrease of wellbeing as a *loss* or a *cost*. We speak of *profiting* from an experience, of having a *rich* life, of *investing* in happiness, and of *wasting* our lives" (Lakoff & Johnson 1999:292). Current economic models in the West, and the philosophical standpoints in which such models are grounded, apply this metaphorical conceptualization of wellbeing as wealth in how both markets and political decision-making are institutionalized. For example,

corporations are taken as "rational actors" that are established for the express purpose of the maximization and accumulation of wealth (Lakoff & Johnson 1999:530). Thus, the creation of monetary wealth by "rational actors" is seen as a goal in and of itself.

This contrasts with the conceptualization of Gross National Happiness, through which happiness can be construed not only as a goal but also as a resource, a pool of cultural, environmental and social capital that contributes to the creation of further prosperity. His Excellency Lyonpo Jigmi Y. Thinley, in his keynote speech at the Millennium Meeting for Asia and the Pacific in 1998, has articulated this disconnection between monetary income and social wellbeing, as confirmed by the fact that "happiness depends on relative income, not on absolute income. In a world where everyone who has less is trying to catch up with everyone who has more, we may become richer but happiness becomes elusive" (Thinley 1999:20). Indeed, as Thakur S. Powdyel has succinctly stated, Gross National Happiness allows for the measurement of social progress and people's worth "not by what they have, but by what they are" (Powdyel 1999:64). Thus, Gross National Happiness epitomizes a cyclical view of progress, with happiness as a type of wealth and both goal and source, in contrast to a linear view of happiness as primarily just a purpose reached via the accumulation of wealth.

Indeed, in some respects, conceptualizing happiness in terms of being only a goal could entail significant social and economic risks. Peter Hershock has argued that advancements in communications, transportation and manufacturing in the late 20th century have led to the widespread commoditization of most of the material goods and services that are required for basic subsistence. In a world of plenty, this has caused media consumption to cross over from being an intrinsic force for market development to becoming, rather, a channel for "the mass export of attention from local environments" (Hershock 2006:75). Gross National Happiness provides a basis for mitigating these risks by

enabling a rethinking of the usefulness of media services and luxury goods in terms of how much they actually contribute to the advancement of social wellbeing.

Aside from the Five-Year Plans, the figurative phrases associated with Gross National Happiness in other planning documents and policy statements of the Royal Government of Bhutan also reflect the source-path-goal mapping introduced above. The view of Gross National Happiness as drawing on a shared pool of wealth, and the fundamental underlying metaphor IDEAS ARE OBJECTS, can for example be seen in statements of how Bhutan's development strategy relates to its environmental policies:

The process of communal enrichment [in Bhutan] was based on a dynamic in which those who possess superior knowledge imparted that knowledge to others. In the Buddhist religion, this concept of personal development was refined even further to entail overcoming the delusions arising from ignorance, aggression, and the desire for consumption and acquisition. ... The notion that gross national happiness is more important than gross domestic product is thus inherent to the Bhutanese value system (National Environment Commission 1998:19).

In a very real sense, this notion of happiness as capital for development, rather than just a goal toward which development is directed, stems from Bhutan's religious philosophy:

Firmly rooted in our rich tradition of Mahayana Buddhism, the approach [of Bhutan toward development] stresses, not material rewards, but individual development, sanctity of life, compassion for others, respect for nature, social harmony, and the importance of compromise. Our approach to development has sought to both draw upon and conserve this rich fund of social and cultural philosophy and to achieve a balance between the spiritual and material aspects of life, between *peljor gongphel* (economic development) and *gakid* (happiness and peace) (Planning Commission 1999:21).

The ubiquitous availability of Gross National Happiness as a pool of resources and as a specific type of path is perhaps best reflected in the statement that it "is a habit of thought that infuses development and the day-to-day business of government. Gross

National Happiness is Bhutan's bridge over the gap between values and development" (Royal Government of Bhutan 2000:23).

Conclusion

From the data discussed above regarding the use of Gross National Happiness in conjunction with metaphorical phrases in Bhutan's Five-Year Plans and other planning documents, we can thus see that, for example, the notion of "the pursuit of happiness" was not an explicit element of Gross National Happiness when it first emerged in the discourse. Instead, Gross National Happiness was conceptualized as a goal to be achieved *and* a resource to be cultivated. In other words, Gross National Happiness is formulated as both a future goal and a present resource, so as to balance a forward-looking stance for policy planning with a view grounded in the recognition of present circumstances. There are many other figurative phrases which could likewise express how happiness should be harnessed as a resource existing in the present, for example, describing Gross National Happiness as something to be "recognized," "legitimized," "nurtured", "grown" and "protected."

I propose that further research of the type that I have attempted on a very small scale with the Five-Year Plans and other governmental texts, but involving large-scale analysis of texts from a variety of media in Bhutan, could shed further light on the structural nature of how Gross National Happiness is conceptualized in the national discourse, including the degree to which is construed as a goal versus as a resource. More importantly, such a program of research could also shed light on how the discourse of Gross National Happiness has changed and is changing in real time.

A research approach based on Conceptual Metaphor Theory could also have implications for education, from elementary school through college. Given that each person understands happiness uniquely as an individual, and that each person has the capacity to conceptualize happiness and Gross National Happiness creatively

through novel metaphorical language, by integrating metaphor into language education via guided elicitation methods (Li 2008), English classes and other language classes in Bhutan could play a role in fostering creative conceptualizations of happiness at the individual and societal levels, while also teaching youth how to be mindful in the ways that they view social wellbeing.

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Community Vitality

Development and (Un)happiness: A case study from rural Ethiopia

Dena Freeman

Introduction

This paper presents an ethnographic case study of the impact of a 'successful' development project on a small rural community in Southern Ethiopia. The project, carried out by a well known international NGO, aimed to increase household income in this remote area by developing the production and sale of a cash crop, namely apples, in this area formerly characterised by subsistence agriculture. Viewed from the outside, through the lens of traditional development indicators, the project is a huge success. However, when viewed from the inside, by living in the community and observing the social and cultural changes that have come about because of apple cultivation, the success appears much more qualified. Although additional wealth has been generated, it is questionable whether this wealth has made people happier – it has largely been used to buy more clothes and plastic goods, such as plates, cups and shoes. More worryingly, the new presence of a valuable commodity – the apple saplings and trees – has led to widespread theft and social conflict. Traditional methods of conflict resolution are proving ineffectual in this new social reality. Trust has been eroded and what can be described as 'social breakdown' is taking place. The result is that people are clearly more stressed and unhappy. None of this is captured by traditional development indicators, and even by more holistic indicators of wellbeing would only capture the problems after they had occurred. The paper considers the trade-offs between wellbeing in different domains of life and questions how development organisations should deal with the seemingly

inevitable trade-off between economic development and community vitality. The paper signals the importance of ethnographic accounts of development and happiness in order to understand the real impact of development on people's lives.

The Gamo highlands

The Gamo Highlands are a mountainous area in southwest Ethiopia. The village of Masho, where I conducted my research, is situated at an altitude of about 10,000 feet, whilst the highest peaks extend up to 14,000 feet. The population of the Gamo Highlands was approximately 700,000 when the last national census was conducted in 1994 (Population and Housing Census 1994: 14), and is probably considerably more now. Masho itself has a population of approximately 2,000 people. Population density is high, estimated at about 336 persons per square kilometre. There are only a few dirt roads in the highlands and most travel is done by foot or mule. People live in traditional bamboo houses – looking rather like an upturned basket – or in newer style rectangular mud houses with corrugated iron roofs. Two or three generations live together in small compounds that are usually surrounded with simple bamboo fences. Villages do not have electricity or running water – cooking is done over wood fires and lighting is provided by small kerosene burners and candles.

People have traditionally lived by subsistence agriculture, cultivating wheat and barley, and to a lesser extent peas, beans, potatoes and tree cabbage. Enset, the false banana plant, is also central to subsistence. During the twentieth century people have also been involved in hand-loom weaving, becoming one of the major producers of the traditional white cloth shawls worn by men and women all over Ethiopia. The gendered division of labour is such that men are responsible for ploughing the land, sowing seed, weaving and house-building, while women are responsible for taking manure to the fields, harvesting, fetching water, food preparation and child care.

Whilst life is physically tough and people live in poverty according to international standards, this is not a famine area, people do not go hungry and until people began to become aware of living standards in larger towns, Addis Abeba and the West (as seen on television and in the lives of foreign tourists and missionaries), people did not consider themselves to be poor. However, as development comes to this area this perception is beginning to change.

What these bare descriptions and statistics do not show is the remarkable social and cultural richness that has long been a part of Gamo life. According to the Gamo worldview there are numerous spirits living in the surrounding environment - they are to be found in the earth, in lakes, on mountain tops, in sacred forests, in large rocks and so on. They are thought to have great powers over agricultural production and human well-being (Freeman 2002:66). If fed through offerings and sacrifices, the spirits are believed to cause the crops to grow, the cows to give milk and the women to have babies. In short they will cause the people who 'feed' them to become fertile and prosperous. However, if these spirits are ignored and the required offerings are not made then they are believed to cause crop failure, sickness and conflicts. Feeding the spirits then, in traditional Gamo thought, is crucial to living and maintaining a good life.

According to the set of beliefs and practices that I will call the sacrificial system, however, not everyone can make offerings to the spirits for themselves. Certain senior people, such as clan heads, lineage heads and household heads (all male) must make the offerings on behalf of their juniors. The sacrificial system, therefore, is essentially a pyramidal power structure with a senior, at the top who sacrifices animals to the spirits on behalf of the whole community and various other 'seniors' who make similar sacrifices on behalf of their district, clan, lineage and sub-lineage, right down to the household head, or father, who makes sacrifices on behalf of his household. In each case those on whose behalf the sacrifice or offering is being made have to 'call' the senior to make

the sacrifice or offering. This 'calling' always involves some type of economic transaction, such as giving the senior a sheep or some grain so that he will come and perform his task.

It can thus be seen that seniors are considered to mediate the important relation between their juniors and the spirits, and thus in a subtle sense, to control the wellbeing of their juniors. The hierarchical social relations constructed in Masho, and other Gamo communities, can be thought of a set of channels down which fertility and wellbeing flow, from senior to junior. By following the social norms and behaving the appropriate way to one's seniors, the social gradient is set up that enables the downward flow of fertility and wellbeing. Conversely, if one does not follow the rules or behaves inappropriately, it is as if either the gradient has been flattened or there is a blockage in the channel and the flow of fertility and wellbeing is hampered. In such circumstances those downstream of the obstruction would expect to experience agricultural failures, sickness or other misfortune. This state of blockage in the system of flow is known as *gome*, a term which refers to both the initial transgression and the misfortune that follows (Freeman 2002; Sperber 1980). Thus when a person experiences some misfortune they will immediately try to work out what rule they have broken or to which senior they have behaved inappropriately, and will seek to make amends. And in order to avoid misfortune in the first place, people in Masho have traditionally focussed much attention on proper behaviour and avoiding *gome*. Thus major social conflict, violence and theft have been rare in traditional Gamo communities.

Another important part of Gamo life is the initiatory system. This is a politico-ritual process by which men, with their wives or mothers, become initiated to the status of *halak'a* or elder. It is not however dependent on age, but rather on material success. Any man can be initiated to the role of *halak'a* if he can raise the requisite resources needed to host the huge feasts which are a necessary part of the initiation process. The initiation process lasts several months, sometimes years, and involves numerous feasts

and rituals (Freeman 2002: 83-113). A major function of the initiatory system, therefore, is as a system of economic redistribution (Halperin & Olmstead 1976). Put another way, the initiatory system provides something for people to do with their surplus wealth. In a traditional economy with no consumer goods, people use their surplus wealth to buy status.

A final important aspect of traditional Gamo life is the system of assemblies that permeate all communities. Formal communal assemblies, meeting in assigned assembly places, often with ritual significance, used to be the locus of legal and political life in Masho and other Gamo communities. Whilst much of their role has now been taken over by state political and legal modalities, the assemblies continue to play an important role in Masho life. The community meets here to discuss serious matters, to plan communal activities and to settle disputes. People speak one at a time and discussion continues until consensus is reached. In the past the assemblies had recourse to strong sanctions, such as fines and expatriation, and they provided an extremely effective way to settle disputes.

Along with this set of traditional beliefs and practices, many men and women in Masho would also consider themselves to be Orthodox Christians, and would occasionally visit one of the local churches or make special offerings to Maryam (Mary) or one of the saints. Ethiopian Orthodox Christianity has been present in the Gamo Highlands since the sixteenth century and has mixed easily with the local traditional beliefs.

Whilst there has been much change in the details of traditional Gamo life throughout the twentieth century, as I have discussed elsewhere (Freeman 2002), the three central elements of traditional Gamo culture that I have described here have been central in Masho life up until the late 1990s. At that point, Protestant missionaries came to the area and began to be successful at converting people to Protestant Christianity.

The Protestant missionaries consider the spirits to be the devil, and thus see all traditional practices as forms of devil worship. They consider *gome* to be backward superstition, the *halak'a* initiations a waste of money, and all other traditions evil or irrelevant. The conversion process thus involves convincing local people to give up their traditional ways and take on the new ways of Christianity. Protestants focus more on individual than community, equality than hierarchy, and personal consumption rather than communal redistribution.

In light of the activities of the Protestants, the leaders of the Orthodox Church began to feel the need to separate out their form of Christianity into a distinct religious offering so that they could compete for the hearts and minds of the Masho people as they 'become modern'. Thus the Orthodox Church is now also turning against the traditional practices and putting pressure on its followers to stop them and solely follow the teachings of Orthodoxy.

The conversion process is still very much taking place and there is much religious flux in contemporary Masho, with many individuals moving backwards and forwards between traditional, Orthodox and Protestant lives as they make up their minds. In 2005 approximately 65% of the community had become Protestants, 25% were Orthodox Christians and about 10% were traditional.

It was in this context that the first NGO came to the area and started to implement development projects to try to improve the lives of the local people.

Development in Ethiopia

Ethiopia is one of the poorest and least developed countries in the world, ranking 169th out of 177 countries with data in the Human Development Index (HDI) for 2007/08. Poverty levels are desperate with 31 million people living below the national poverty line of less than half a dollar a day, and over 80% of its 84 million

people living below the international poverty line of \$2 a day. Lack of food security and malnutrition are major problems where between 6 and 13 million people are at risk of starvation each year.

Poverty is manifest in many forms, but most directly by low levels of income. In 2000, the World Bank estimated *per capita* income to be 100 USD. Perhaps the most telling manifestation of poverty in Ethiopia is the extent of food insecurity that prevails among the population. The annual number of drought-affected and internally displaced (due to armed conflicts) people requiring emergency food assistance has ranged between 1.1 million and 10.9 million over the past ten years. In 2004 Ethiopia ranked 105 out of 108 developing countries in the Human Poverty Index with an HPI value of 54.9, indicating extreme poverty. The Human Development Index (HDI) for 2005 was 0.406, further confirming extremely low levels of human development and extensive poverty.

It is thus not surprising that there are over 700 NGOs working in Ethiopia and that the main focus for many of them is poverty reduction and food security. DEVCO (not its real name) is one of these NGOs. DEVCO has been working in Ethiopia since 1971 and now works in many areas of the country. In the late 1990s DEVCO started working with a number of villages in Chench district, including Masho. Prior to this there had been virtually no NGOs active in the area, partly because of the lack of famine and extreme poverty in this area and partly because of the difficult access due to hilly terrain and near to non-existent roads.

The DEVCO development project in Masho

DEVCO set up a wide-ranging development program in the local area. As set out in the initial program document the overall goal of the program was to 'contribute towards sustainable household food security' and the three substantive objectives were:

1. Improved agricultural production
2. Improved socio-economic infrastructures

3. Increase in household income.

The program document discusses the economic situation in the area and gives data on average land holdings, agricultural crops grown, numbers of livestock per head, off-farm activities, levels of literacy, rates of malnutrition, number of female-headed households and the like. Only passing reference is made to 'culture' or 'traditional practices' and there is no discussion of the social life of the community. I would never recognise the vibrant village that I lived in for two years from their bare situation analysis. There are no people in this document, only statistics. Development for DEVCO is a purely material, economic matter. How people think, feel or conceptualise their own wellbeing is totally ignored.

For DEVCO development 'is a process of change for human beings for the better.' What 'better' actually means, however, is never discussed. Like most development organisations, DEVCO is trying to improve peoples' lives without having any clear idea of what a 'good life' is or what actually makes people happy. And although DEVCO proclaims a 'holistic development' philosophy including physical, material, economic and spiritual development, it seems that all non-material development is only relevant as far as it serves material development. Thus their program document declares that

real development begins when people begin to think differently, when they realise the potentials their environment could offer and the means available to tap the potentials of their physical and social environments. (p. 52)

In other words, development includes changing the way people think so that they will learn how to maximise the material gain they can achieve from their physical and social environment. Development involves turning traditional peoples into economic maximisers. Will this really improve their lives?

One activity within this program, and the one that I shall focus on in the rest of this paper, was the introduction of apple cultivation. Apples, it was considered, would grow well in the highland soils and could function as a cash crop. The farmers could sell the apples to consumers in Addis Abeba for a relatively high price, thus improving their household income.

DEVCO staff selected a number of individuals and gave them each six apple saplings for a nominal price. They trained them on cultivation techniques and provided follow up support to help them grow and propagate. They also supplied root stock to selected farmers in the area and made available more apple saplings for general purchase.

The project has continued for several years, and more and more farmers have become involved in it. From a technical point of view it is very successful. The farmers have quickly learnt the new cultivation techniques and the apples have grown well in the local soil. The total apple production is still relatively low as it takes several years for apple saplings to grow large enough to bear fruit, but already it seems that the fruit quality is good and a small local trade is developing. Trade in the apple saplings themselves has also developed, with one apple sapling selling at about 50 birr (about US\$ 5). Considering that a day's labour is valued at about 3 birr, this is a very high price.

Most households in Masho now cultivate at least some apples. Some now have considerable orchards, while others have just a few saplings. The community as a whole also contributed money and bought saplings for a community orchard. Masho, along with surrounding villages, is now known as the area for apples.

Impacts of the project

So what has been the impact of this project? Has it improved people's lives? Has it made people happier? The project approached development from an economic point of view and it seems clear that apple cultivation has indeed lead to improvement

in household income for many households. Through the sale of apples and apple saplings additional income has come to many households. DEVCO and other organisations stop the analysis there and conclude that the project has been a huge success. Already plans are underway to implement it in other parts of the country. But if we look a little closer we begin to see another story.

Firstly there is the question of what people do with their additional household income. The development project focuses on generating this income and then seems to assume that people will use this extra money in a way that better their lives. Little thought has been given to what this actually means. In practice, what I saw in Masho was a proliferation of plastic household items – plates, jugs and washing-up bowls. More people are wearing plastic shoes rather than going barefoot and people have more changes of clothes.

When I discussed their expenditure with people, most reported that when they received a large lump sum, they wanted to get rid of it as quickly as possible. People did not want to keep the money for day to day activities, but wanted to spend it quickly on large or important items. Thus one man reported how he had quickly spent the income from the sale of some apple saplings by buying a calf and new clothes for all his family. A few days earlier he had asked me for money to buy medicine from the clinic because his daughter was sick and he had no cash. Other people told similar stories – they did not want the money to disappear on small things so they spent it quickly on big things, and then found themselves in the familiar old situation when a child needed a school book or a family member required medicine.

Secondly, and more importantly, is the unintended impact of the apple project. In short it has led to almost total social breakdown. The problem is theft. People who planted their apple saplings in a regular plot of agricultural land, away from their homestead, often arrived one day to find their entire holding of apple saplings had been uprooted and taken. People say that neighbours steal from neighbours, brothers steal from brothers. The problem has become

so intense that nowadays no-one plants apple saplings in regular agricultural plots, which are unfenced and unguarded. Instead people have started to plant the apple saplings within their homesteads, on small pieces of land that would otherwise be the location of a cooking hut, or a space to hang drying washing, or a space where people might sit and talk. Traditionally agricultural land and domestic space is clearly marked. In order to protect their apple saplings from theft this boundary has become blurred.

Others have created fenced orchards and try to guard them, but everywhere the fear of theft is high.

And even so, theft persists. It is not hard to break through the simple bamboo fences that mark off family compounds and break-ins in the middle of the night have now become frequent. Many households have now bought dogs so as to protect their compounds from unwanted guests. In the family that I live with, and no doubt many others, the young man of the house grabs a few hours sleep during the evening so that he can stay awake all night, guarding his apple saplings. This spoils the camaraderie around the evening meal, as an important family member is not there, and often leaves him tired and irritable from not enough sleep. The impact on his marital relations is not good either.

Masho, like other Gamo communities, has always been a sociable place. Friends, neighbours and kin are always going in and out of each other's compounds, helping with tasks, participating in meetings, and sharing news and gossip. Now this has changed. People don't want to go into too many compounds, in case they are accused of stealing. And when unusual visitors do come, household members notice where they look and whether their eyes stray towards the apple saplings. There is the thought that perhaps they may be checking out the lay of the land before coming back at night to steal the valuable saplings.

While many people seem to get away with the thefts, occasionally someone is caught. About a year ago a Masho man was caught after he stole 2000 birr (US\$ 200) worth of apple saplings from the

community orchard. People were outraged. The man was put in prison in the local town of Chenchu. He claimed to have already sold the saplings and disbursed the money and was thus unable to repay the community straight away. The case continues although the man is now back home. People are angry and social relations are tense. Trust, the glue of social cohesion, has almost entirely been eroded.

Why has this happened? It is, I claim, because of the unfortunate combination of the activities of DEVCO and the activities of Protestant missionaries. DEVCO have introduced a very valuable commodity into the village economy, and the activities of the missionaries have led to erosion of traditional values and practices and to a state of moral and cultural relativism. Apple saplings are worth a huge amount of money. Stealing 20 apple saplings can earn you 1,000 birr (US\$ 100), which is the average annual per capita income in Ethiopia. When there is no clear moral message about right and wrong, and no moral centre able to impose sanctions, plus an extremely valuable commodity, the temptation has become too great and people have begun to steal on an unprecedented scale.

Were the traditional Gamo culture still strong, people would be scared of causing *gome*. Even if they felt tempted to steal the precious saplings they would fear the misfortune that would likely occur to them by angering the spirits in this way. Nowadays people are not sure whether the spirits exist or not, or whether Christian ideas about punishment in hell are true or false. The plurality of ideas and religions has led to a state of moral relativism where there is space to think that since they can't all be right then maybe none of them are right. The Protestants, now the largest group, are still busy trying to evangelise the rest of the community, and thus their sermons are not preaching Christian values, which would include not stealing, but are instead exhorting people to leave their traditional ways and come to the Church. They are saying that other ways are wrong, but are not spending much time teaching what they believe to be right.

So are people happier?

It is difficult for me to believe that people are happier now than before the DEVCO project started. Unfortunately I do not have survey data about people's subjective wellbeing, but I have a sense of a community that I have known over some twelve years. Whilst people do appreciate the additional wealth and the new clothes and plastic shoes that it buys, people overall seem more stressed and more fearful. There is less socialising and visiting and more of a wariness of others. People are forever talking about recent thefts and complaining how people can behave this way. There is a growing sense that individuals and families are trying to protect their possessions from others. Boundaries are becoming more clearly marked, the sense of community is slowly diminishing. On balance, it would seem to me that people are less happy now than they were twelve years ago, before the apples and the missionaries arrived.

DEVCO however are unaware of the social impact of their apple project, as they are only looking at economic factors and do not really have any deep understanding of the local people and their lives, beliefs and culture. When looking through the lens of economy these other matters become invisible or irrelevant.

Were DEVCO using the GNH indicators developed in Bhutan, or other indicators of wellbeing, then it seems likely that they would have at least spotted the problem once it occurred. The community vitality indicators would surely have shown the breakdown that has taken place. Thus it seems that using wellbeing or GNH indicators is a big step forward from using simple economic indicators alone.

Two interesting questions remain, however.

1. If DEVCO had designed the project with the GNH indicators in mind, would they have foreseen the problem and been able to design their project in a way to minimise the problem of theft?

2. In measuring happiness, how does one value comparatively happiness in different domains? If people are happier because they have greater wealth, but less happy because there is less community vitality, how do we weigh these different types of happiness against each other? Has overall happiness got better, worse or stayed about the same?

The answer to the first question, I believe, is no. Although the broader thinking that a GNH approach would have brought, it is simply impossible to predict the particular nuances of social change, and even with in-depth knowledge of this community it is still totally surprising that theft would become such a huge problem and that social relations would breakdown to such an extent.

However, if the project were carefully monitoring GNH indicators throughout the duration of the project, then it does seem likely that the project staff would have been alerted to the problem at its early stages. They would then have been able to discuss the matter with community members and, before the problem escalated to such a huge extent, work with the community to find some solutions.

Possible solutions might include asking all the religious authorities in the area – Protestant, Orthodox and Traditional – to actively teach about the importance of trust and honesty and the evil of theft. They might also include setting up some kind of local community police force with the task of patrolling the area at night and guarding the orchards. Other solutions could include trying to control the market of apple saplings so that it was impossible for people who had stolen apple saplings to sell them, or setting up a tagging system so that all saplings were tagged with information about their owner and location. It is possible that a combination of these activities would solve, or at least control, the social problems that have come about because of the project.

The second question is perhaps more philosophical. Even the proposed solution to the problem are only a band-aid, covering up

a fundamental change in mentality and outlook that is taking place in the community - a change from a more communal outlook to a more individualist outlook. It seems that the most productive and efficient economic systems stress the pursuit of individual economic gain and the rewards of individual economic consumption. The desire for material things, commodities, is the fuel driving this kind of economic development. And it seems that the development of an economic system that stresses individual (or family) production and individual (or family) consumption necessarily brings about a shift from communal to individualist values. So there appears to be an inevitable trade-off between economic wealth on the one hand and community vitality on the other hand.

Further research is needed to understand people's subjective experience of this transition and this trade-off. We need to understand how people themselves value the different domains and well-being, to what extent they are willing to trade one for another, and where in the continuum between the two end-points they would choose to be. Perhaps our responsibility as development practitioners and policy makers is to help individuals and communities to become aware of these issues and to empower them to be able to make their own decisions, rather than have them caught in a situation that they feel is beyond their control.

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Religious Institution-based Community-hood and Identity of a 'Muslim Community' in a 'Remote' Rural Village in Bangladesh

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Abstract

This paper addresses the notion of community and community-hood by making its ethnographic focus on a 'Muslim community' in rural Bangladesh. In applying the Resource Profiles Approach (RPA) and Subjective Well-Being (SWB), it understands the cultural constructions of community-hood in relation to the perceived religion there. It argues that the notion of community and community-hood in the contexts of rural Bangladesh is multi-dimensional and culturally rooted. Religion becomes important into the constructions as it implicates social, economic and political lives there. People tend to develop a religion driven identity though it becomes complex due to rapid transformation of village society.

Introduction

How does the notion of community identity, and therefore, community-hood develop or exist in rural Bangladesh? Here, this question is not linked to the nationalistic concern or debate about people's 'Muslim' or 'Bengali' (Ellickson 2002) identity that is still a real national issue in Bangladesh (Abecassis 1990). This ethnographic paper, here, rather focusing a 'remote' rural community in the country, attempts to explore the cultural constructions of community-hood—how do the community people identify themselves or their sense of belonging. Effort to

defining 'community' in the contexts like rural Bangladesh is not new; however, much was based in ecology, mode of production and economic relations while for example, Bertocci (1996) for the specific cultural ground suggests for 'a model of community rooted in an Islamic world view' (Bertocci, 42). He argues to capture the ideational and symbolic processes that provide clues to conceive of community in this Muslim dominant country (ibid). At the micro (village) level, the dominant sense of community-hood, in general, is geographical i.e. *grambashi* (villagers) that confines a settlement boundary and/or socio-political i.e. blood or non-blood based *samaj* (traditional social group) that, followed by specific leadership, confines a lineage/descent boundary (Mannan 2002)—rather than one's religious identity. Not that the religious boundary is missing or less important; rather many researches argue that in the whole sub-continental context including Bangladesh, religion in constructing people's identity becomes important (Ellickson 2002) though the issue is much more associated with inter-religious groups relationship i.e. Muslims vs Hindus (Azad 1996) and which often interprets as political phenomenon (Baird 2004). This paper addresses the concept of 'community' as a psycho-cultural phenomenon following the Abecassis's (1990) argument that 'communities are defined by their culture and their religious labels' (Abecassis: 4) and for its membership, 'the ways in which the members regard themselves and understand themselves ... their self-image' (ibid, 3) though construction of any (collective) community identity becomes illusory because of the non-existence of a final truth (Schuurman *ed* 1993).

Understanding the community context

The paper first of all focuses on nature of the community simply means how does it look. To do this, a combination of Resource Profiles Approach (McGregor 2004) and (community) Subjective Perception (WeD 2003) have been applied to understand the community level *perceived resources* and *subjective perception* respectively.

The following table is about different types of resources the people collectively perceive available to them, also the 'desires' within the resources:

Table: The community-perceived 'resources' and 'desires'

Dimension	What do they have and what they desire more	
	Resources	Desires (want more)
Cultural	Ulema, madrasa and mosque	'Morality', 'commitment' of ulema, 'quality' of ulema, 'Islamic norms'
Material	Arable land, limited jobs in non-farm areas, jobs in Islamic professions, migrated jobs mostly in Saudi Arabia	Enough employment and jobs, more incomes
Social	Social groups (samaj), old aged people (murrubbi), social leaders (matbar) who are aware of their samajs	Solidarity and collectiveness, 'powerful' and rich people for development, commitment to the social development, preserving social values e.g. enough caring attitude towards parents by sons
Physical	Pacca mosque, primary school and the Alia Madrasa, also the hafizia (semi-pacca)	Road communication to visiting the urban areas, electricity connection
Financial	Two absentee persons donate to the hafizia madrasa, also to the poor people, services (mainly loans) of NGOs	Significant number of rich who could help the community much more, 'favourable' loan conditions of the NGOs
State service	The Alia Madrasa (MPO benefited) and the primary school, the current UP chairman	Interest of the state apparatus and UP in social welfare, enough teachers both at the Alia Madrasa and the primary school
Knowledge (Social and	gaany (being intellectual) persons have knowledge for social development	Convenient social environment to apply the 'social' knowledge

Dimension religious)	What do they have and what they desire more	
	Resources	Desires (want more)
	Persons (e.g. mufti) who has enough Islamic knowledge	Effective interactions of the mufti with the community, peoples' heartiest/ positive response to the ulama

The above table presents different categories of *resources* people perceive available to them and the *desires* they perceive to have more. Regarding the *cultural resources*, they have *ulema* who received a formal or informal religious (Islamic) education; *madrassa* (religious school, one is *alia*, and another is *hafizia*), and a historical mosque built in 1935. But they perceive a lack of morals, less commitment of *ulema* to the community people, loss in the 'quality' of *ulema*, lack of *rahmat* (kind from Allah); lack of 'Islamic norms' among the individuals as well as community people.

Regarding the *material resources*, earning money by selling crops or leasing out pieces of land is important for many villagers. Segment of people employed in non-farm sectors (e.g. labourer in industries) can also earn money to support their families while the *ulema* people do it in working at mosque/*madrassas*. A significant number of people earn their incomes through working in foreign countries, mostly in Saudi Arabia; their remittances are also spent for mosque and *madrassa* development. But there have a lack of employments opportunities as well as expected incomes.

Regarding the *social resources*, *samaj* provides a sense of attachment to the groups. The community people (the *samaj* leaders in particular) are aware of social norms and values in maintaining peace in their society. But there have a lack of solidarity among different *samajs* (groups), lack of educated and 'powerful' people to promote social development, also lack of *collective* efforts to making social development, lack of care shown by sons towards their elderly parents.

Regarding the *physical resources*, the community people have fertile cultivable land, which produces crops both for domestic usage

and markets; also a *pacca* mosque and Alia Madarsa. Mosque and *madrasa* carry importance from a cultural point of view. To the people these are much more value because these are brick built. However, the villagers feel marginalized regarding the poor road communication, especially during the monsoon. They also desire for having electricity in their village.

Regarding the *financial resources*, most of the people perceive them as 'poor' because of their very poor financial conditions. This category also includes presence of NGOs in receiving credits. But having no significant number of wealthy villagers is a big concern. A shortage of funds for *madrasa* education, 'unfavourable' conditions in taking and paying loans with NGOs are also a concern.

The state service and level of knowledge of individuals is also a matter in the perceptions of resources and desires.

The above discussions give the sense that this is such a community where i) traditional kin association, consists of both blood and non-blood relationships appears a big phenomenon ii) any non-kin association does not appear with a *strong influence* where presence of religious organizations in a traditional mode carries a significant sense to the people, and iii) the appearance of the state in delivering services is very poor.

Religion and religious institutions in the community

The perceived 'religion' (Islam), in the community context, involves three types of phenomenon—i) religious institutions/organisations, refer to one mosque and two *madrasas* ii) religious actors, usually called *alem* (the plural sense is *ulema*) here are mufti, *moulana*, *kari*, and *hafez*, and iii) 'religion' reflected behaviour i.e. sense of 'morality', 'quality' of *ulema*, practicing 'Islamic norms' and 'values' in everyday life. The people like to emphasis on their 'Islamic' practices considering a presence of the religious institutions inside the village boundary; however, not ignoring the wider cultural sense of belonging to the Muslim

ummah (global Muslim community) because of the experiences with outside religious institutions as well as some of labouring people's living experiences in Saudi Arabia as well as Mecca.

The importance of 'religious' institutions and actors

The people put higher emphasis on the presence of both religious *institutions* and *actors* in the village. The institutions include one mosque built in 1935, and two *madrasas* (religious schools), one is state recognised *Alia*, up to grade 10 and another is community funded *Hafizia*, an informal school for foundation training established in 1984 and 1992 respectively. These are useful for addressing different 'religious' needs (e.g. becoming 'educated' through reading 'Islamic' syllabus in the *Alia*; getting familiar with 'Islamic norms' in reading in the *Hafizia*) of the community people. The *actors* refer to the *ulema*, who studied 'Islamic education'; therefore, receive a social status for that type of education. However, *actions* (what they can do or cannot do) of the *actors* (including functions of institutions) are much more important to the people. Here, *actions* broadly refer to 'religious behaviours' the people convey. The importance of the institutions and the actors involve a historical motivational process that has described below.

Ground for the birth of the religious institutions and actors

'Every religion arises within a particular environment which inevitably affects the development of religion' (unc.edu). The notion of 'remoteness' in the community context is important to explore *growth* of the religious institutions and the actors. Here, the sense of 'remote' is not a methodological vocabulary only that the study has previously used (welldev.org.uk); rather it has a specific historical as well as political meaning there. To them this is a *char* village, refers to a range of understanding in the wider context: more than a hundred and half year ago this area has emerged from the river *Dholeshary*, and gradually developed to a habitat. By definition, *char* means 'a mid-channel island that

periodically emerges from the river-bed as results of accretion' (Kamal and Khan 1994: pp.11); but to the people, defining *char* is more than geographical; it has a socio-political meaning that refers to a community-state relationship. They feel that they are deprived of some basic services e.g. *pacca* (paved) road, electricity connection that would come from the state apparatus. They are being experienced in 'less interest' of the state apparatus (including Union Parishad, the lowest tier of local government) to their social development/welfare. 'They also find none' in their village/community who could lead a significant developmental activity as well as to reduce different community problems i.e. severe income poverty, intra-community conflict. Thus the local perception of *char* includes a community-state relationship where the community is perceived *ignored* by its counter partner.

This relationship as well as the community phenomenon has made affects not in the areas of social and economic development only, but also in the cultural sphere including developing their identity. Before 1935, the people were used to pray the *zumma* prayer (Friday's special prayer) in a far away mosque that carried huge sufferings on walking for muddy road. When this community mosque was established in 1935, then it reduced that type of sufferings, especially for the older people. This mosque was established by an influential lineage group of the community to address not the religious needs (congregation) only, but also to prove it that 'they can do', as 'they then had a status in the society'. Thus establishing the mosque became a symbol of power and status for a group of people. Some groups of people also felt that they need to educate their children but the problem was the "state's callousness" to build a paved road that could enable students to get access to outside 'better' schools. This was the situation from demand point of view; however, state as the supreme authority of delivering such services, 'did not take any appropriate measure to address the demands of the people'. Within such circumstances, an individual (the first *alem* of this locality) of neighbouring village, studied 'Islamic education' in a *madrasa* in Comilla (an eastern district in Bangladesh), started to

motivate the village people towards the same type of education ('Islamic education') in the late 50s. Since most people's livelihoods were mainly on cropping agriculture based in their locality, purpose of receiving 'Islamic education' was not fully a cash-inspired activity for them, rather, a 'moral' inspiration to perform religion as well as motivate others to gain 'spiritual benefits' both in their eternal as well as earth lives. This motivation worked and inspired others to become *alem* through that education as it carried a higher status during that period of time. This has gradually resulted in producing a good number of *ulema* from the successor generations who studied in different *madrasas* staying far away from the village as well as relatives. This has motivated further to establish at least one *madrasa* inside their village so that younger students can receive 'religious' education staying close to their relatives. In the middle of 80s, the UP chairman (head of local government), a rich person of the village, donated pieces of land, also took attempts to establish an *alia madrasa* so that students can receive 'religious' mixing 'modern' education intended to 'serve Islam' along with securing a job in the market. He, for his position did it also. However, the *ulema* people (studied in different *kowmi madrasas* outside the village), usually prefer a more orthodox type of Islam and oppose to any 'modern' (e.g. *alia*) type, were not satisfied with such type of *madrasa*, and later they made a pressure to establish a *kowmi/hafizia madrasa* that would provide 'pure religious' education only, and they made it also with the supports (both 'moral'/'ideological' and financial) came from a segment (belonged to different lineage groups other than the chairman's one) of local people who i) do not support the *alia* education for their 'moral'/'ideological' ground, and ii) did not like that UP chairman for his lineage ('Mallik') identity. Thus over period of time, the community people got one mosque and two *madrasas* in their village that are significant collective assets to them. They find a meaningful attachment as well as a sense of identity with these assets.

Religion, community-hood and dynamics of the ‘muslim’ community

This paper in using the concept of *relatedness* refers to meaningful connections with intimate others and social groups and is facilitated by a sense of significance (Ryan 2004) broadly categories five types of ‘religion’ driven attachments that produce a sense of dynamism in their sense of community-hood. These are as follow:

- The distance sense
- The spiritual sense
- The lineage sense
- The gender sense
- The occupational sense

i) The distance sense

In this paper, ‘distant’ refers to the psychological as well as ideological attachment of the people with the ‘Islamic image’ of the Middle East countries, particularly Saudi Arabia and United Arab Emirates. The community has a large number of people (men mainly) who are the labourer migrants to these countries (also discussed in Hossain 2004). The migrants not only send financial remittances to their origin but also social remittances (include *knowledge* or *experience*) that a migrant receives during his/her staying in the destination, and sends to the origin (Levitt 2001). To the community people, for example, Saudi Arabia is a ‘good’ country for migration because ‘that is a Muslim country’, ‘the land there is *pabitra*’ (‘sacred’) because prophet Hazrat Muhammad was born there; there have Mecca and Madina cities where they can make visit, there have the *Allah’s house* (the Kaba) and they can perform *hajj*. “There people are forced to close shops during prayer time ...every body is forced to pray ...women cannot go outside without wearing *burkah* (veil), even the Christian women also...”; thus the community people develop some sort of ‘Islamic image’ of that country and aspire to reflect it in their village also.

The mosques in Saudi Arabia are 'very beautiful'; they also desire to make their village mosque beautiful. They take initiative also – the migrants send some money for the mosque and *madrassa* development; they while visit their origin, tell others about these 'good' things of Saudi Arabia, and ask to follow Islam including the mosque development. Not only the mosque or *madrassa*, individual's everyday behaviours also get a change; for example, when a migrant returns back, s/he likes to say *salam* (as 'hello' in Western style) first while seeing/meeting others and most often s/he was less used to with such type of behaviour before his/her migration. Among the migrants, bringing *burkah* (veil – the perceived Islamic dress) for their women relatives (mother, wife or daughter) is common so that 'they can maintain *purdah* like the women in Saudi Arabia'. Being Muslims, the community people construct/take these things positively and feel how they are attached with these 'Muslim countries'. They become happy with a migrant's financial contributions to the community mosque and/or *madrassa*, and get inspired also to make a contribution there. The whole scenario produces a *positive inspiration* for the community people towards their religious institutions as well as actions.

ii) The spiritual sense

While the 'distant' dimension is explained from a trans-national perspective, the 'spiritual' attachment can be explained from a local neighbouring perspective. The community people like to consider their village as a *Muslim village* where all people are Muslims. This distinct sense of community identity is geographically confined while lots of Hindus are living in the neighbouring villages. It encourages them to say: 'we all are Muslims and we have no Hindu in our village' – reflects their spiritual cognition that is further associated with their *roles* and *responsibilities* towards the religious institutions, here, the mosque and *madrassas*. Such *roles* and *responsibilities* include: younger *madrassa* students are appreciated for studying 'Islamic education', the *ulema* people, in spite of their income poverty enjoy a social

status for their 'Islamic occupation' like jobs in mosque and *madrasas*; people are often called to contribute (donate) more to their religious institutions, people collectively desire to develop (both infrastructure and increasing number of participants) their mosque and *madrasa*, many are concern for the 'loosing of their religious values', many parents find a 'moral' obligation to send their children to *madrasas* to make them *ulema*, almost all households make contribution of *musteer chaal* (one clenched rice paid once a week) for the mosque, and they through a collective effort supported a solar technology system for lighting (power) their mosque and *madrasa* because of no electricity connection in the village.

Being Muslims, and for their spiritual inspiration, the people do these things as part of their 'religious' duties as well as obligations. However, their obligations and actions most often are driven by other types of attachments. Here kinship (lineage/*samaj*), gender status and occupational involvement matter that are describing next.

iii) The lineage sense

The community people are divided into nine major *samajs* (traditional social group based on blood and non-blood kin); however, formation of as well as attachments to these *samajs* is confusing—to what extent these connect to blood relation or particular occupational involvement. For example, 'Munshi' is a lineage group in the community; textually 'munshi' refers to a person who is involved in a specific religious occupation (Karim, 1998) i.e. *imam* to lead a congregation in mosque, but in the contemporary community scenario, 'Munshi', as a group, consists of a lot of people who are not involved in any religious occupation. It was told that they belong to the 'Munshi' group because they come from a same ancestor who pursued a religious occupation in the past, and for his occupation people called him 'Munshi'. The same is about the *Bepari samaj*—'bepari' there refers to a person who does business, but many people of this *samaj* are

not involved in doing any business. Mannan (2002) argues that Muslim society organized according to the principles of ethnic and also occupational stratification, and not by descent criteria, in the British period. He considers social mobility that produces fluidity in descent (Mannan 2002). In the community, the lineage/descent formation primarily comes from blood based kin group (locally called 'sharik' means belonging to a same group to inheriting property) usually headed by the oldest male.

The influence of national level party-politics (except elections) and any non-kin associational form (except a few NGOs) is less significant in the community, and the groups of people belong to individual *samaj*, generally care this traditional identity. This type of identity, in one hand, provides a (informal) social security for the individual groups/persons, for example, when an individual faces any social problem, then *samaj* takes a responsibility first to mitigate it; provides insecurity also when inter-*samaj* conflict takes place, on the other. Because of multi-dimensionality (amount of cash flow and size of land a person holds, 'capacity' i.e. to do something significant and 'quality' i.e. educational status or intellectuality of individual, connection to urban influentials etc.) of power none (individual/group) can enjoy a monopoly over it. The inter-*samaj* conflicts, sources may be different, however, have a connection to the community's religious practices. The *ulema* (religious actors) come from different *samajs*, and such diversification does not create any significant tension into any conflicts as most of them are absentees living away from the village to earn. Regardless the sources of conflicts among *samajs*, the mosque, the *hafizia madrasa* and the graveyards become important into these conflicts for historical reason—which *samaj* established what and its relationships with others. For example, the *hafzkhana* (*hafizia madrasa*), an important community institution was established in 1992 by an influential *samaj*, but the opposite group(s) wants to control over it. There are two graveyards in the village, based on specific *samaj* attachment (*Mallik* and non-*Mallik/grihosta*). The *Mallik* people established their graveyard (at least 80 years back) close to the *alia madrasa*, which also was

established (in 1984 but launched in 1990) by this (Mallik) group while the non-Mallik's (known as *grihosta*) graveyard is close to the *hafizia madrasa*, and gets a 'higher' attention and care from the *ulema* people who oppose the *alia* type of education as to them "it does not provide the 'real' Islamic education that Islam suggests".

Not only in the community's perceived religious practices, but also in other non-religious areas, the social conflict makes an affect that weakens the collectiveness of that single 'Muslim community'. It comes true when the villagers take mosque-based collective action to develop a village road in particular, but does not produce an equal benefit to all. Having different lineage groups and conflicts influence their sense of *Muslim-hood* negatively, in case of resources distribution in particular though they try to mitigate these influences centering to the mosque-based identity.

iv) The gender sense

It refers to the nature and extent of the village *women's participation (inclusion)* in the community religious institutions including their *actions*. The community mosque, two *madrasas* are the 'public' (male facet and opposite to 'domestic' / 'private') institutions and the existing religious norms and values as well as practices there do not allow women to come and take an action (e.g. attend the congregation in mosque) that the men can do (except the girls' studying opportunity in the *madrasas*). However, the village women find a *hidden inclusion* with *their* institutions that encourages them towards performing some *roles* and *responsibilities*. This type of *inclusion* can broadly be categorised from the following two aspects:

i) Material aspect

ii) Non-material aspect

Material aspect: It denotes the material goods or cash donated for the mosque and *madrasa* or received from there. The mosque receives *musteer chaal* (one-clenched rice) every week to meet its

different expenses. An assigned man (asked by the Mosque Committee) visits every door when women in most cases hand over/transfer an amount of rice to him. Here, the women as individuals are not the decision makers to give the rice; but they, being the community members, feel a *sense of belonging* to their mosque that creates a social obligation for them. To them it is their 'religious duty' also and cannot ignore such obligations.

The mosque produces a sense of 'our' for the women though it restricts them to get a physical entry in it. Not donating the rice only, the women receive material benefits also from the mosque, for example, *tobaraak* (food items come from community people) that is distributed to the *musullis* (men, boys come to the mosque to pray) just after the Friday's *Jumma* (noon) prayer and some carry it to their family to transfer to women and children. The *hafizia madrasa* organises annual *wez mehfil* (religious gathering) where lots of women (in a separated sitting arrangement) participate as listeners, also receive *shirni* (late night meals) as part of the programme. Thus both the mosque and the *hafizia madrasa* produce 'a sense of inclusion or participation' (no matter it is equal or not compare to men) for the village women that is strongly associated with their community membership.

Non-material aspect: It refers to women's obligation for the religious institutions other than the material goods. The community membership and the religious identity all together develop a sense of *our* in women's cognitive level for which they cannot ignore *their* attachment with the religious institutions.

The following story reflects such type of cognitive sense of a village woman:

feel proud with our mosque; I do not go there, women never go there ...my husband goes there to pray; I ask him to pray for the departed souls of my father/mother in laws, he prays also. He also shares Hadiths with me that are discussed in the mosque ...I do not think that the mosque is for the men only ...this is for both ...they can go, they can pray there, we cannot; but we receive religious statements

(Hadiths) from our husbands ...I live in this village ...this is our mosque also...

Source: Field note: Dec 2004

The mosque there is not merely a place for men to pray, but also an instrument to reproduce religious ideologies as well as roles and responsibilities both for men and women. The *imam* there states many religious prescriptions that are significantly applicable for women—what they should do and what not. Thus it becomes a ‘public guardian’ for the women, includes (or control) them, recognises them as its ‘members’, and takes a ‘responsibility’ to ‘guide’ them to the ‘paths of Islam’.

However, this is all about ‘female face of inclusion’ that differs from men and provides a very limited scope for women compare to men, for example, women’s job in transferring the weekly rice (women also responsible for cooking at the household level) is large while they can not hold any position of *ulema* in the village.

v) The occupational sense

Occupational engagements include both local (inside the village) and migratory (outside the village) involvements of work to make a living. It looks at the cultural constructions—how people’s occupational involvements connect their identity as well as well-being.

Occupations relate to the community identity can be seen from two dimensions:

- a. The ‘non-religious’ face of occupation (e.g. non-farm labourers)
- b. The ‘religious’ face of occupation (e.g. *imam*)

a. The ‘non-religious’ face of occupation

The ‘non-religious’ face of occupation refers to these *activities that have no any direct religious attachment* and people depend on these

occupations to pursue their incomes. Cropping agriculture is the main source of earning to the people who own enough arable land. Most of the farmers heavily depend on producing cash crops like jute, maize etc. apart from the staple food of HYV paddy. Though the present farmers are habituated with the land cultivation, nowadays, their descendents seem to have less interest for that occupation. This is for two reasons: i) the successor generations (age below of 30) are getting attraction with various non-farm occupations in urban areas; also in foreign countries, and they find a 'status' with the new jobs, and ii) the economic benefits against the costs in the contemporary agriculture is not so much attractive (profitable) to the village farmers.

The changes in the village economy are fasting with their increasing connections to the capital city and closer urban areas. These changes have shifted the mode of religious contribution also—donation of money/cash instead of/along with rice/paddy to the community mosque and *madrassa* in some cases. The increasing number of jobs based in urban non-farm sectors encourages the village people to be out-migrants that produce a negative effect to the conventional family as well as social relationships. Breaking up of traditional joint family and creating of more nuclear type of family causing to be less caring to the older parents by their married sons. These are developing a sense of *individualism* among the younger people who in the contemporary village scene are out-migrants or want to be, and who have been identified 'callous' to lead a village life staying in the community. The interpretation of 'callousness' also includes people's degree and nature of *religious participation* at the community level, their (ir) regular physical presence in the mosque in particular which is understood as 'deterioration of or loosing religious values' of the younger people. Younger people's work at outside the village physically makes them absent in praying at the community mosque; however, the unemployed older people interpret it as a *deviation* from their 'religion' as well as community responsibility. This 'deviation' in one hand lessens the number of people in the mosque, but increases the volume of

cash (*daan*) donated for the mosque on the other. A number of international migrants (elaborately discussed in Hossain 2004) make financial supports for the mosque/madrasas which are a very significant source of fund for the institutions. Such donations are perceived as a 'good' work which 'bring *chouab*' ('religious gains') to the donors; also provide a status and honour for them.

b. The 'religious' face of occupation

The 'religious' face of occupation refers to *the income activities based in religious institutions*, mainly at mosques and *madrasas*. Different mosques, *hafizia/kowmi madrasas* in and around the village where the community's *ulema* people pursue their jobs, are a significant source of earning for the group. Apart from the cash earning by the religious professionals, many poor students reading in the community's *hafizia madrasa*, receive regular free of cost food supports from the village households; also free accommodation in the *madrasa* building. Pursuing these types of 'religious' occupations mostly depend on the community financing which is perceived as a 'moral' and 'spiritual' duty of the people. A number of local students, reading in different *madrasas* far away from the village, also get free of food and accommodation supports there for the same reason. Such 'religious' face of occupations exists and sustains because of the perceived community obligations, here both spiritual and social, for their religion. Therefore, are strongly liked to their collective Muslim identity.

Conclusion

This ethnographic paper looks at the constructions of community-hood by taking a case of a 'Muslim community' in a rural village in Bangladesh. It argues that the notion of *community* and *community-hood* in the contexts of rural Bangladesh is multi-dimensional and culturally rooted. In case of religion, it (community-hood) goes beyond spiritual and involves a range of factors related to every day social and economic life there. Religion and religious institutions make a sense not for spiritual

necessity only, but also for people's non-spiritual *practical needs* that hardly addressed by the state authority. Because of socio-cultural and economic implications, the rural people tend to find a sense of well-being for their attachments with religion. Traditional nature of *collectiveness* integrates to the religious practices that unite the people towards a common identity. The culturally rooted socio-economic contexts maintain and sustain that identity though recent transformation of village life makes it much more complex.

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To Think Like an Island: Three-capital model in pursuing GNH in Taiwan

Juju Chin Shou Wang

Abstract

One outstanding feature of GNH – as opposed to using Gross National Product (GNP) to measure the quality of life – is its focus on the Eastern world view in an attempt to deconstruct the long-standing practice of viewing the world largely through Western perspective. In particular, the “invisible hands” directing the market has turned into “invisible feet” that trample on society, producing the phenomenon of “affluent poverty” including environmental and social costs. Thus, GNP-oriented development in Taiwan has actually brought about three other GNPs: Gross National Pollution, Garbage, Noise and Pollution, $GNP = NG(\text{Guns}) + NP(\text{Pollution})$. In a sense, GNPs are the major source against happiness in Taiwan.

According to “word map of happiness”, Bhutan ranked eighth and was the only Asian country to make it to the top ten list, while Taiwan came in 62nd and China 82nd. Considering Bhutan’s GNH model on “thinks like a mountain”, Taiwan might facilitate a GNH model of “think like an island” in terms of two perspectives. One perspective will be focused on three-capital discourse associated with natural capital, cultural capital and social capital. Another perspective put emphasis on three-dimension discourse including paradigm shift, institutional transformation and structural change.

This paper aims at developing an island-oriented GNH model in a theoretical fashion. In practice, this paper also presents a local case of Bamboo Broom Union (BBU) by applying above-mentioned two perspectives. Considering GNH as a social movement, BBU has launched a grassroots program in pursuing a GNH city in a glocalized and humorous way.

1. GNP: gross national product or pollution

Global problems, particularly global changes, have been a long-term result accumulated through “negative exchanges” between both environmental and societal systems. Anthrop-centered societal system, in an aggressive fashion, has long been exploiting the environmental system in terms of three factors: addition, withdrawal and simplification (Schnaiberg, 1994; Hemple, 1996). Food chain has thus been disturbed and then downgrades the natural system in both quantitative and qualitative aspects. On the other hand, a sub-system of the societal system, production and consumption, has also been “de-naturalized” and further enlarged the “role distance” between man and his environment. In a word, the ways our societies interacting with the environment have reached a state known as “structural distortion”. In this sense, GNP coins with Gross National Pollution; Garbage, Noise and Pollution; $GNP = NG(\text{Guns}) + NP(\text{Pollution})$. Eventually, lower quality of environmental has been a source leading to unhappiness.

A paradigm shift based on social transformation, rather than technology, is urgently needed to tackle unsustainable and unhappy society associated with global environmental problems. This assertion was presented in early 1970 by the Rome Club and latter in 1990 by the Brundtland Committee. Brown (1992) has even coined the idea to be “environmental revolution”. Tomas Kuhn (1962) asserted that environmental problems, like knowledge and power, are constructed by the society and thus viewed as one of the social structures. Structural functionalism, a classic sociological theory, focuses on the interaction between “whole” and “part”, which is closely associated with “global” and “local” perspectives in environmental context. In other words, “structural adjustment”, in a form of paradigm shift, is required to tackle above-mentioned “structural distortion” in dealing with unsustainable and unhappy world. Moreover, islands, among various spatial forms in the unsustainable world, are confronting “life and death” crisis in terms of their spatial and social characters

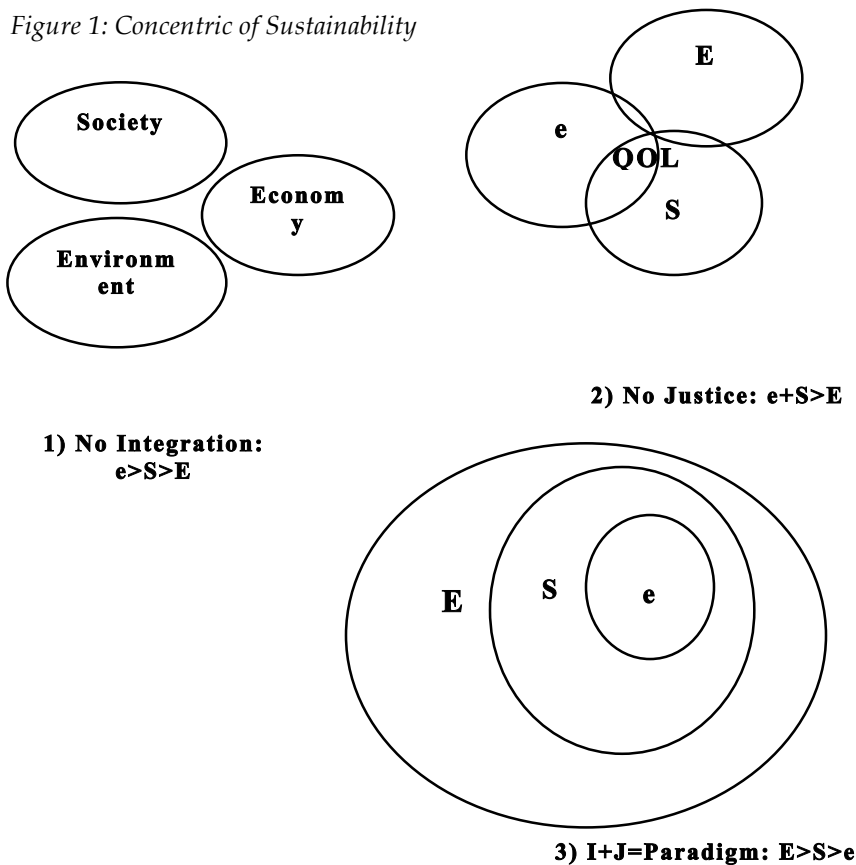
as compared with continental counterparts. This paper intends to address how "Island Taiwan" works out her paradigm shift toward sustainable society in a glocalized context through GNH, discourse and movement.

2. Sustainability gaps

The East-West "sustainability gaps" are to be addressed in terms of the conceptual and contextual insights. Sustainable gaps, in a qualitative perspective, are to be identified in terms of how far from "genius sustainability or happiness" (Maser, 1998; Rogers, 1998).

One of the "sustainability gaps" would be the problem engaged in system imbalance among environment, society and economy (See Figure 1). In the first phase, each system has its own indicators without any integration. For example, GDP stands for economy sector and PSI for environment, while social indicator movement works out for a better society. First phase, thus, provided no integration among three sectors and economy sector dominating over the two other sectors. In the second phase, some integration appealed in terms of quality of life (QOL). Indicators measuring QOL include Borda Index of Quality of Life (Fred Gruen 1996), Calvert-Henderson Quality-of-Life Indicators, CFI (Country Futures Indicators) developed by Hazel Henderson, GPI (Genuine Progress Indicator), HLE (Happy Life Expectancy) by Ruut Veenhoven, HSI (International Human Suffering Index) by Population Action International 1992 and so on. Second phase involved anthrop-centered practices without paying much attention to no-human aspects, so to speak, environmental and no-human justice. In that stage, attention on society was paid more than that in the first phase. Still, environment earned less in the pie. Coming to third phase, environment-based economy and society is the central theme in achieving sustainable development that would promote paradigm shift, from Social dominant Paradigm to New Ecological Paradigm as Dunlap suggested. In this stage, environment accounts for largest share and includes social and economic parts.

Figure 1: Concentric of Sustainability



Source: Juju Wang, 2001

Other sustainability gaps include GNP's myth, particularly in developing countries, signifying several new GNPs without environmental concerns. They are: Gross National Pollution; Garbage, Noise and Pollution; $GNP = NG(\text{Guns}) + NP(\text{Pollution})$. (wang,, 1998). Similarly, the Index of Sustainable Economic Welfare (ISEW), and a variation, the Genuine Progress Indicator (GPI), has been calculated for a number of developed countries including Austria, Australia, Denmark, Italy, Netherlands, UK,

and US. All tell a similar story: ISEW growth accompanies GDP/capita growth until about the mid- 1970s when GDP continues to grow but ISEW begins to decline.

In addition, the "Happy Life Expectancy" (HLE) indicator developed by Ruut Veenhoven attempts to measure the degree to which a citizen of a country can expect to live happily, using estimates of longevity with survey data on subjective happiness. Surveys have been carried out in 48 countries. Predictably, scores tended to be higher in affluent, free, equal, educated and harmonious societies, but surprisingly they were not significantly related to unemployment, state welfare, income equality or population pressure. Countries with a high quality-of-life index do not necessarily have a high happy life expectancy, for example Iceland, and vice versa Bulgaria, which raises interesting questions about the relationship between "quality of life" and "happiness", and notions of progress generally.

Third dimension of sustainability gap would be the gap between the west and East. Although useful in promoting a civilized world, Western views have dominated most of modern aspects including sustainability. Perspectives from the East are needed to construct a complete word view.

Other indicators include those sets of indicator such as UNDP's Human Development Index (HDI), Human Poverty Index (HPI-1 and HPI-2) and Human Freedom Index, (HFI), EU's Environmental Pressure Indices and PPI (Policy Performance Index); IUCN's Wellbeing of Nations; Ecological Footprint (Wckernage & Ree, 1996), Environmental Space (George, 1999), Eco-efficiency (Desilmone, 2000), Waitakere's Greenprint (NZ), Vermont's Social Well-being Index; Washington's Environmental Health; Green Map, eco-footprint, CofS, Japan's National Welfare Index (Kaya, 1998), Taiwan's Environmental Pain Index and Mother Pain Index (Wang, 1998) and National Well-being Index (Prescott-Allen, 2000); Green HDI, Green GDP, Natural Capital.

Among them, Human development Index (HDI) is probably the most popular indicator in reflecting basic needs on health life, acquiring knowledge and upgrading standard of living (UNDP, 1990-1999). Recently, new dimensions, such as gender inequity, were added in order to cope with the spirit of Agenda 21. With this change Japan drops from 1 to 17, while Finland moves up from 13 to 1. However, the HDI is much more useful in comparing developing countries than developed nations (Harris, etc., 2001).

Another indicator in reflecting degrees of sustainability among 52 nations is a ranking of ecological footprints and deficits. Obviously, most countries occupy more ecological capacity than their country provides. Compared with 1.7 hectares per world citizen, USA is ranked first with 10.3 ha / per Capita followed by Canada (7.7 ha), New Zealand (7.6ha) and Singapore (7.2ha). In terms of ecological deficit, Singapore is ranked first with -7.2ha followed by Hong Kong (-6.1), Belgium (-3.7), USA and Netherlands (-3.6). India, Pakistan and China are three notable exceptions. According to the calculations of this study, they are among the few countries that consume at a level which could be reproducible for everybody in the world without endangering the planet life-support capacity. However, for both Pakistan and India their land-based footprint is larger than their terrestrial ecological capacity. The ecological remainder comes from their comparatively low use of sea space as their fish consumption is much below world average. First, the ecological deficits calculated here may be an underestimate of the true deficits. Second, if their population and per capita consumption continue to grow, this possible remainder will soon be used up. ([http//www.ecouncil.ac.cr/](http://www.ecouncil.ac.cr/))

Hanley et al., (1999) has conducted a dialogue to detect Scotland's sustainability between 1980 and 1993 among several measurement tools, such as Green Net National Product, Genuine Savings, Genuine Progress, Index of Sustainable Economics Welfare, Environmental Space, Ecological Footprint and Approximate Environmentally-Adjusted Net National Product. The

forementioned tools are single-dimension oriented, covering economic, social and ecological ones. The detecting results indicate a social and ecological sustainability downgrade, but an economic sustainability upgrade. Another project on “sustainable dialogue” through “weak sustainability”, done by Pearce & Atkisons (1998), demonstrate that Japan and Netherlands were ranked first and second among 18 countries.

3. Taiwan’s Island characteristics

According to STI research team and Yeh (2002), Taiwan is a continental island with approximately 36,000 sq. km land area and 1,200 km of coastline. The surrounding marine ecosystem provides local people with abundance resources. Geologically, Taiwan is relatively young, ranging from recent alluvial deposits to early sedimentary and crystalline rocks. A tilted fault block running along the entire length of the island forms its structure. This gives Taiwan its fundamental topographic feature—the Central Mountain Range, which lies from north to south. Within the 140-km horizontal distance between the east and west coasts, the elevation ranges from sea level to 3,950 meters. Steep mountain terrain over 1,000 meters constitutes about 30% of the island’s total land area; hills and terraces make up around 40%; and low-lying alluvial plains make up the remaining 30%. Therefore, land areas suitable for human development is limited; however, the population density is very high. This have caused severe land use problems that land resources is not restricted to urban and suburban areas. Marginal land in non-urban areas, including hillside and coastal areas, also faces the threat of destruction through human development.

Despite its recent change from its peripheral “milk cow” status for Mainland China (J Yeh, 1996:), Taiwan is an island, once called Formosa. This is not a virgin island, however, it is an island under frequent colonization. Also, this is an island with high density of economic development. Further, this is an island of profound political transformation. And furthermore, despite its economic and political strength, this is an island struggling for its national

identity and international recognition. It is against these salient features that we are developing a set of sustainable development indicators.

Islands are commonly defined as “land surfaces totally surrounded by water and smaller in size than the smallest continent (Goudie, 1990:252). Taiwan is an island off shore of Chinese Mainland. It is thus a continental island structurally a part of a neighboring continent not a sea island rise from the ocean flow. But above this geological connectedness, the relationship between island Taiwan and Continental China is much more complicated than it appears to be.

Despite many common features, all islands are not the same. Taiwan, as an island, shares some common features with other islands but presents its various salient features against other island. Two sets of concept underscore these dual features.

On the one hand, island Taiwan shares the feature of insularity with other island (Emilio Biagini and Brian Hoyle, 1999: 8) while showing greater interconnectedness with other parts of the world. On the other hand, Taiwan seems to be vulnerable but demonstrates fast and profound change and transition. Under the concept of insularity and interconnectedness, island Taiwan presents the following features:

1. Physical, biological and cultural insularity: like other islands, Taiwan presents a level of insularity in physical, biological and cultural sense.
2. Scarce natural resources: Taiwan is scarce in nature resources in the cause of industrialization, and that have increase the reliance on sea transport.
3. Colonial legacy: like most of the islands, Taiwan had been under frequent colonization over last 400 years.
4. High population and competitive in spatial allocation: Taiwan's population density has been among the highest in the world.

Competing for space and spatial allocation has thus been a critical public concern.

5. Trade dependent economy: Over centuries, Taiwan relies on foreign trade to accommodate its island status. But it was since the last three decades that Taiwan has begun to develop itself into a big trading economy in the world.

For vulnerability and fast changing, island Taiwan presents:

1. Natural disaster prone ecology: Taiwan is prone to natural disasters, including flood, hurricanes, and earthquakes.

2. Environmentally sensitive areas: A large percentage of land in Taiwan could be designated as environmentally sensitive areas that are significant for natural disaster prevention or natural conservation.

3. High turn over rate: life span of industries, system or prevailing practices is relatively short in Taiwan.

4. Constant changing society: Taiwan is a society constantly under change.

5. Transitional society: industrialization, political democratization, and economic liberalization in Taiwan all happened within a relatively short time. But the dynamics and result of the change have been profound and lasting.

6. Vulnerable to external influence: Taiwan society is very vulnerable to external intervention, environmentally, economically, socially, and culturally.

7. Struggling for identity: Taiwan has been struggling with national identity both in the island and international arena.

4. New paradigm for environmentalism: GNH

Two sets of paradigm shift are presented as follows in order to conduct a discourse on GNH.

From economic capital to natural capital: Capitalism always intends to maximize the economic profit as possible it could, which is viewed to be the major reason resulting in “common tragedy”. Gross National Product (GNP), an indicator of capital accumulation, is the only showcase in displaying a state’s power. Under a new international labour division, “commodity chain” accompanying with “pollution chain” and “disease chain” have brought about a dilemma known as “affluent poverty”. In this sense, GNP is given three other new meanings: Gross National Pollution (GNP), Garbage, Noise, and Pollution (GNP) and $GNP = NG(\text{guns}) + NP(\text{pollution})$ (Wang, 1994;2001). Thus, World Bank proposes a set of three indicators in evaluating a state’s power as a whole. They are human capital, natural capital, and economic capital. In the future, natural capital is expected to be the dominant indicator among others because of its scarcity of which people have become aware.

From anthropocentrism to eco-centrism: Human-centered values, particularly male-centered ones, have treated Nature as a “green slave” representing “cruelties of civilization” (Salt, 1897). From Homo Sapiens to Homo Rapines, human beings have been exploiting the earth despite of the earth housing us. To apply the concept “the world is your body”, human beings should be humble and always “think like a mountain” in an “inter-subjective” view (Watt, 1966; Leopold, 1960). Eco-centrism, thus, has been a major value in shifting to New Ecological Paradigm (NEP) from Human Exemption Paradigm (HEP) and also in promoting environmental justice (Bryant, 1995). Being a significant frame of environmental justice, eco-centrism puts its emphasis in the rights of nature rather than natural rights (Nash, 1990).

Following those perspectives toward new paradigm, GNH movement is in process among many nations. The third International Conference on Gross National Happiness (GNH) was held in Thailand from Nov. 22 to 28 at Chulalongkorn University in Bangkok in 2007. The conference

was an attempt to launch three changes in the form of a social movement : a paradigm shift, institutional transformation and structural change (Wang, 2008).

One outstanding feature of GNH—as opposed to using gross national product (GNP) to measure the quality of life—is its focus on the Eastern world in an attempt to deconstruct the long-standing practice of viewing the world largely through Western perspective.

The concept of happiness as the ultimate goal is common to both Eastern and Western religions and philosophies. Unfortunately, capitalism has narrowly defined the quality of life in economic terms, as measured by GNP, putting excessive emphasis on anthropocentrism and materialism.

As such, the “invisible hands” directing the market has turned into “invisible feet” that trample on society, producing the phenomenon of “poverty within prosperity” as well as incurring other social costs. In fact, some have defined GNP as “gross national pollution” The incurred social costs are diametrically opposed to the core values of happiness-dignity, sensibility, faith, reassurance and hope.

Bhutan took the lead in promoting the GNH movement in an attempt to pursue happiness at the national level. The king of Bhutan set an example by partaking in the movement organized by the Center for Bhutan Studies.

The movement covers eight areas - psychological well-being, health, balanced use of time, education, cultural diversity, good governance, communal vitality, ecological diversity and resilience and living standard.

Bearing in mind that the government is responsible for connecting public opinions to these domains to create happiness on a structural level, Bhutan set up two commissions-the Royal Civil Service Commission and the Anti-Corruption Commission—to

carry out the three changes in order to integrate and expand the scale of happiness.

Since 2004, when it began hosting international conferences on GNH, Bhutan has become a focus of discussion because it has been brave enough to create new paradigms.

One of the paradigms from which Taiwan can learn is Bhutan only has diplomatic relations with 22 countries, as it believes that sparing expenses is conducive to domestic affairs.

Adrian White, a social psychologist at the University of Leicester, has produced the first ever “world map of happiness.” White based the ranking on the findings of more than 100 studies from around the world, including data on life expectancy from the WHO and various national surveys about satisfaction with life.

Denmark ranked first in the survey, which covered more than 80,000 participants from 178 countries, followed closely by Switzerland and Austria. Bhutan ranked eighth and was the only Asian country to make it to the top 10 list. Taiwan came in 68th and China 82nd.

Three-capital model for island Taiwan: from sustainable development indicators to GNH (island happiness)

Taiwan should pay attention to such a trend as it is a crucial turning point for “glocalization.” Bhutan walks its own way and “thinks like a mountain.” If Taiwan “thinks like an island” and supports the “three capital”—natural capital, cultural capital and social capital—it will also have an opportunity to make itself an island of happiness. Hopefully the public will speak out in pursuit of happiness and launch a grassroots GNH movement. In this sense, ten-year Sustainable Taiwan Indicator (STI) system is an appropriate base to link with GNH.

In general, there are four schools of thought on sustainable development (Yeh, 1996). The first is the carrying capacity model, which defines sustainability as development staying within

natural limits. Under this construction, sustainable development was defined as improving the quality of human life while living within the carrying capacity of supporting ecosystems (IUCN, 1991). The second is an intergenerational justice model that defines sustainability as the development of the present generation without depriving the development of future generations. The Brundtland Report defined sustainable development as the development that meets the needs of the present without compromising the ability of future generations to meet their own need. The third is an economic internalization model that extends the context of economic development to include all elements of social welfare. Under this construction, sustainable development is defined as a maximization of the net benefits of economic development, subject to maintaining the services and quality of natural resources over time, where economic development is broadly construed to include all elements of social welfare (Pearce, 1990). The fourth is an institutional capacity-building model that links decision-making process and real world and thus incorporated with the role of institutions. Accordingly, sustainable development is better understood as a desired institutional environment, and not as a desired result. The essence of sustainable development is thus the dynamics of social capacity building, through which the ex post regret of collective decisions can be minimized.

Though the world is claimed to have a "common future," we have seen how differently each nation (or each island) can view its interests in development and the environment (Porter & Brown, 1993). Conflicts in values are equally pervasive at the national level, especially in countries undergoing rapid transition such as Taiwan. It is imperative to ask how a transitional island society would define the course of national development in terms of sustainable development, given its prior developmental pattern and current international dependence. Among four different models of sustainable development, Taiwan takes the institutional capacity-building model to be her base for essential rationale in designing her sustainable development indicators.

In developing sustainable development indicators for island Taiwan (STI), STI team incorporated the concept of institutional capacity building. An extended PSR system is further employed to demonstrate the structure of the chosen indicators.

STI system, covers Island Taiwan and Urban Taiwan, adopted PSR model in which social and economic components are treated to be pressure. In a sense, social and economic components are the source of unhappiness lead to unsustainable state of environment such as pollution. For both GNH and three-capital model, good environment is a major source of happiness on the one hand. Social capital, in a positive way, is another source of happiness.

Comparison among major components

STI	GNH	Three-capital Model
Environment (State)	environment	Natural capital
Society (pressure)		Social capital
Economy (pressure)		Structural change
Institutional (response)	Governance	Institutional change
	culture	Cultural capital
	Balanced development	Paradigm shift

In addition to island features, a discourse on Three-Capital Model is to be interconnected with a three-change framework in terms of structural change, institutional change and paradigm shift (change). Nature and culture are the foundation of island Taiwan. Currently, GNP-oriented governance structure in Taiwan has

Island GNH: Three-capital model

	Natural capital	Cultural capital	Social capital
Structural change	From GNP to GNH	From GNP to GNH	From GNP to GNH
Institutional change	Hunter to protector (indigenous people) Sea food culture to ocean culture	Moveable feast in terms of cultural depth Cultural citizenship	Incentives on national trust movement PPP (public-private-partnership)
Paradigm	Environmental	From	From power to

shift (change)	protection is the best economic development	glocalization to llobalization	empower
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7. National trust movement as a mechanism for GNH: happy social capital

Better environment base upon natural capital is one of the major sources of happiness. Natural capital is accumulated through social capital based on national trust movement. Following new trends on GNP (Gross National Happiness) and CSR (Cooperate Social Responsibility), trust system (particularly environmental trust) could be a constructive means to better promote both natural and social capitals. Trust system has long been a tradition of charity in most part of the Western world. Moreover, Trust is not only a legal term, but also a social one. Socially speaking, Trust has been viewed by sociologists to be empowerment's switchover by which social capital is accumulated in terms of network and money collection. For example, National Trust movement since 1895 put strong emphasis on a slogan: 10,000 men one dollar each is much powerful than one man's 10,000 dollars (Waterson, 1994). By this movement and concept, civic society is possible through "charity society" including social charity and environmental charity. Through GNH, this paper is an attempt to conduct a discourse on people's social enterprise in terms of national trust movement associated with natural, cultural and social capital. In a sense, people's happy power is not only the most powerful association in terms of social capital, but also the most powerful foundation in terms of natural and cultural capitals.

Overview of environmental trust around the world

Case	Legislation(s)	Organization	Trusted	
UK	Status of Mortmain(1279) Statute of Uses (USE) (1535) Statute of Charitable	National Trust (1895) NT, Scotland (1931) Civic Trust (1957)	Trusted land 248,000 acres 1200 KM seashore line	Members 3.5 million 149 museums Heritage Lottery

	Uses : Elizabeth an Act(1601) Public Trust Act (1853) Trustee Act, Consolidated(1893) Judicial Trustee Act(1896) National Trust Act (1907) Public Trustee Act(1910) Trustee Act(1925) Civic Amenities Act	Landmark Trust (1965) English Heritage (1983)	31 natural reserve 557 Green Heritage Site	Fund (HLF) (1994) Working Holidays (1967) Charity shops Heritage shops
Japan	Trust Act and Trust Business Act (1923) NPO Promotion Act (1998) Trust Act Updated (2006)	Trust Association (1926) First Public Trust (1977/5/20) JNT (1968) Japanese Association for National Trust (1983)	334 Public trust cases (1990) 558 cases (21 in environmental trust) (2007)	Acorn Camp (2000)
USA	National Historic Preservation Act(1966) Congress legalized National trust(1949)	National Trust for Historic Preservation(1947)	2500 National Historic Landmark	Main Street Movement (1980-) Save America's treasures movement (1998) Historical Hotels (1989) Cultural Heritage Tourism (1999)

Three-Capital Model in Pursuing GNH

New Zealand	Resource Management Act (1991) Historic Places Act (1993)	NZ Historic Places Trust (1954)	5649 listed in inventory	Lottery support cultural and environmental preservation (1987)
Australia	The Natural Heritage Trust (1997) by government EPBC Act (1999) Australian Heritage Council Act (2003)	NTSW (1945), NTSA (1955) NT Tasmania (1960) NTQ(Queensland) (1963) National Trust Association established : ACNT (1965)	300 sites 77 NHL sites 335 CHL sites 681 trees	Annie Wyatt started NT movement (1945)
Malaysia	Antiquities Act (1976) National Heritage Act (2005)	Heritage of Malaysia Trust □BWM (1983) PHT (1986) MHT (2007)	50 tangible NHR sites and 50 intangible NHR sites. (20070	National Heritage Register (NHR)
India	Regional and Urban Planning Act added article in preserving cultural and environmental heritages (1994)	India National Trust for Art and Cultural Heritage (1984)	National Heritage List (NHL) no. 1 in 1987	
Holland		Gelderland Landscape Trust (GLT)	11,000 acres	Members 42,500 National lottery (NPL) cultural and environmental fund (1989)
Korea	National Trust Act(2000)	NTK	6 trusted sites	

			DMZ forest	
Taiwan	Trust Act (1996) Trust business Act (2000)	No. 1 Public Trust 2001/10/11 Taiwan Trust Association (2003)	45 cases, 3 in cultural, none in environmen tal	(ECO Working Holiday (2004) Environmen tal Trust Act is a presidential policy

Source: Juju Wang, 2008

Taiwan’s trust system has started from 1996 when is 143-year later then England and 73-year later then Japan. Following Japanese model, Taiwan’s trust system also coins similar shortcoming putting emphasis on trust rather than public interests. Reviewing those public trust cases in Taiwan, it is obvious that “scholarship-distributing” type of trusts account for 95% in total. However, cultural and environmental trusts require fund-raising and business-running urgently due to their characteristics. So many cultural and environmental sites are in stake because of rapid development here and there. PPP(Public-Private-Partnership) could be developed smoothly through environmental trust in this stage. Taiwan’s trust system has followed Japan and other nation’s path in a glocalized context. However, current trust system in Taiwan is not approaching the spirit of National trust, 10,000 men one dollar each is much powerful than one man’s 10,000 dollars. It is now a turning point to set up a goal to reach GNH(Gross National Happiness) in terms of natural and cultural capitals. Thus, trust system in Taiwan should be developed in a llobalized way, for instance, to think like an island in coin with Leopold’s concept, to think like a mountain (1949).

Conclusion

From I. Wallerstein’s “world system” providing concepts of center, periphery and semi-periphery to differentiate global economy in 1970s to index for national competitive power in 1990s, it is obvious that the state of economy has been dominating

the measurement of national development trend. Until now, the development of sustainable indicator has initiated a crucial mechanism to balance the disparities between environment and development. However, “sustainable indicator movement” has also encountered serious problems in terms of feasibility, indicator availability, international linkage and social empowerment (Overton, 1999; Bossel, 1999). Collaborated with the other island states, this system may contribute partially to look into the rationale for indicators theoretically, and partially to present linkage and empowerment practically. In addition, this system may integrate Taiwan case into global circle, in particular, island factor and non-UN member factor will contribute her global partnership to some extents.

Island Taiwan has gone a long way in the transformation from a milk cow periphery to an island state, from a rural economy to industrial economy, and from an authoritarian regime to liberal democracy. A sustainable island Taiwan is certainly a just cause for citizens and government of Taiwan at the turn of the century. Developing GNH, instead of STI, for island Taiwan is thus a mandate for Taiwan’s sustainability.

Sustainable development with happiness, however, is a global mandate. Being a member of global village, Taiwan has much to offer in searching for global sustainability with Island GNH. With its island status and profound transition in environmental, social, economical, and political dimensions, Taiwan serves an important showcase of searching for happy sustainability for the global village.

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Ecological Diversity and Resilience

Institutional Challenges to 'Patience' in the Collective Management of Public Goods

Mukul Ram Fishman

Impatience is nothing but an unnoticed, self-defeating experience.

Sri Chinmoy

Abstract

I discuss institutional challenges to the practice of far-sighted, "patient" policies, such as restraint in present consumptive patterns in order to avoid future damages, be they environmental or social. These challenges arise from the excessive influence of "impatient" parties in a participatory decision process.

Introduction

Many of the collective decisions we make, as societies or as groups of nations, involve inter-temporal tradeoffs – balances of present and future benefits and damages. Virtually every investment strategy is evaluated in terms of its future return to present costs. Similarly, the harvesting of a natural resource, such as forests or mineral deposits, balances present benefits and future scarcity, and the pursuit of polluting activities balances present income and future damages. Indeed, decisions such as those are at the very heart of the sustainability debate.

The efficient balance between present and future depends on the degree to which we value the future. We all share a psychological tendency to undervalue the future in comparison to the present.

The closer to the present a certain amount of goods or services (utility) is provided, the more we value it. This tendency should be familiar to all of us from our daily life, and is also reflected formally in the economic environment by the presence of interest rates, which limit our investments to those that provide rates of return above a certain positive threshold.

In economic theory, this complex psychological phenomenon is commonly described by a single number called the factor of time discounting. This number is defined as the factor by which we discount, or undervalue, a unit of utility, for every additional time unit (a day, a year, a generation) by which it is further removed from the present. The lower this factor is, the more “impatient” or “short-sighted” our behaviour is, in the sense of an increased unwillingness to sacrifice present utility for the sake of future one.

For example, consider an individual with a discount factor of 90% per generation (25 years). Such a person attaches a value only 90% of its present value to a unit of utility that is provided to the next generation. If it is provided in two generations’ time (50 years), such a person would value it at $90\% \times 90\% = 81\%$ of its present value, and so on.

Figure 1 shows the discounting factors associated with two individuals, one having a discounting factor of 90% per generation, which I call “farsighted”, and the other of only 30% per generation, which I call “myopic”. Clearly, the latter person is much more “impatient”, and the difference becomes more manifest as the discounting is compounded over more generations.

The different discounting behaviour of these two individuals will be manifest in their tastes with regard to various investment decisions. For example, consider an investment, be it in education, the conservation of a forest, etc... that costs 100\$ today, but provides returns of 150\$ in 25 years (ignore the effects of inflation). While the myopic individual will deem such an investment unworthy (because $150\$ \times 30\% = 45\$$, which is less than

100\$), the far-sighted individual will deem it worthy (because $150\$ \times 90\% = 135\$$, which is more than 100\$).

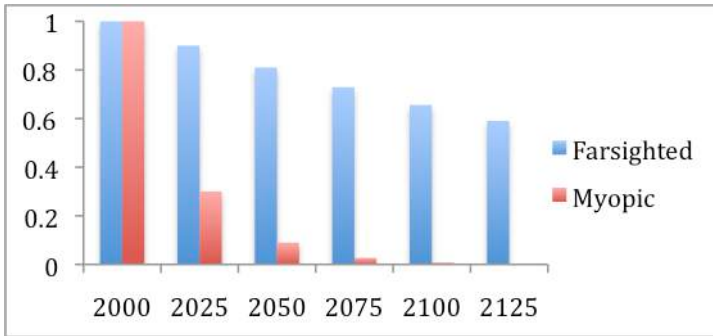


Figure 1: The future discounting factors of two individuals, one, farsighted, having a discount factor of 90% per generations (25 years), the other, myopic, having a factor of 30% per generation

Global Climate change is perhaps the most pertinent example. Climate change mitigation requires a collective, globally coordinated effort. The degree to which we should reduce greenhouse gas emissions, and thus incur present abatement costs, in order to reduce future damages from climate change depends on our time discounting factor. Indeed, two prominent works on the economics of climate change reach very different recommendations on the desirable course of action, partly because of the different discount factors they use. Sir Nicholas Stern who advocates aggressive mitigation, uses a factor of 99.9% per year, whereas Prof. William Nordhaus, who finds that mitigation is premature, uses a factor of 97% per year (while the differences may seem small, when compounded over the time horizon of climate change impacts, about a 100 years, they add up to a very large factor). Dasgupta 2006 discusses this in detail.

There are many reasons to believe that people have a wide range of discount factors. For example, some empirical estimates find individuals' discount factors ranging from 100% to 30% (see, for example, Frederick, Loewenstein and O'Donoghue 2002). When facing a collective inter-temporal decision, these different

individuals will have different opinions on the best course of action. How might we expect group decisions to reflect and balance these different tastes?

The same question can be posed with regard to collective global decisions to be undertaken jointly by several nations. Here again, there are reasons to believe different countries may value the future differently. For example, it is widely believed that impatience, in the sense of a short term planning horizon, is higher the lower income is, and theory suggests that the discounting of consumption also increases with the growth rate of a country, so countries with high economic growth may tend to be more "impatient".

There are other situations in which we might expect discount factors to vary across stakeholders. Consider a fishery, or a primary forest, that is harvested by both commercial firms as well as households traditionally depending on it for their subsistence. Commercial firms that translate the forest's services into financial returns will harvest it in a rate that maximizes their stream of profits, and is thus determined by the market interest rate. Households depending on the forest in a much deeper way will, in contrast, be harvesting the forest according to a traditional system that probably ensures the long term sustainability of their livelihood, and will be much more patient (for example, not exceeding the natural re-growth rate).

In this paper, I discuss how groups, composed of members, be it individuals or nations, with different valuations of the future, might be expected to collectively value their future. Such collective decisions are needed when they pertain to public or common goods to avert a tragedy of the commons, but there are many possible socially efficient policies, each one corresponding to a different valuation of the future.

Below, I will point out two challenges that might lead to collective decisions that enhance collective "impatience" unless they are recognized and dealt with. The challenges are institutional, in the

sense that they may tend to plague the political economy of the decision making process unless special institutional measure are undertaken. Of course, if members of a group discount the future, any collective decision process that reflects the wills of all its members will also discount the future to some degree. Ideally, collective discounting is chosen to optimize aggregate inter-temporal welfare. What I show below is that the degree of impatience is likely to exceed this idealized level.

In some sense, any tendency to undervalue, or “discount” the future is an obstacle to achieving sustainability, by definition. In fact, there is a view that holds that even though individuals discount the future, social institutions, and governments in particular, should not, but instead value all times equally. While many social scientists consider this view to be paternalistic, some important economists, including one of the fathers of the discounted utility model, Ramsey, have upheld it. From this perspective, any tendency for social “impatience” is excessive, and institutions should be designed to minimize the degree of collective discounting.

The Kingdom of Bhutan is undergoing a profound institutional change - a transition from a far-sighted monarchy to a parliamentary democracy in which less patient attitudes are also likely to have an influence. One of the challenges to the designers of the constitution is the protection of the far-sighted vision of the monarchy (as reflected by Gross National Happiness, protection of forests, etc...) within the new democracy. In this sense, I hope the ideas in this paper might be of relevance to policy discussions in Bhutan.

The first challenge: lack of long-term commitment

Consider a group whose members have different discount factors. Consider further an inter-temporal allocation problem in which each member of the group has the same benefit and the same damages at each period in time. For example, we may be trying to decide whether to levy uniform, lump-sum taxes on all group

members in order to make a collective investment, for example in education, that will benefit everyone equally in the future.

Thus far, we have modeled the time preferences of each member in terms of a single number, the discount factor. If the discount factor was x , the second period's utility was valued at a fraction x of the same utility in the first period, the third period's utility was valued at a fraction x of the same utility in second period (i.e. x^2 of the first period), and so on – each period was valued at a fraction x of the previous period, no matter which period it was. Such discounting behaviour is called “geometric” or “exponential” discounting because the discounting factors form a geometric series.

It turns out, however, that for a group composed of members with different discount factor, the collective discounting factors that should be used when making optimal decisions for the group as a whole, display what is called “hyperbolic discounting”. Specifically:

Proposition 1: The collective discounting of a group whose members have heterogeneous discount factors is hyperbolic: the discounting factor of period $N+1$ relative to period N is not constant, but increases for larger N . Asymptotically, in the long run, it approaches the largest discount factor in the group, i.e. that of the most patient member.

Proposition 1 is proved in the Appendix (see Gollier & Zeckhauser 2005 for a comprehensive formal treatment of this problem). However, proposition 1 is not hard to understand intuitively. Imagine a social planner that tries to allocate common resources inter-temporally in a way that benefits the group's aggregate welfare. The impatient members of the group, by definition, care about the short-term allocation much more than they do about the long-term allocation, and the patient members care about the long-term allocation and the short-term allocation more equally. This means that the near term allocation, i.e. the allocation of resources between earlier periods should reflect the tastes of the impatient

members disproportionately, and that the allocation of resources between the later periods should reflect the tastes of the patient members disproportionately. In other words, collective discounting should initially mirror the discount factors of the impatient, and later on mirror that of the more patient members, and more so with time, so that eventually, it should converge to that of the most patient member.

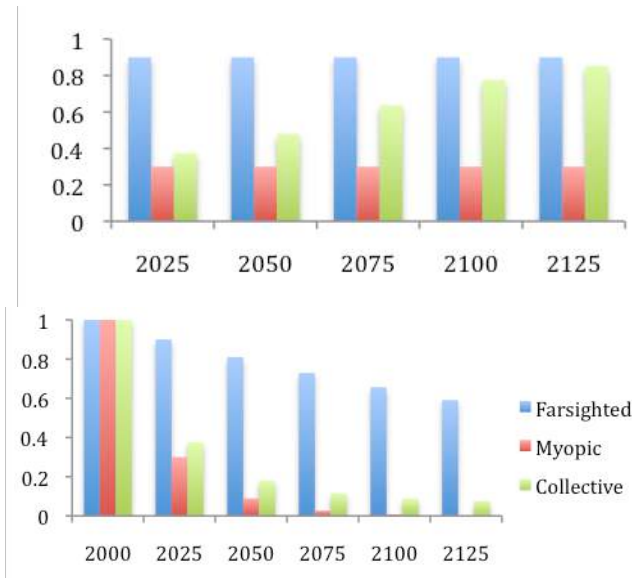


Figure 2. Discount factors of the farsighted member, the myopic member, and the group's, at each period (compared to the first period (bottom) and compared to the previous period (top)).

As an example, consider a "group" consisting of our Mr. Farsighted and Mr. Myopic (short-sighted). Figure 2 shows the discount factors of each member and the "group" consisting of the two. On the right, the factor by which each period (generation) is discounted compared to the previous generation is shown. Whereas for both the myopic and the farsighted individuals, these factors do not change with time, the collective factor rises with time.

This type of discounting can have interesting impacts. As a simple example, suppose that Mr. Myopic and Mr. Farsighted need to manage an old-growth forest that they share, and have to decide how much of it should be cleared each year. Suppose they decide, jointly, to harvest 100 acres in 2000, 50 acres in 2025, 30 acres in 2050, and some other amounts in the future. This harvesting plan reflects their joint discounting factors: the more is harvested in each generation, the less remains for future generations, so the harvesting amounts reflect the degree to which the pair jointly values these future generations. Note that the decision to harvest 100 acres in 2000 is optimal only if the rest of the future harvesting amounts are followed in future generations.

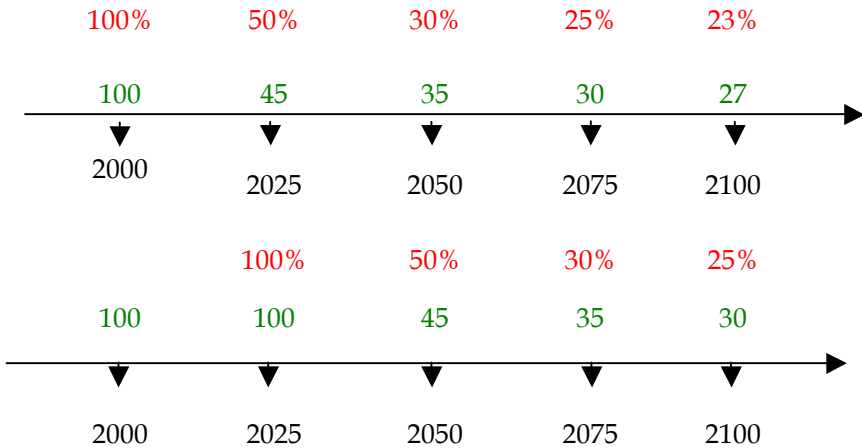
The pair indeed harvests 100 acres in 2000, but when the year 2025 arrives, rather than following the original plan and harvesting 50 acres, suppose they convene to re-evaluate their decisions. Because of hyperbolic discounting, future generations, as seen from 2025, are not valued, relative to each other, in the same way that they were from the perspective of 2000. In fact, the years 2050, 2075, 2100 etc... are now valued the way 2025, 2050, 2075 etc... were valued from the perspective of 2000. Accordingly, the pair now decides to again harvest 100 acres immediately, 50 acres in 2050, etc... Figure 3 shows this updated plan schematically. These dynamics eventually lead the pair to harvest 100 acres at each generation, which is a much faster rate of harvesting than the optimal plan as it was devised in 2000.

Such a situation, called “time inconsistent plans” would not occur if the two agents had the same discount factor, because then their joint discounting would be geometric, not hyperbolic, and thus relative discounting between successive generation would remain the same, no matter from which period they are viewed.

Essentially, the root of problem is that in the original plan, the tastes of the myopic member were allowed to disproportionately influence the initial harvesting rate, and the tastes of the far-sighted member dominated the harvesting rates further on in the future, because initially, the myopic member did not care about

what happened far in the future. But when that future actually arrives, Mr. myopic now realizes he does in fact care, and the collaborative decision process is updated to reflect that.

Figure 3: An example of inconsistency in a forest harvesting plan. Discounting factors (in blue), planned harvesting amounts (in hectares, green), as seen and decided upon



To refrain from such excessively impatient behaviour, institutions are necessary that commit the group to its original plan. This can be politically challenging, since if all parties decide to update the plan, they can also decide to change any legislation that may try to prevent such a change. Still, a constitutional act that is backed by a non-political entity can be quite a powerful means of avoiding these kinds of dynamics. The constitutional protection of forests in Bhutan and the very presence of the King may prove to provide just such an institution.

Certain economic institutions may also be helpful. For example, if the governments announces future plans of restrictions on harvesting in the forms of aggregate caps, and also allows harvesting permits to be traded across firms and across times (effectively, a Cap and Trade system which also allows trading in

harvesting “futures”), the trading in future harvesting permits can create strong resistance in the market against an updating of harvesting caps, since such updating can reduce the value of traded permits and hurt some of these firms. This can in turn influence the government to stick to the original plan.

On the other hand, past experience seems to indicate that long-term environmental policies, especially in the international arena, are uncommon. The Kyoto protocol on climate change mitigation, for example, was of very short duration, and new climate treaties are not expected to commit countries for more than a decade or two, time scales that are short in comparison to the planning horizon relevant to the problem.

The second challenge: the excessive influence of the impatient in negotiated outcomes

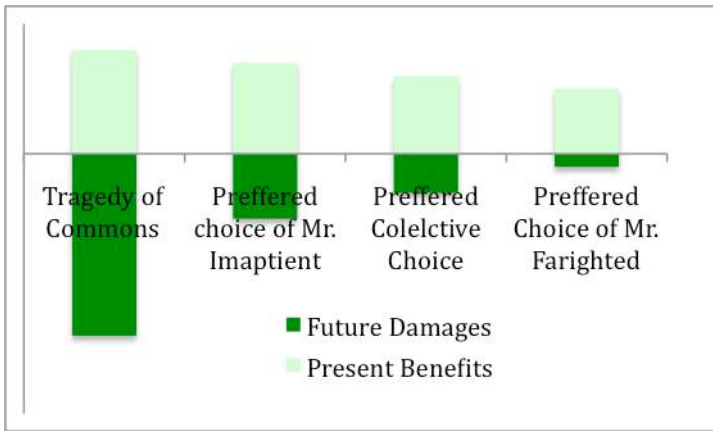
Thus far, we assumed that the group decisions are aimed at optimizing collective welfare – the sum of all members’ inter-temporal welfares. Below, I argue that in fact, there are reasons to expect impatient members of the group will be able to sway collective decisions to place disproportionate weight on their own welfare, even if a social commitment mechanism exists.

The collective decision, I assume, is reached through some process of negotiation, which is in essence, a bargaining process. One prominent, and perhaps the most intuitive, theory of bargaining predicts that, when two or more parties can cooperate in more than one way, they will choose that way for which the benefits to all parties, relative to the non-cooperation outcome, will be equal. For example, when two parties need to split a cake, and in the absence of agreement none get any of it, this theory predicts they will decide to split it in half. But if one of the parties values the cake to a higher degree, this theory predicts the bargaining process will eventually allocate a lower share to that person. The reason is, simply, that this party has a weaker bargaining power and thus be willing accept such an outcome.

What is the non-cooperation outcome in our context? In most environmental problem, like the management of a shared forest, it is natural to expect that in the absence of any agreement on harvesting policies, no regulation will be enacted, and a 'tragedy of the commons' will ensue. Firms will tend to over-harvest the forest, simply because in the absence of regulation, there is no incentive for conservation – whatever is spared through personal restraint will be shared by all other parties in the following period. The tragedy of the commons will be manifest in an excessively high harvesting rate early on, higher than what either of the parties, even the impatient one, would have chosen on their own. This excessive impatience is actually inefficient, and a result of the externalities involved. A formal demonstration of this assertion requires the tools of dynamic game theory and is beyond the scope of this paper (the pioneering analysis of this problem can be found in Levhari and Milman 1980).

Figure 4 shows a schematic example of the ranking, in terms of impatience, of the consumption choices of Mr. Myopic and Mr. Farsighted if they were on their own, the collectively optimal choice (that maximizes the sum of their welfares) and the tragedy of the commons (the non-cooperative outcome). The horizontal axis measures impatience, as it is reflected in present consumption. This present consumption has associated future damages. In the tragedy of the commons, high present consumption is more than offset by future damages and is inefficient according to either the myopic or the farsighted discount factor. The optimal choice of present consumption depends on the discount factor - the collective optimum lies in between the individually optimal choices of Mr. Myopic and Mr. Farsighted.

Figure 4



If cooperative outcomes have lower utility, early on, and higher utility later on, in comparison to the non-cooperative outcomes (the tragedy of the commons), this means that the gains from cooperation lie in the future (and they more than make up for the early losses in cooperation). Now, since patient members value the future more, it seems plausible that patient members of the group will have more to gain from such cooperation. In other words, they will have a weaker bargaining power. Thus, we might expect that the negotiated cooperative decision will be oriented to emphasize the interests of the impatient members.

There are many ways in which the parties can cooperate. In economic terms, there are many Pareto-efficient policies. One of these (sometimes called the globally or socially optimal policy) is the equitable policy, the one we have discussed in the previous section. But there are others, and these give disproportionate weight to some of the parties. The above reasoning leads us to expect that a negotiation process on inter-temporal cooperative policy will tend to put greater emphasis on the interests of the more impatient members in the group. Formally,

Proposition 2: If the non-cooperative outcome is more impatient than any of the individually optimal policies, the gains from cooperation are always higher for the more patient members. As a

result, the bargaining outcome will reflect the preferences of the most impatient member.

Proposition 2 is proved in the appendix. The main implication is that the negotiated collective policy is likely to be as impatient as the most impatient member of the group is. In that sense, such an institution will lead to excessive collective impatience.

What can be done to ameliorate this outcome? One option is to allow for other forms of compensation between parties. For example, in the context of climate change, financial side transfers may provide another way to compensate more impatient parties instead of reflecting their discounting factor.

Alternatively, we might want to change the non-cooperative outcome. If instead of having no regulation at all when negotiations fail, constitutional or other institutions will dictate that when negotiations fail, all harvesting (in the example of the forest) is actually banned, the previous reasoning will now predict that it is the most patient members of the group that will have the highest bargaining power, and that collective negotiated policy will thus tend to be as patient as possible in the group.

From the point of view of economic efficiency, there is a complete symmetry between these two scenarios. But if we consider impatience and discounting to be a social “evil”, then one mechanism to minimize discounting is to install a ban on harvesting in the absence of a negotiated outcome.

Conclusion

In the presence of a variety of time discounting within a group, a collective decision-making process on inter-temporal choices related to the management of common resources and public goods (or bads) can lead to excessive social “impatience”.

Certain legal and economic institutions may be able to prevent these effects. If social discounting is considered as fundamentally

flawed for ethical reasons, they can provide the means to achieve more sustainable policy.

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Appendix – Mathematical formulation

Proof of proposition 1

Let the discount factor be β . Inter temporal welfare is:

$$W = (1 - \beta) \sum_{t=1}^{\infty} \beta^t u_t$$

where t is an index of time period (year, generation, etc...) and u_t is utility at period t . the factor $(1-\beta)$ ensures the weights given to all time periods sum up to unity.

Consider two individuals, one with discount factor β_1 and the other with discount factor β_2 . Suppose the two individuals always have the same utility at each period. Aggregate welfare is then

$$W = W_1 + W_2 = \sum_{t=1}^{\infty} [(1 - \beta_1)\beta_1^t + (1 - \beta_2)\beta_2^t] u_t = \sum_{t=1}^{\infty} D_t u_t$$

where D_t is the aggregate discount factor for period t .

Proposition 1 states that:

D_{t+1}/D_t is decreasing at t increases.

$D_{t+1}/D_t \rightarrow \max(\beta_1, \beta_2)$ as $t \rightarrow \infty$.

Indeed,

$$\frac{D_{t+1}}{D_t} = \frac{(1 - \beta_1)\beta_1^{t+1} + (1 - \beta_2)\beta_2^{t+1}}{(1 - \beta_1)\beta_1^t + (1 - \beta_2)\beta_2^t}.$$

This expression can be viewed as a weighted average of the two discount factors β_1 and β_2 . The weights are $(1 - \beta_1)\beta_1^t$ and $(1 - \beta_2)\beta_2^t$. Suppose for example that $\beta_1 < \beta_2$. As t increases, these weights become more and more skewed towards β_2 , and as t

approaches infinity, the ratio of these weights approaches infinity, i.e. placing all weight on β_2 . Therefore, the above expression rises with t and converges asymptotically β_2 .

Proof of proposition 2

As before, assume utilities at each period, for both the non-cooperative outcome and for the cooperative policies provide equal utilities, at each period, to both individuals.

For simplicity, assume that time consists of two periods, the present and the future, which I will denote as periods I and II. The indices 1 and 2 will refer, as before to the individual.

Let the uncooperative outcome's utilities be v_I and v_{II} (for the present and the future periods), for either individual, so that non-cooperative inter-temporal welfare for each individual is

$$W_1^{NC} = \frac{v_I + \beta_1 v_{II}}{1 + \beta_1}, \quad W_2^{NC} = \frac{v_I + \beta_2 v_{II}}{1 + \beta_2}$$

(the NC suffix stands for non-cooperative). The factors in the denominators have been included, as before, to ensure the inter-temporal weights sum up to unity.

Now consider some cooperative policy that provides utilities u_I and u_{II} (in present and future, respectively) to each of the individuals. The cooperative Inter-temporal welfares are

$$W_1^C = \frac{u_I + \beta_1 u_{II}}{1 + \beta_1}, \quad W_2^C = \frac{u_I + \beta_2 u_{II}}{1 + \beta_2}$$

Assume that the non-cooperative outcome has higher utility in the present, but lower utility in the future (which more than offsets it for both individuals). The gains from cooperation are

$$\Delta_i = W_i^C - W_i^{NC} = \frac{(u_I - v_I) + \beta_i(u_{II} - v_{II})}{1 + \beta_i}, \quad i=1,2$$

Our assumptions mean that in these two sums, the first summand is negative but the second is positive enough to make up for that.

Recall that we have chosen individual 1 to be the more impatient one, i.e. that $\beta_1 < \beta_2$. It is then straightforward to notice, that as long as $\Delta_1 > 0$, it also holds that $\Delta_2 > \Delta_1$. Indeed, in the weighted averages that represent the gains from cooperation, there is greater weight given to the future term for individual 2, the more patient one. Since this future term is positive and offsets the negative present term, the whole expression is greater for the more patient individual. This is basically the content of proposition 2: that the gains from cooperation are always greater for the more patient individual.

It might be worth mentioning that the multitude of cooperative outcomes are the Pareto-efficient allocations of utility between present and future, subject to whatever inter-temporal constraints define the problem. Each such policy maximizes some weighted combination of both individuals' inter-temporal welfares $\alpha_1 W_1^C + \alpha_2 W_2^C$. For example, when $\alpha_1 = \alpha_2 = 0.5$, this is the equitable social optimum discussed in section 1. When $\alpha_1 = 0$ and $\alpha_2 = 1$, this cooperative policy puts all emphasis on the welfare of individual 2, and vice versa. The point of the discussion in section 2 is that as long as a cooperative policy provides positive gains to the impatient individual, it provides higher gains to the patient individual. Thus, the impatient individual always has stronger bargaining power. In this simple model, we expect the bargaining process to lead the pair to adopt the cooperative policy with the greatest possible weight α_1 given to the impatient individual, as long as gains to the patient individual are still positive. It is easy to show, following the method of the first part of this appendix, that the more a cooperative policy is tilted towards one individual, it will be characterized by a collective discount factor which is tilted towards the discount factor of that individual.

Status Symbols, Ecosystems and Sustainability

Arthur Fishman

Abstract

Why is it that so many of the consumption goods we value and love are ecologically degrading? From ivory to rice cultivation in semi arid regions, examples abound of goods so highly desired, even when functional substitutes exist, as to generate ecologically unsustainable production levels that lead to extinctions and depletion of precious resources. While the reasons for the high valuation of these goods are complex and manifold, this paper suggests that one factor is a taste for rarity: the rarer an item the more humans will covet it and hence the greater will be its exploitation. Thus these products have become so sought after not in spite of, but precisely because of, their ecologically low supply.

The research question

This essay addresses the following question: Why is it that so many of the consumption goods we value and love are ecologically degrading? More puzzling, we continue to prize these goods even when adequate substitutes which are less damaging to the environment are available.

Recent research suggests that in many cases, tragically, ecologically degrading consumption goods are valued not in spite of their negative ecological impact but precisely because the ecological unsustainability of their consumption. We introduce the concept of *rarity value*. This refers to an intrinsic value attributed to a good solely on account of its rarity, independently of its

functionality or lack thereof. Goods which are ecologically limited in supply are thus more highly sought after. Clearly we expect the price of an item to be higher the rarer it is. This is because rarity increases the cost of acquiring the item. The rarity value thesis says more: it asserts that rarity increases the value of the item and that therefore its price increases by more than the cost of procuring it. In the case of an 'ordinary' good (which has no rarity value), there is a market for the good only as long as the procurement cost is less than the utilitarian value of the good. Also, the intrinsic value of the good to consumers is independent of the procurement cost. Thus the quantity demanded decreases as the procurement cost goes up and once the cost is high enough, demand evaporates. In the case of a good with rarity value, by contrast, each increase in production cost shifts up demand by more than the cost increase; In fact, the item is desirable precisely because it is costly to supply. Thus that no matter how high the production cost, demand never slackens but, to the contrary, increases. This hypothesized effect has been named the *Anthropogenic Allee Effect* by F. Courchamp et al. (2006).

Rarity value and ecological degradation

Following Courchamp et al. (2006), we may enumerate several avenues of nature related activities through which rarity value leads to ecological degradation.

Collecting rare specimens

An obvious example of an activity where rarity is valued is that of hobby collections, where the rarest items are the most valued and thus demand the highest prices. As the value of a rare item increases, more time, effort, or resources may be devoted to its acquisition, increasing the pressure on the species as it becomes rarer.

Paradoxically, legal protection of endangered species, by increasing the price that the rarest species can bring on the collection market, may exacerbate this effect by providing a

powerful incentive to poachers and smugglers to hunt and illegally.

Scientists have been among these enthusiastic collectors of natural specimens. Following the overexploitation of the great auk, *Pinguinus impennis* for food and feathers, the species became very rare. As a consequence, these birds became a valuable item for collectors—among them, ornithologists and museum administrators, who were eager to acquire eggs or skins of the rare and soon to be extinct bird, thereby precipitating its extinction [see Courchamp et al (2006) for relevant references]

Even more paradoxically, a recent article suggests that scientific research warning that a species is endangered may itself precipitate a species extinction. Immediately after being described in the scientific literature, the turtle *Chelodina mccordi* from the small Indonesian island of Roti and the gecko *Goniurosaurus luii* from southeastern China became recognized as rarities in the international pet trade, and prices in importing countries soared to highs of US\$1,500 to US\$2,000 each. They became so heavily hunted that today, *C. mccordi* is nearly extinct in the wild and *G. luii* is extirpated from its type locality. The declaration of a species as endangered by a conservation organization provides official proof that the species is rare and therefore more valuable. Hence, paradoxically, declaring a species endangered may accelerate its extinction.

Trophy hunting represents another form of collection. In the past, trophies were valued as a sign of manhood and virility, because strength and courage were required to kill them. Nowadays, however, prestige has shifted from dangerous to rare animals; since rarer species are harder to find, greater wealth is required to kill them, and greater prestige is gained by killing them.

Luxury items

This is perhaps the most perfidious of them all. Thorstein Veblen is famous for coining the concept of *conspicuous consumption*. This

refers to consumption for the sole purpose of displaying wealth and/or social status and its origin is probably rooted in the evolutionary urge to attract females. Especially deplorable examples in the ecological context includes the consumption of rare species as luxury food items.

When closing deals, wealthy Asian businessmen wishing to display their affluence will pay large amounts of money to eat a plate of lips of a large Napoleon wrasse, *Cheilinus undulatus* (a single pair of lips costs US\$250). By the mid 1990s, Napoleon wrasse became the most sought-after reef fish in the world, and is currently number one on the "top ten most-wanted species" list published by the World Wide Fund for Nature. Populations in South East Asia are now extinct on many reefs, and very few large individuals survive in the remaining fragmented populations (see Courchamp et al (2006) for relevant references).

Many other species are likely to be vulnerable due to the demand for other types of luxury items, such as exotic woods, furs, turtle shells, snake and crocodile skins, and so on.

One celebrated – albeit hypothetical – historical example of luxury consumption which has been credited with bringing down an entire civilization is the story of Easter island. This island was completely deforested of indigenous palm trees, which were used to roll and transport stone from quarries at the centre of island to erect huge *moai* statues, which apparently were erected as symbols of status and power for by the wealthy and powerful. This eventually led to the complete deforestation of the island, which in turn is credited with leading to mass starvation, cannibalism, the decimation of most of the population and complete societal collapse. Jared Diamond in his book *Collapse* poses the question: "Who cut down the last palm tree?"; that is, why didn't deforestation stop when it became apparent that these practices were unsustainable? In light of our discussion, we can answer that precisely as deforestation progressed and tress became increasingly rare, the prestige value and hence the demand for

new maori statues increased, which accelerated, rather than retarded deforestation and eventual collapse.

The dramatic decline of sturgeon populations, exploited for their caviar, is another sad example: most species are threatened and the most coveted are on the verge of extinction. The overexploitation continues unabated despite caviar's ever-increasing price and the imminent loss of these species continued overexploitation of sturgeon species (Pala, 2005), Pikitch et al (2005), Stone, 2002, Stone, 2005). This phenomenon is consistent with the rarity value thesis: Demand for caviar has not decline, but increased as sturgeon has become rarer.

Gault, Meinard & Courchamp (2008) conducted an interesting experiment to further confirm this. In that experiment caviar from identical cans was placed in identical turins at a prestigious cocktail party. One turin of caviar was labelled 'rare', the other was labeled 'common'. Subjects overwhelmingly preferred the caviar labeled rare, although the caviar in both was turins was identical in every other respect.

Abalones, of which six species suffer from overfishing on the Pacific coast of North America, are another illustration. Considered a delicacy in California, white abalones, the rarest of the six abalone species, have declined by over 99.99% due to increasing overfishing, in part illegal (the fishery was closed in 1996), while at the sametime, prices have escalated. Although white abalones were the first marine invertebrate on the United States endangered species list in 2001, this species could become extinct within a decade unless extraordinary recovery measures are implemented (see Courchamp et al (2006) for relevant references)

Another example is blue fin tuna. The population of blue fin tuna, coveted for Sushi, is on the verge of collapse. Jacob Lowenstein of Columbia University has been sampling New York restaurants to test whether tuna claimed to be blue fin is indeed so. He has found that other types of tuna are often falsely claimed to be blue fin,

showing that consumers attach a value to it despite being unable to recognize it. He also finds that this kind of deception is less frequent in high end restaurants than in lower end restaurants.

Ecotourism

This activity provides another source for the feedback loop between rarity and increased demand. Ecotourism ventures have expanded greatly in recent years, with the public increasingly wanting to experience closeness to natural ecosystems or species. Such activities often involve encountering and/or observing rare species. Given that some ecotourism activities have been shown to generate disturbances that are detrimental to the fitness of observed species we can assume that rare species, especially those that are charismatic, will be disproportionately impacted upon by ecotourism.

Technology and entrenched taste for rarity

Often, environmental sustainability relies on “substitution” of natural goods by man-made or natural alternatives. But when rarity raises value, even perfect artificial substitutes may fail to decrease pressure of the environment.

For example, in the past ecological limits turned some consumption goods into status symbols in certain regions. Until modern times, these goods could only be produced by traditional technologies that were dominated by natural conditions. Rice could not be cultivated where rainfall was deficient. Elephants could not be hunted on a massive scale. This very fact could make a product rare and thus assume the nature of a status symbol – a product reserved for elites – in traditional societies and cultures. When new exploitative, unsustainable means of production were introduced, they were adopted on scale to meet the high demand that persisted simply as a result of their past rarity and status symbol legacy, not necessarily because of intrinsically valuable functionality, thus leading to ecological degradation of entire ecosystems and species.

For example, high power rifles became available for the hunting of elephants. Tube wells were drilled to irrigate rice fields. Demand may have also increased due to rising incomes. The high psychological valuation of these products, rooted in long-standing perception as a status symbol, became engrained into cultural norms, and was slower to adapt to changing supply as compared to the rate of introduction of exploitative technologies. As a result, production was increased, far exceeding natural rates, and at a cost to ecological stability and in an unsustainable manner. Elephant populations could not withstand massive hunting. Groundwater resources could not recharge fast enough to meet extraction rates and became depleted.

As an example, consider the cultivation of water-intensive rice in Semi-Arid regions of India (e.g. Telangana). Because of the lack of water, rice was not traditionally grown in these areas. After the introduction of tube wells, rice cultivation grew dramatically, traditional crops were neglected, and groundwater aquifers were depleted. The seemingly stubborn insistence on the continued cultivation of rice and failure to substitute less water intensive grains may thus have its roots in the status role played by rice before tube well technology was introduced.

Conclusion

The above discussion suggests that market forces can not remedy these problems; indeed market forces maybe at their root. What is needed is a change of attitude, a change of consciousness. Rarity value is rooted in the entrenched perception that consumption of ecologically endangered species and products as symbols of status. To combat this, a new perception of status must evolve. Education must be targeted to foster the perception of such activities as a badge of shame, not of prestige. A new perception of status must evolve, which rather than glorifying wasteful consumption, honours the conservation, care and nurture of our planet and its ecology.

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Good Governance

Good Organisational Practice and Gross National Happiness

Anne-Marie Schreven

Introduction

In 2007 the Royal Government of Bhutan (RGoB) introduced Organisational Development (OD). OD refers to organisations' efforts to regularly review their mandate and capacities for taking the right decisions and measures to assure healthy organisations delivering high quality of services and products and improving performance. In Bhutan, OD was introduced as a tool to ultimately strengthen the bureaucracy to play an effective role in a vibrant democracy.

This paper builds on RGoB's OD experience and holds a plea for developing performance indicators for Bhutanese organisations to measure their contribution to GNH. Organisational performance is a part of good governance, one of the four pillars and nine domains of GNH. I don't intend to come up with entirely new approaches. In fact, most of what is presented here is known as 'good organisational practice' and is widely tested and applied in other parts of the world, most often driven by the organisation's or leader's self interest to do well (and 'sell'). In Bhutan, however, good organisational practice goes beyond the organisation's self interest; the national vision of wellbeing puts a claim on organisations to do well and excel towards achieving GNH or the wellbeing of the people.

People, organisations and GNH

Bhutan, unlike many other countries, is in the unique position of having a national vision. Gross National Happiness is a public good addressing the wellbeing of the people. His Majesty the fourth Druk Gyalpo has indicated that the people are the strongest asset ('what we have is our people'); it is their wellbeing that matters most. At the same time it is the people - through their organisations - who are responsible for implementing the national vision. The focus in this paper is on people in organisations being instrumental towards achieving the wellbeing of others - the public or the clientele. It is likely that staff perform well if they are being well taken care of by their organisations. The Bhutanese context asks for people-centred organisations and leadership qualities as they provide the main answer to implementing good organisational practice for GNH. The assumption is that organisations, with happy staff members, working in a good working environment that ensures quality work life, are likely to contribute to the needs and demands of its customers or clientele and, therefore, their wellbeing.

We define an organisation as *a group of people brought together around a certain purpose*. Necessary for any organisation is to have:

- Common understanding and collective commitment to this purpose which is often reflected in a strategic or business plan;
- Clarity on the best possible way to achieve purpose; internal operations; systems and procedures, human resources and organisational culture;
- Assessing regularly achievements and reviewing whether purpose is still relevant and appropriate (monitoring, evaluation and learning).

In OD one of the indicators for organisational wellbeing is the commitment and ability of the leadership and staff to find and allocated time for planning, review and learning; in other words to

reflect on *the purpose, the people and the team*. It is also referred to as the “maintenance’ of the organisation. In OD terms it is an investment (not a cost!) for a healthy and vital organisation. One could say that Organisational Development is a structured and planned approach for building and maintaining healthy organisations; in other words, responsible and responsive organisations and institutions that serve the needs of the customers or public. OD in the Bhutanese context asks for a strong focus on people as they are the means towards realizing Gross National Happiness. Organisational indicators should reflect such a people’s focus.

One would expect that organisations in Bhutan are being steered and organized by the ultimate purpose of GNH. The other assumption could be that being predominantly Buddhist, the compassionate nature – or concern for the wellbeing of all sentient beings – would be reflected in the performance of organisations, and that such attitude would come more ‘naturally’ and shape staff behaviour. There is a strong cultural and spiritual base for organisational indicators.

Since Organisational Development is a fairly young discipline and only recently introduced in the government agencies and the government is still the largest sector in Bhutanese society, many of the examples in this paper will be based on this experience. However, organisational performance indicators which contribute to putting the GNH concept into practice are not restricted to government agencies, and they hold true for private and corporate sector and civil society organisations.

Government and good governance

Good governance is often used in the context of government, including the new democratic set up, guided by the principles of transparency, accountability, efficiency and professionalism.

- Accountability refers to the organisation's capability to set professional standards and deliver services in line with expectations and demands of the public.
- Effectiveness addresses whether the services delivered are the ones that are needed or demanded.
- Efficiency refers to how well the organisation is using its resources to deliver the services.
- Transparency is about having the mechanisms in place that allow insight in the use of public resources.
- Professionalism refers to the civil servants having the right qualifications, competencies and attitude to perform the tasks.

Organisational indicators will assess whether government agencies steer their organisations according to the national vision and the above mentioned values.

Private and corporate organisations and corporate governance

Bhutan's vision of GNH demands a private and corporate sector that addresses sustainability and social responsibility, in addition to fast-paced economic development. Not an easy mandate, particularly in this sector where profits and 'quick win' agendas dominate. However, the concept of Corporate Governance is making headway. Successful businesses or companies nowadays consider sustainability of their business and shoulder some public responsibility by allocating a certain percentage of their profit to social or welfare issues. It also contributes to a positive corporate image. Again, within the context of GNH, corporate governance is a societal responsibility.

Civil society organisations

Civil Society is (CS) considered critical to an effectively functioning democracy. With GNH as the guiding concept CS organisations should work *with* the people rather than *for* the people and, hence safeguarding the traditional self-organising capacities and the interests of Bhutanese communities and groups. The notion of civil

sense amongst people is a driving force for the development and principles of Civil Society such as participation, co-creation and empowerment which should figure in the organisational indicators.

Whether good governance, corporate governance or civic sense, the focus of this paper is on organisational performance indicators that are general and applicable to all organisations, irrespective the sector they are in. However, the relevance of sector specific indicators is being acknowledged and could be elaborated simultaneously.

Organisational indicators for GNH

The suggestion for organisational indicators presented in this paper will enhance understanding of organisations within the concept of GNH. However, the organisation's capability to implement these indicators is what matters most. How do organisations put people - staff and customers - in the centre and function optimally in their performance and their unique contribution to GNH? How does the concept of GNH guide and inspire organisations? What are the indicators that measure GNH leadership and organisational functioning and how do organisations implement and monitor these indicators? These questions concern good organisational practice for achieving GNH. The following will give some insight in possible answers.

1. What organisations stand for: mandate, vision and values

Do leaders, managers and staff in organisations understand why they exist and what their specific contribution to GNH is? On a day to day basis staff members undertake numerous activities because their managers and leaders ask them to do so, fully relying on their wisdom and position. But when the question is asked what the vision or mission of the organisation is, they often don't know. Organisation's mandate and vision have often been formulated by the leaders or managers and put in a report that is safely stored on the shelves in the manager's office. Hardly ever it

is being shared and reviewed with other staff. It is only being looked into occasionally, e.g., when outsiders such as consultants ask for it.

Do managers and leaders address the concept of GNH in their organisations? Do they initiate organisational reviews and planning exercises in which strategic issues such as mandate and roles and responsibilities of the organisation in the wider context of the sector and society are being discussed and decided upon? Do staff members participate in such events? Are policies and strategies based on the present and future needs and expectations of stakeholders? Do managers and leaders sufficiently go beyond their specific unit, section, division or department, and practice visionary 'bird eyes views'?

The same questions can be raised for organisational values. Very often organisational values remain a paper reality. If at all organisations have values, staff are aware of it, there are no indicators to connect organisational behaviour to organisation's values. Neither are they measured. However, organisational indicators for GNH have to be value driven, and there is an increasing number of organisations making their values visible and displayed at the office entrance, office walls or PC screen savers. These organisational practices can be reflected in the indicators that address values.

As much as the national vision is a commitment of the country's leadership towards its people, the organisation's vision is a strategic expression of what the organisation wants to achieve. The advantage of having a national vision is that it will trickle down into the organisational visions. During the OD exercise, all government agencies reviewed their visions and mission statements and spelled out their specific contribution to achieving GNH. It provided a very straight forward indicator for assessing visions of Bhutanese organisations.

Some Examples from the organisational assessments:

Dzongkhag (District)

“A stable and self reliant Dzongkhag promoting balanced socio-economic development & gainful employment whilst preserving culture and environment to realize GNH”

Ministry of Education

“To ensure a learning society with standards of education that is comparable to the International standards and that reflects the unique Bhutanese culture and values in keeping with GNH”.

Royal Audit Authority

“A premier audit institution that promotes economy, efficiency and effectiveness in the use of public resources and contribute towards good governance”.

Gross National Happiness Commission

At the end of 2007 and shortly after the 3rd International Conference Gross National Happiness held in Bangkok, Thailand, Planning Commission was renamed Gross National Happiness Commission (GNHC). GNHC’s mandate is macro-level, socio-economic and cross-sector policy and strategy development. The name change is the best possible expression of the government’s commitment to putting the GNH concept in the heart of the RGoB’s policy framework. Some may say, what’s in the name? From an OD point of view, one can’t think of a better strategy to acknowledge GNH as the national vision. This is followed by formulating indicators that measure the implementation of GNH at all levels in the Commission itself and in the guidelines for all other government agencies including monitoring and evaluation mechanisms.

2. Who are the leaders in organisations: leadership

As mentioned earlier, leadership is a very important indicator for good organisational practice: in a people-centred approach,

leadership attitude is more important than skills and knowledge. Leaders act as role models for their staff. In looking for an inspiring and visionary leadership model, Bhutan need not look elsewhere. Leadership qualities such as selflessness, humbleness, and modesty which make world leaders are right here at home. We found a shining example in the way His Majesty the Fourth Druk Gyalpo had led his country for more than 30 years. A visionary leader is able to see the future beyond the existing reality and steer choices accordingly. Nowadays we are getting used to the need of thinking and acting 'out of the box'. Visionary leadership is about shaping a new box. The long term transition process towards democracy is a good example.

Leaders develop and facilitate the achievement of the organisation's vision and mission, and values required for the long-term success, and implement these via appropriate actions and behaviours. They are personally involved in ensuring that the people in the organisation are in the right positions, are motivated and committed, and they remain so. Leadership is the main factor in successfully implementing OD processes in the organisation, and the people-centred leadership one of the indicators.

3. What organisations deliver: products & services?

Keeping wellbeing as the main focus, organisations fulfil a particular need or wish of their customers or clients. One way of monitoring the level of satisfaction of the public or customers or clients is asking them to evaluate the quality of the products and services. This can be done through customer/client satisfaction surveys. Such surveys were introduced during the OD exercise.

One would assume that in the context of GNH, such surveys would be undertaken frequently in order to assess and monitor the impact on wellbeing. In the private sector where quality of services impact directly on the profit margins, such surveys are more common and frequently used. Contrary to government agencies, the sales of products and services have a direct effect on the

number of jobs, the salaries, job satisfaction and career perspective etc. There is a keen interest to keep track of how products and services 'are doing with the public or customers' in order to take decisions on future production and strategies.

The overall outcome of the surveys in the government agencies confirmed the need to improve the quality of the services to the public in order to contribute to their satisfaction and wellbeing. Also recommended were standard setting, streamlining, simplifying procedures and acknowledging the need for changing mindsets and attitudes of service providers. Service delivery by the government agencies for example is still perceived from the agency's rather than the client's perspective, and alignment and simplification of procedures is needed in and between the agencies. The service providers must become more client-oriented and start seeing the world through the eyes of their customers, and to act according to the convenience and interest of the same. It is the leader's role to encourage staff to see and live up to their newly-identified responsibilities.

An urgent need and immediate measure that is being recommended is the establishment of performance indicators for services. For example, this can include:

- **Promptness:** indicating the time it takes to deliver a product or service and communicate this to customers including the right to claim if not (e.g. citizen charter, ombudsman, information desk, client service, suggestion box);
- **Efficiency:** especially in the government there is scope to reduce red tape to the maximum and to strengthen a customer friendly approach to the service (demand driven rather than supply driven); efficiency in business is often better taken care of.
- **Effectiveness:** does the customer get the service he/she asked for, do the products fulfil needs of the clients, are they useful or wanted and how is the quality?

- **Friendliness:** the way the customer is being treated. The last point refers to the attitude of being client/customer oriented. Quite often staff in private sector are more client oriented than civil servants in their service delivery. More about this in the paragraph on Human Resources.

The quality of products and services delivery is often the yardstick of organisational performance. This holds definitely true for private businesses. If you are not doing well (which often means: if you do not sell) you will no longer be in the business. In government agencies this is less obvious as the quality doesn't have a direct impact on their existence nor are unnecessary bureaucratic procedures presented in terms of costs. This is changing. The Anti-Corruption Commission (ACC) has adopted the Standard Costing Model, a tool that calculates the percentage of public money that is being spent unnecessarily due to lengthy and inefficient procedures and processes, so called red tape. ACC has tested the model and has handed it over to the Ministry of Finance to institutionalize it further. Government agencies could become less bureaucratic, more efficient and more price conscious as part of good organisational practice.

4. How organisations are being managed: systems and procedures

Addressing good organisational practice includes the question on systems and procedures; what processes and systems are being put in place to facilitate high quality of services and products and smooth and healthy functioning in the organisation?

Systems and Procedures for Products and Services

The quality of products and services is to a large extent determined by the production processes or the service delivery process. We could think of the quality of raw materials used for a product, the type of machines, actually the quality of the entire production process.

Services respond to a particular demand or need and require relevant data, documentation, clearance, verification, cross checking, etc. The OD exercise clearly indicated that systems and procedures in government agencies are agency-driven rather than client-driven. Instead of organizing the services in such a way that it makes life easy for the client or customer, he or she sometimes has to visit different ministries and agencies to get the services. There is a scope for improvement in communication and collaboration between ministries and agencies and taking out overlap will definitely shorten procedures.

A fundamental shift is needed in the way the government conducts its business by putting the welfare and the convenience of the public at the forefront rather than the interest of the agency. The option of 'one window facility' was mentioned as a way of re-engineering the workflow and makes the services truly citizen centric. Optimal use of ICT is also recommended to increase efficiency and ease difficulties for the clients and to design and implement quality standards of services including clear timelines.

Administrative and Financial Systems and Procedures

With regards to smooth functioning of organisational processes, other important systems are financial and administrative systems and procedures that are necessary for carrying out its core business. Nowadays Information Technology is the key to streamlining internal systems and financial procedures and for increasing access to all kinds of information and fast communication – for example, keeping detailed databases of clients/customers and other stakeholders. Indicators for administrative and financial systems should address how these systems facilitate and support production and/or service delivery.

Another question is the practice of sustainability in organisations. Do systems and procedures sufficiently take into account the working environment (physical and social context within which one is functioning) like office space, office facilities, office equipment etc? Do tender procedures facilitate governance

principles and quality over costs? Can printers do double-sided copies? Are office vehicles being used properly? Do we have an alternative for plastic bottles we use during meetings and conferences and do we apply proper ways to deal with office waste?

In other parts of the world innovative ideas on waste management and care for the office environment do offer tremendous business opportunities. As sustainability and wellbeing of staff, clients and customers are at the core of organisational functioning, it is a necessity rather than an option to assure a pleasant and safe working environment and to consciously deal with office and waste management. These considerations have to be covered in the organisational indicators for GNH; experience and expertise on how to go about it can be borrowed from other parts of the world; the justification and responsibility for these aspects of good organisational practice are definitely rooted here.

Human Resources Systems

In a people-centred approach to organisations, the people (Human Resources) in the organisation are the most crucial component. All medium and large size organisations need to have a Human Resources policy and implementation plan for organizing their people for effective and efficient functioning and for assuring a healthy and safe working environment and happy working relationships.

Human Resource systems deal with staffing issues such as recruitment & selection, performance management, reward systems, career planning, training and capacity development and appeal and grievances system. Government agencies often have a strong emphasis on the organisational structure or organogram which arranges the lines of authority and communications and allocates rights and duties. Salaries and career perspectives are determined through positions in the structure rather than through performance as is often the case in private businesses.

The OD exercise carried out in the government indicated that motivation of the civil servants has been a weak link in the bureaucracy. There seems to be little incentive to perform as managers and systems and procedures often stifle performance and effective management style. Although the civil service has a lot of potential and talent, the capacities are not being used to the optimum as performance management hasn't been implemented to the full extent. Human Resource systems have to facilitate staff to performing their tasks and responsibilities. A people-centered Human Resource policy does address motivation and attitude, and goes beyond the organisation's organogram.

5. How organisations manage staff: HR issues

Thus far, I have mainly dealt with the more technical dimensions of organisations. As GNH demands a people-centred approach to OD, it is obvious that people play a determining role in organisations being successful; it is the people who give life to organisations in the way they relate to each other and to their working environment.

Human Resource systems refer to clear job profiles and roles and responsibilities, team work and team spirit and a healthy and pleasant working environment. The non-technical dimensions of Human Resource systems are as important as the technical ones.

Recommended is a performance-based culture in the civil service for achieving organisational mandates. Further decentralization of Human Resource issues to the government agencies will strengthen the Human Resource Committees and Human Resource Divisions and facilitate implementation of performance management. After all, responsibility for recruitment and selection and managing performance are interlinked. This is easier in private businesses or corporations where managers have their own Human Resource policies through which they have full responsibility over all HR aspects of their staff.

In the OD exercise it has been acknowledged that mindsets and attitudes of civil servants need to change; they must become more client oriented and start approaching and seeing the world through the eyes of their customers and act according to their convenience and interest; it requires a fundamental shift from agency focus to client focus.

Earlier we mentioned Customer Satisfaction Surveys to measure whether clients are satisfied with the products or services delivered. Clients have to rate statements such as:

- staff show they care about helping me
- staff have the right knowledge and expertise to deliver the service/product
- staff work quickly and professionally
- staff deals with clients in a fair and impartial manner, etc.

Leadership and performance management

The OD exercise recommended a performance-based culture in the government. The Bhutan Civil Service Rules 2006 offer a framework for all civil servants, including rules and procedures of Performance Management. Leaders and senior management must make performance management as their core responsibility and must be held accountable. Key performance indicators for the CEOs or Executives are the primary requirement to the effective implementation of Performance Management. This has to be linked directly to the performance of the organisation against agreed targets, and supported by tools such as the Client Satisfaction surveys and Organisational Behavior surveys.

If staff members are well taken care through proper performance management, it is more likely that they will do well and will be friendly towards clients in delivering services. Again, leaders and managers fulfil a major role in motivating staff including their behaviour; they act as role models for their staff; they 'walk the talk' and 'practice what they preach'.

6. Organisational culture for GNH: redefining a culture of care

Culture is to an organisation what personality is to an individual; it is the collective energy that deals with the values and norms and how they are being reflected in the way staff members behave and relate to each other and their working environment. Culture refers to 'how we are doing things here' including dress code, formal or less formal office interaction, level of openness and hierarchy. The dress code in the government is a distinct feature of government culture though it is eroding in other sectors of society.

One way of assessing organisational culture is through Staff Behaviour surveys. This tool provides clarity on how staff values the organisation, starting with questions like: what makes me most happy/unhappy about my organisation. Staff are asked how they feel about customer service, human resources, systems and procedures and performance management and leadership style in their organisation.

Some of the questions of Staff Behaviour surveys are similar to questions in the Client Satisfaction surveys; it makes it possible to compare clients' views and staff views.

Staff Behaviour surveys are a good entry point for discussions on how 'we see ourselves' and 'how others see us'. In such discussions organisations norms and values are being reaffirmed and linked to staff behaviour. They enhance commitment and a sense of belonging and care.

As the concept of GNH puts the people and their wellbeing in the centre, the implementing organisations adopt an organisational culture that does the same: it is in people's behaviour that the concept of GNH is becoming manifest. Therefore, good organisational practice promotes a 'Culture of care':

- for all to care for the organisation's specific contribution to wellbeing and achieving GNH

- for all to care for the way products and services are being offered to customers and clients;
- for leaders and managers to act as role models and care for their staff through adequate implementation of performance management;
- for leaders and managers to facilitate team work and organise time out/retreats;
- for staff to see themselves through the eyes of the customers and clients;
- for staff to care for each other as colleagues;
- for all to carefully manage office time and private time;
- for all to care for the working environment and a sustainable way of working.

Bhutan has been characterised, as other traditional cultures, of age-old systems of care and community sense. With modernization coming in, these systems are being threatened. Care does exist in the government agencies, but it is often defined by relationships and networks. Transparency as a GNH value requires equal treatment of all clients and customers irrespective of the relationship the service provider have with the customer. How to balance the good of the old with the promise of the new? It entails a decision on how an organisational culture of care is being shaped in the context of GNH.

To conclude this paper, a people centred approach to organisational performance fits within the concept of GNH, and organisational indicators should mainly focus on people in the organisations. Leaders and staff of organisations are instrumental in providing services to the people that make them happy; at the same time leaders and staff are also citizens and recipients of services; they are both means and end of GNH. They provide services that they would want to receive themselves; they themselves are a yard stick for wellbeing.

This paper intended to provide input for developing indicators for good organisational practice in the context of GNH. Further research on these practices for GNH is needed; the attached checklist could be a starting point for a GNH model for organisational practice to be used in the further implementation of OD across organisations and institutions in Bhutan and to set standards for organisational practice and eventually the design of an organisational model for GNH.

Annex: Indicators for good organisational practice - towards a checklist

Organisational practice in general

- Is there organisational awareness on the national vision of GNH and how does that manifest itself?
- Does the organisation take time out (retreats) for planning exercises, for reflection and review of performance and functioning of leaders, managers and staff?
- Are these events regular, planned and structured?
- Is staff at different levels sufficiently represented and involved and do they participate actively?
- Are outcomes of such sessions shared and communicated in the wider organisation and with clients and stakeholders?

Vision and values

- Does the vision of the organisation clearly indicate its specific contribution to achieving Gross National Happiness?
- Is the vision based on a thorough analysis of the context in which the organisation does exist, including the 4 pillars of GNH and the ultimate purpose of wellbeing?
- Do stakeholders participate in the visioning and strategic planning of the organisation?
- Do the values of the organisation connect to the mandate of the organisation and the national vision of GNH?

Leadership

- Do leaders develop and facilitate the achievement of vision, mission and values?
- Are leaders able to envision the longer term future and prospects of the organisation?
- Are leaders personally involved in ensuring the organisation's management system is developed, implemented and continuously improved?
- Are leaders personally involved with customers, stakeholders and representatives of society?
- Do leaders motivate, support and recognise the organisation's people?
- Are leaders role models of an organisational culture that takes care of the wellbeing of the staff?

Core business areas: products & services

- Does the core business of the organisation - what it produces or offers to the market - contribute to the wellbeing of the clients or customers?
- Does the organisation undertake studies and research for quality improvement and development of new products and services?
- Does the organisation undertake Customer satisfaction surveys regularly?
- Does the organisation communicate and respond to the results of such surveys?

Systems and procedures

- Do the systems and procedures facilitate delivery of services and products?
- Are they sufficiently client oriented?
- Is the way in which the organisation functions efficient and sustainable?
- Is the working environment encouraging high level performance; e.g. use of office building and office space, equipment, materials, toilets, etc.
- Does the organisation have copiers that can copy double sided?
- Does the organisation deal with office waste properly?
- Are questions on systems and procedures included in the Customer satisfaction surveys?
- Are the results from these surveys dealt with and communicated?
- Does the organisation have a grievances system?
- Does the organisation offer a healthy and safe working environment?

Human Resources

- Does the organisation have a HR policy and plan for transparent HR addressing recruitment & selection, performance management, reward systems, career planning, training and capacity development and appeal and grievances system?
- Do staff members have well defined job descriptions with clear roles and responsibilities?
- Is client orientation sufficiently addressed in job descriptions and appraisals?
- Are job descriptions being used as input for performance appraisals?
- Are outcomes of performance appraisals shared with employees and mutually agreed upon?
- Do performance appraisals include training and capacity development in line with job profiles and is it implemented?
- Do leaders and managers initiate and facilitate performance management?

Organisational culture

- Do staff members care for their clients and customers?
- Do staff members adhere to organisational values and norms?

Do leaders and managers care for their staff; are they being rewarded, recognised and cared for?

-Are staff members in the organisation involved and empowered?

-Do staff members care for each other?

-Do staff members manage office time and private time?

-Is the working environment sufficiently being taken care of?

Etc.

Between Earth and Sky: Formal Organizations as Instruments in Creating Gross National Happiness

John Nirenberg

The concept of GNH is based on the premise that true development of human society takes place when material and spiritual development occur side by side to complement and reinforce each other.

– Lyonpo Jigmi Y Thinley, Prime Minister of Bhutan

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.

– Declaration of Independence, USA

Abstract

The realization of GNH through the lived experience of people in formal organisations requires a compatible organisational infrastructure. This paper makes two main points: First, one's experience in organisations is a source of happiness or suffering, and; second, there is a viable way of operating organisations to allow happiness to flourish if people are willing to take responsibility for its emergence.

Prelude

Humans are natural seekers. From the beginning, people have pursued their happiness in many different ways guided by very different philosophies, motivations, and circumstances. You might say the pursuit of happiness is the fundamental human project.

Today, there are various models of the good life, many ideas about what happiness is, and many ideas about how to create societal systems that foster its attainment. It is notable that the epigraphs on this page point to two completely different approaches to acquiring happiness: one is to protect the individual's ability to define it and pursue it in an environment of maximum personal freedom unfettered by societal (government) interference. In that environment happiness is believed to be a very personal matter. This is one extreme; not quite anarchic, but disdainful of obligations or interference (particularly through taxation) from a societal mechanism not of their choosing. The inclusion of the "pursuit of happiness" in one of the United States' founding documents may have been the first such mention of the concept by a people. Indeed, the United States was the world's first intentional country, self-designed, and launched with the consent of the people.

Another approach to happiness requires the conscious creation of a societal structure and requisite processes that will result in people's wellbeing as a consequence of national policy. In that regard, Bhutan, by calling for an index of Gross National Happiness, to replace GNP, suggests that a government's primary function should be creating an environment in which happiness is a natural by product of living life from day-to-day. In calling for this measure and, presumably, utilizing the machinery of government to insure that societal instruments actually stimulate the development of national happiness; Bhutan may be the first country in human history to do so. This may be the most incredible national vision of our time.

Happiness

Though philosophers have wrestled with the idea of happiness for millennia, people seem to know it when they feel it. Or they think they do. The new discipline of positive psychology tells us that happiness is not related to simple pleasures, but is something deeper. They call that something gratification, reflecting what the ancient Greeks called eudemonia. It is the state of mind that is created when one is lost in the process of living. It is the “flow” that is created unselfconsciously that results from completely losing oneself in the present (Csikszentmihalyi, 1991). It is possible as long as basic needs are met.

The three pillars of positive psychology are, according to one of the field’s founders, Martin Seligman (2002): 1) positive emotion, 2) positive traits, 3) positive institutions – democracy, strong families, and free inquiry. All pillars are a way to understand the idea of how some people exhibit qualities associated with happiness as an observable part of their character within an open society. From one perspective it can be strongly posited that Buddhism prepares one to have a very positive psychology as a consequence of following the Noble Eightfold Path.

What Buddhism and positive psychology tell us about happiness, contrary to the widespread belief in the west that it emanates from consumption and power, is that it is an internal phenomenon almost never achieved through striving.

Chasing the so-called “American Dream” – basically a plan for continuous, conspicuous consumption - makes it almost a certainty that happiness will be forever elusive.

In contrast, the “Bhutanese Dream” is an effort to create a state of national wellbeing as part of the continuous cycle of life. It is also, if pronouncements by the government are fully understood, an effort to insure a sufficient quality of life in a supportive cultural web within which each person can realize their happiness.

While individuals' psychology and early nurturing may be responsible for their orientation toward happiness, one thing is almost certain: happiness derives from optimism, kindness, love of learning, curiosity; and, involvement in a purpose larger than oneself (Csikszentmihalyi, 1991; Seligman, 2002). Measuring GNH may be important from a public policy level to assess the actual state of being of a people according to characteristics such as public health; literacy and educational opportunities; access to fresh air and water; sanitation; cultural events and celebrations; or other societal characteristics, but these measures ignore the internal experience of people within families and within organisations. Current discussions of GNH seem incomplete in that regard.

It is important that an index of the quality of work life be considered a component of GNH. Whether people work in government, private or non-governmental organisations, their experience in organisations is a major source of satisfaction, personal growth, and meaning, or it's a source of violence, repression and pain. Considering the growing number of Bhutanese devoting half their waking lives working in organisations, it is critical to insure that the experience contributes to individual and collective happiness.

Earth: Present reality

Though Bhutan is experiencing growth in its urban centres, it is still primarily a rural society and individual lives revolve around a distinct locale. Individuals focus on family and social ties supported by rituals and celebrations nearby. Therein, longstanding family and cultural practices constitute a tradition of long understood individual behaviour, beliefs and obligatory social roles. The manner of interpersonal relationships has also been long established. An understanding of those relationships is very clear to all Bhutanese. One's place in the human family and in the community is secure. Indeed, in small communities one may even perceive everyone there as part of an extended family; in this cocoon of relationships, people are firmly grounded.

The experience of life in this context (meeting obligations, engaging in the work necessary for family and community, performing deeply held obligations to others and the community) develops within people a deep meta-conscious connection to one another. Perhaps within tight knit communities people may not even perceive a separation from one another. There is, in everyday life, enough time and compassion to accept each person's uniqueness and see one another firmly fixed in each other's world.

This is quite similar in rural communities the world over. It may be a fundamental quality of being in "community," enjoying the kind of personal understandings and mutual self-sufficiency that accrue to small scale, personal, environments. This is not to romanticize rural life. There is no doubt that rural poverty is also psychologically crushing. Though 30 percent of the Bhutanese population is below the poverty line it tends to remain cohesive and bound by strong traditions. This does not, however, mean they are happy; that they experience deep personal gratifications as a matter of daily experience; it does not mean that they are engaged in activities that align with what most fulfils them. The question to be asked is, "How do we create a realistic expectation that every individual will find work with others that speaks to their soul's code (Hillman, 1993) and may result in their experience of happiness?"

Sky: Buddhist practice

For many, the approach to life probably emanates from a deep understanding of the Buddha's teachings: that the nature of life is suffering, attachment leads to suffering, but relief can be found by following the Eightfold Path with meditation being the way of moving along that path. As a foundation, Buddhism provides an unimpeachable foundation for establishing collective happiness.

The potential for constructing an environment that can lead to an increase in personal and collective happiness is possible. The search for GNH measures at this conference is testament to that fact. But as we grapple with the earthly realities and strive to imagine a lofty vision that unleashes the prospects for real personal and national

happiness, the power of intentional organisations to facilitate or stifle that possibility should be understood.

If the past was characterized by small scale systems, and human involvement, and the present is characterized by large scale systems and bureaucratic control structures, a middle way of creating deliberate workplace community and determining indicators of happiness at one's work is appropriate.

Between earth and sky: Interpersonal relationships in organisations

If the present reality is Earth, and Buddhist practice is sky, our interpersonal relationships are the bridge. Specifically, our intra-familial, intra-organisational, and interpersonal experiences are hugely influential in establishing experiences that may lead to our personal happiness or suffering. The focus here is on the intra-organisational experience.

Perhaps this wouldn't be necessary, if society were static. If it were static, community level relationships would function as they always have. Intra-organisational relationships would equate to current community relationships and perhaps express a benevolent paternalism. But change happens.

Discos and bars come to Thimphu, satellite dishes spew countercultural messages over every viewer, young girls in red bikinis are displayed in "glossy advertisements" drinking fizzy water (Dorji, 2007), and new roads make it easy to explore distant towns where individuals are less constrained by local customs.

So-called development practices do lead to more than infrastructure improvement and satisfying basic needs. Once begun, the development process leads directly to an increase in desires and unanticipated consequences. The temptations that drive people to believe happiness is attainable through consumption are part of the fallout. Eventually, once treasured simplicity and traditional

practices are seen as provincial and lacking. It also leads to the creation of impersonal, sometimes very large organisations.

Development has brought with it to the United States a profound alienation from "community." Famous for its mobility; pursuit of self-actualization, and happiness, individually defined; and living in urban and suburban settings where neighbours are virtual strangers, work has become, to many Americans, impersonal to the point where people are merely interchangeable parts in the production equation.

There are cultural, demographic, geographic, economic, and historical reasons for the peculiar evolution of this state of being in the U.S., but the phenomenon of being alienated to the point of becoming a wage-slave is common everywhere. An employee has a contemporary status of servant. And as long as that mental model prevails, the gap between people in the workplace will remain. As long as the structure and processes of the workplace reinforce separation, competition, fear, dependence and powerlessness for the employee and power, domination, control and discretion to the owner or designated managers, the imbalance will create an environment ill prepared to stimulate the deep personal gratifications that we call happiness.

According to Scott and Hart (1990) the current organisational imperative includes two value propositions and four rules that dominate our organisations. The two values are: "...whatever is good for the individual can only come from the modern organisation" and, "...all behaviour must enhance the health of such organisations." The rules that buttress these two main propositions require employees "...1) to be obedient to the decisions of superior managers, 2) to be technically rational, 3) to be good stewards of other people's property, and 4) to be pragmatic (Scott & Hart, 1990: 30)."

As the organisational imperative has matured it has come to mean much more. It assumes the willingness of the individual to sacrifice for the good of an organisation in which he or she is not a

stakeholder beyond wages received. It also assumed that property rights, as exercised by owners of organisations over their material wealth, extend to the virtual ownership of the employees who work for them. One is reminded of the frail nature of the attachment to his or her workplace with an oft-repeated reminder that employment is "at will." One may quit or be dismissed "at will."

The consequences of the typical workplace relationship is a reinforcement of the idea that people must constantly look out for themselves and treat their work only as an instrument of their needs. This is a mutually destructive environment because the individuals are stuck there out of economic necessity and operate at less than full capacity while having their potential ignored.

There are alternatives. Contrast that thinking with the individual imperative that states that "Individuals have the civic obligation to realize their full potential, otherwise they diminish self. When self is diminished, the life of every individual in the community is, correspondingly, diminished. Second, all individuals have the civic obligation to promote human diversity, since pluralism is an essential precondition of self-actualization. Third, all individuals have the civic obligation to reject all forms of human instrumentalism: individuals are ends in themselves, not instruments for attaining other goals. Finally, all individuals have the civic obligation to dissent when any individual, institution or organisation abridges the Founding Values (Scott & Hart, 1990:161)." (In this case the Founding Values are: individual dignity, people as ends in themselves; full participation in the decision making process at all levels, either directly or through chosen representatives, gain/pain sharing, and equal protection of the laws.)

It may be odd to think of this distinction between owners/managers of organisations occurring in Bhutan, but wherever there are class distinctions or labour has migrated (internally or externally) for work, this is a very real possibility. Why? Because there are characteristics that develop naturally in an organisational enterprise based on the loss of community: the need for efficiency, productivity, attention to the use of time, and profit seeking.

Interpersonal competition for additional personal advantage is the only way to get ahead. And you *do* have to get ahead because costs rise; growing families have additional economic pressures, inflation cuts your spending power and savings get eroded. Yet, organisations that are driven by traditional hierarchical, bureaucratic control and reward systems, inevitably resemble the exploitative environments found in more alienated cultures where the sense of meaning is missing from work and people, paradoxically, augment their suffering, not reduce it.

It would be ironic if Bhutan, a Buddhist society, were to “develop economically” but increase suffering rather than diminish it. Even though the organisational imperative is at work everywhere and traditional organisational forms are easy to replicate, an alternative is possible – one that I suggest may be amenable to the Buddhist community of Bhutan.

Some aspects to consider in looking for organisational behaviour conducive to GNH are: the worksite environment; the safety and comfort of people at their workstations; the use of materials, processes, and tools to insure an ecologically compatible exchange with the environment; the relationships between worker and manager/owner/ government; the reward structures; sense of purpose; the match between the skills used on the job and the interests and abilities of the individual; and opportunities to learn and to share the good fortune (as well as the inevitable setbacks) with all workpartners.

Can living the Eightfold Path be encouraged in the workplace environment? Will all work eventually constitute Right Livelihood? Right Intension?

Involvement is one viable approach

Because traditional organisations are conceptualized as an extension of the personal resources and prerogatives of the owner or manager, talking about involvement at work is often a subversive act. It challenges the class system, tradition, and prerogatives of power.

Involvement is about being a legitimate participant in a process of determining the nature of one's work life. It is having the opportunity to express oneself and to be recognized as a rightful member of the community on the same footing as everyone else.

Involvement, and its attendant attitude of commitment, stimulates synergies and serendipity when people participate in the natural flow of information and resources to solve problems, coordinate activities, serve customers, and improve processes; and, to give and receive accurate feedback about how the work is going. These kinds of outcomes are inhibited, if not destroyed altogether, unless individual initiative is released. A participatory system is also motivational.

The major barriers stopping the transformation of abusive systems into humane workplace communities are the difficulty in overcoming the mental model born of traditional prerogatives and unregulated capitalism. Bhutan will benefit from cultural compatibility with community building exemplified by its Buddhist traditions.

It will come as no surprise to the GNH conferees, that an example of grassroots community building along Buddhist teachings has shown that it is not the system that is the problem, but the mental models and motives of those who enjoy power, privilege and the control of resources.

The Sarvodaya movement in Sri Lanka builds bottom-up democracy where councils at the local level, discuss all aspects of mutual problems in an open manner. A similar model is used in Bangladesh where BRAC has established local micro-lending organisations for people to take control of their own destiny. Both of these examples are alive and well - succeeding at the grassroots level among people with little formal education.

The key is to engage individuals by inviting them into the process through participation on teams of variously skilled and experienced individuals.

Organisational community building

In the GNP model, workplaces are constructed environments where relationships between people are necessarily formal and instrumental to achieving the purpose of the organisation. Though they consume at least one-half of people's conscious time at least five days a week, the purpose of being there is not, in the overwhelming number of cases, about personal growth or collective happiness. They are the loci of an exchange: labour for wages. Some may enjoy the experience more than others; some may even derive great personal satisfaction and fulfilment from the work they do and the people they meet. For them it may indeed be a means to achieving their personal happiness, but that is incidental. For the vast majority of workers, around the world it is not only instrumental in creating a product or service but the only means for individuals to earn a living.

In the GNH model, being conscious about our workplace environments is a necessary requirement in order to stimulate two important aspects of gross national happiness: positive relationships and a sense of purpose.

Working in organisations with people who are strangers to you requires developing an understanding of one another. A socialization process needs to take place where the nature of relationships, expectations, responsibilities and rights are spelled out. But unlike traditional orientation programs that take on a legalistic tone that benefits the organisation, this takes the form of a social contract that evolves as circumstances change; clarity about what works and what doesn't work is gained with experience. In effect, each organisation takes on community-like properties.

With the establishment of a shared purpose, workplace community (Nirenberg, 1993) assumes a balance between the individual and the group. Once a person is selected there is an obligation to sustain that person's relationship in the organisation so long as he or she lives up to designated responsibilities. Community conveys a felt concern for the success of the organisation and the individual members in it,

and that concern is felt at a fundamental personal level. Members, in turn, have a responsibility to live up to expectations.

There is a sense of personal efficacy in the role one plays by participating in the creation of the ends toward which the community strives. Each person determines how she or he will serve the community and the means through which they achieve their personal responsibilities. All roles are necessary and there is no hierarchy of importance even though some jobs are more pressing or are more fun or more visible or more central to the fulfilment of the organisation's goals than others at different times. Time is spent explaining and clarifying where the organisation is going, what it is trying to achieve, and how well it is doing, much like in an ownership organisation (Stack & Burlingame, 2003).

Community requires continuous learning. Community, by encouraging individuality and mutuality as it does, can never be totalitarian; it strives to move beyond democracy to consensus yet it focuses on realism; accommodating multiple perspectives and dealing with dissent. Authority is decentralized – more accurately, specialized – wherein those with expertise, training and experience take the lead in responding to challenges in technical areas whether it be taxation, enforcing supply chain accountability standards, or process design for workflow efficiencies. Community strives to become a group of all leaders, however; managers or facilitators of projects may serve for the duration of the project or for a designated period of time after which the position rotates or the group re-forms assignments. When experience shows all is operating smoothly, there may be collective assent to maintaining the status quo.

There is a fair and equitable package of financial and other benefits reflecting each person's contribution, knowledge and skill. With experience, members can even determine pay and privileges (Semler, 2004).

There are no sides; a group can hold various viewpoints but the test is about what will work best, not a particular person's preference for its own sake.

As it develops in sophistication, community develops a structure that provides avenues for the expression and resolution of conflict and protects the existence of diversity of thought. Power is task centred not person centred. Unilateral veto powers, if they exist at all, are assigned by the workplace constitution as are other rights and responsibilities while the separation of powers and checks and balances are built into the process.

Each member can be as involved in additional responsibilities as he or she chooses through being allowed to serve on administrative, policy and various committees. A community forum exists for decision making in these areas. Each person is directly or indirectly involved through the selection of representatives. Work groups and the community process determine operating rules and processes.

Community allows the full, authentic expression of one's whole personality and encourages completely honest communication; and also encourages humility, self-examination and vulnerability - the ability to truly be oneself.

Community means more, of course. It means mutual aid, cooperation, respect, friendliness, individual efficacy, responsibility and good treatment of strangers - those we don't know or don't work directly with but whom are part of the organisation. Personal relationships must be worked at daily.

Eventually it means no layoffs or policy changes without working it out in the community. The purpose is to keep everyone in the governance process and informed. The work group or representative body would also decide issues of hiring, socialization of new members, establishing performance expectations, assignments, scheduling, benefits, rewards and punishments, and dismissal. It would also arrange for the mediation of disputes between individuals and handle grievances rooted in the organisational policy, rules or structure.

Community means inclusion, acceptance, efficacy, freedom of expression, and having social as well as organisational goals

legitimated. It is also being able to communicate openly and freely. In effect, you are expected to speak your truth and assumed to care about the organisation.

The community allows spirit to emerge from within the group as a natural outgrowth of the community building process.

For an organisation to become a workplace community and foster GNH certain conditions must prevail. Each person who is selected by and freely joins the organisation is expected to be involved in decisions affecting their day-to-day work and the governance and maintenance of the organisation to the extent they are able. The form may be direct or through representative involvement.

The individual's acceptance by, and usefulness to, the organisation is assumed. Personality and relationship issues are dealt with separately from competence and task related issues. This requires agreement on fundamental understandings at the time of recruitment. It also requires the individual's willingness to recognize and to commit to the legitimacy of the fundamental values and associated requirements of the employment agreement.

In short, the acceptance of individuals as full members of the community is dependent on their living up to their role, responsibilities, and group function. In return, the individual takes part in determining the organisation's future and in pursuing his or her own path to happiness within the workplace community. The community stimulates its own growth and group development by creating a learning environment and providing opportunities for individuals to develop fully.

Suitability of workplace community with socially engaged Buddhism and Bhutan's GNH Effort

The idea of workplace community and universal involvement in determining the quality of work life environment and organisational processes seems to be quite consistent with Buddhism.

Speaking from a development perspective, Sulak Sivaraksa, a leader in the movement for socially engaged Buddhism said, "Economists measure development in terms of increasing currency and material items, thus fostering greed. Politicians see development in terms of power, fostering hatred. Both measure the results strictly in terms of quantity, fostering delusion. From the Buddhist point of view, development must aim at the reduction of these three poisons – greed, hatred, and delusion, not at their increase. We must develop our spirit (Bond, 2004:120)." Community building is an effort to do so.

Considering the successful lifelong efforts of A.T. Ariyaratne in Sri Lanka, which were remarkably similar to the ideas expressed here, experience validates the application of a systematic approach to creating a viable workplace community. In his case, his democratic development model expressed through Sri Lanka's largest NGO, Sarvodaya applies the concept of Shramadana, the sharing of labour as a vehicle for the "awakening of all." In so doing they demonstrate the fact that "We build the road and the road builds us," a saying they use that beautifully captures the spirit of their development effort. For Ariyaratne, his work at grassroots development weren't explicitly about happiness. Instead he addressed "the ten basic needs that include: 1) a clean and beautiful environment, 2) a clean and adequate supply of water, 3) minimum clothing requirements, 4) a balanced diet, 5) a simple house to live in, 6) basic health care, 7) small communication facilities, 8) minimum energy requirements, 9) total education, and 10) cultural and spiritual needs (Ariyaratne, 1996:xiv)." Nevertheless, through meeting these needs working together as part of a self-managing community, people come to experience their happiness.

Sarvodaya is 50-years old this year and still serves as an exemplar of how an organisation can help people move toward their collective betterment where "...equality, sharing, constructive activity, cooperation, pleasant speech and love as well as freedom prevail (Ariyaratne, 1996)." Perhaps lessons from the Sarvodaya experience

could be usefully applied in Bhutan. No doubt Bhutanese already know this.

As a by-product of building workplace community it might also be possible to temper the consumption epidemic spreading around the planet like a wildfire. Ariyaratne reminds us "...whereas the Western economic models depend on the creation of desire, Sarvodaya's aim is to eliminate both desire and suffering..." (Bond, 2004:5)

Instead of relying solely on traditional relationships in the workplace, consciously augmenting them and designing organisational environments that apply processes, structures and policies in such a way that workplace community is created, will help make GNH a reality.

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Do Information and Communication Technologies Further or Hinder Gross National Happiness?

Kezang and Jason Whalley

Abstract

This chapter focuses on the relationship between information and communication technologies and Gross National Happiness, the philosophy that has guided development within Bhutan. Whilst a series of challenges are identified, the focus is on that between availability and affordability of the technologies and the need to ensure that access is equitable. It is argued that the gap between the 'haves' and 'have nots' can be reduced but entirely overcome.

Introduction

Over the course of the last 25 years or so, there has been unprecedented growth in the diversity and capabilities of information and communication technologies (ICT). These technologies, such as mobile telecommunications and the Internet, are now found throughout society and the economy. In the information driven economy that has emerged, ICT binds together individuals, companies and organisations irrespective of their geographical location. The enhanced capabilities and near ubiquity of some ICT have engendered new forms of economic activity, encouraged the more efficient delivery of existing services as well as the development of new services and products.

Notwithstanding the many benefits that ICT advances have brought, it is clear that not everyone has been able to enjoy these

benefits to the same extent. In some cases the ICT is simply not available, whilst in other cases affordability or the lack of appropriate skills may be the barrier to adoption. Regardless of the reason why the benefits of ICT cannot be enjoyed, the result is the same, namely, some have access to ICT and others do not. The divisions that result are of concern to many governments, but are particularly problematic in Bhutan due to the unique approach to development that has been adopted. Since its articulation by the fourth King, Gross National Happiness (GNH) has guided development within Bhutan. GNH places the individual at the centre of development efforts, which are to be sustainable and equitable socio-economically. In other words, the gap between those who have access to ICT and those that do not, the so-called 'haves' and 'haves not', runs counter to GNH.

This paper focuses on the tension between ICT and GNH. Access to, and use of, ICT is characterised by its unevenness. In contrast, GNH aims to reduce, if not completely negate, the differences that exist. With this in mind, the remainder of this paper is divided into four sections. The following section provides an overview, albeit brief, of Bhutan and some of its key socio-economic characteristics. The focus then shifts onto ICT within Bhutan, highlighting milestones in their development and recounting the structure of the industry. In section four, the relationship between ICT and GNH is explored with the main focus being on the relationship between availability and affordability of ICT. Conclusions are drawn in the final section of the paper.

Bhutan

Rather than providing a detailed overview of Bhutan, this section is contextual in nature and introduces issues that are referred to later on in the chapter.¹ Bhutan is a mountainous and sparsely populated country that is bordered by China to the north and India to the south, east and west. At 38,394 square kilometres, Bhutan is roughly the size of Switzerland but with a population of 634,982 its population density is among the lowest in Asia.² If only cultivated

land is taken into account, the population density rises to 129 people per square kilometre (Royal Government of Bhutan, 2005a).

Bhutan's self-imposed isolation was ended in 1961 by the third King Jigme Dorji Wangchuck. Bhutan is now a member of many international organisations including the United Nations, International Monetary Fund and World Intellectual Property Organisation. In 1999 Bhutan applied to join the World Trade Organisation, though at present, accession discussions are ongoing.

Although Bhutan is a monarchy, the monarch is no longer head of the government. The Constitution of Bhutan that was adopted in 2008 turned Bhutan into a constitutional monarchy, clearly defining the roles and remit of its components (Royal Government of Bhutan, 2008a). The Constitution divides Bhutan into 20 Dzongkhags (districts), which in turn are sub-divided into a series of Gewogs and Thromdes (Royal Government of Bhutan, 2008a). The Dzongkhags and Gewogs have played an increasing role in both the administration and development of Bhutan.

Bhutan is perhaps best known internationally for its unique development philosophy of GNH. As articulated by King Jigme Singye Wangchuck, "Gross National Happiness is more important than Gross National Product. The ultimate purpose of the government is to promote the happiness of its people" (Royal Government of Bhutan, 2005a). GNH is the overarching development philosophy of Bhutan (Royal Government of Bhutan, 2002) and places the individual at the centre of all development efforts. It is pursued through the four broad platforms of sustainable and equitable socio-economic development, conservation of environment, preservation and promotion of culture, and enhancement of good governance.³ These four dimensions shape development within Bhutan, for instance, a 1999 report suggested changes to the structure of the government so that transparency, efficiency and good governance were enhanced (Royal Government of Bhutan, 1999). This was further reviewed in 2005 and published as the Good Governance Plus Report 2005 (Royal Government of Bhutan, 2005b).

Starting in 1961 the Bhutanese economy has been modernised. The first five-year plan focused on the provision of basic infrastructures like road and telecommunications. Subsequent five-year plans have widened the development remit, with, for example, the Ninth Five-Year Plan highlighting a diverse array of issues including devolution, public services management and the encouragement of the private sector (Royal Government of Bhutan, 2002).

Table 1: Ninth Five-Year Plan Budget Expenditures (in Million Nu)

	02/03	03/04	04/05	05/06	06/07 1	07/08 1
Revenue	4785	5055	6066	6093	10038	11129
External grants	2269	5367	5033	5478	7156	5183
<i>Revenues + External Grant</i>	7054	10423	11099	11571	17194	16312
Current	4581	5149	6506	6888	8756	9471
Capital	5310	4653	9056	7764	9461	9703
<i>Total expenditure²</i>	9890	9802	15562	14652	18217	19174
Lending (net)	-48	-6	39	49	-1103	-1283
<i>Overall surplus / deficit</i>	-2891	580	-4106	-3745	80	-1539
<i>Budget surplus/deficit as % of GDP</i>	-10%	-1.75%	-11%	-8%	0%	-3%

Notes: Projected without Drukair Planes

Source: GNH Commission (2008: 8)

The most recent five-year plan will cover the period 2008 to 2013 with the overarching objective being poverty reduction (GNH Commission, 2008). Although poverty reduction has been tackled through elements of previous five-year plans, its adoption as the overarching objective of the tenth five year plan reflects the fact that substantial socio-economic inequalities remain across Bhutan notwithstanding the progress that has been made to date. The

objective of reducing poverty will be facilitated through encouraging economic development, with the plan focusing on five specific areas: national spatial planning, integrated urban-rural development, strategic infrastructure, the development of human capital and enhancing the enabling environment (GNH Commission, 2008).

Foreign aid has played a role in these five-year plans. India, for instance, has contributed to the development of Bhutan's road and telecommunication infrastructure over the years. Having said this, Bhutan's reliance on foreign aid to fund its development has been declining in recent years (GNH Commission, 2008), in part, due to the economic growth generating more resources indigenously. Even so, as can be seen from Table 1, the Ninth Five-Year Plan saw three large deficits (GNH Commission, 2008). One possible explanation for these deficits is the substantial capital expenditure that has occurred during the Ninth Five-Year Plan, that is, the country is investing today to reap the benefits of these investments in the future. A similar explanation could also explain the substantial increase in national debt that rose to \$691 million by September 2006 (GNH Commission, 2008).

Through successive five-year plans, the Bhutanese economy has changed. The economy grew on average by 6.7 % between 1980 and 1998. In the 1980s GDP growth was higher at 7.3%, resulting in income almost doubling over the course of the decade. Economic growth slowed between 1990 and 1998, averaging 5.9% per annum. In contrast, growth accelerated once more to average over 9% between 2002 and 2006. Over the period of the Ninth Five-Year Plan, inflation averaged 2.5% (GNH Commission, 2008).

Conditions today for most Bhutanese are very different from what they were in 1961. Adult literacy has increased to 54% and the primary school completion rate to 87% by the end of the Ninth Five-Year Plan and more than 80% of the population has access to improved sanitation and drinking water (GNH Commission, 2008). Health coverage has increased, with more doctors and hospital beds in 2006 than 2002 (GNH Commission, 2008).

Information and communication technologies

As can be seen from Table 2 (below), ICT were first introduced into Bhutan at the start of the 1960s. Telecommunication services were the first to be launched, following by the introduction of print media in 1965 and radio in 1973. After a significant gap, TV broadcasting and the Internet commenced in 1999 and cellular mobile services in 2003.

Table 2: Milestones in the development of the Bhutanese ICT industry

Year	Development
1963	First rudimentary telephone system launched
1972	Three separate physical wire routes (Thimphu–Phuentsholing, Trongsa–Gelephu, and Trashigang–Samdrup Jongkhar)
1973	Amateur radio broadcasts commence
1981	First analogue network established
1984	First link to outside world launched (from Thimphu to Hasimara in India)
1986	Bhutan Broadcasting Service radio services launched
1989	UNDP and ITU funded implementation of the Bhutan Telecommunications Development Master Plan
1990	International gateway in the capital city (Thimphu) allowing direct international links for the first time
1991	Japanese grant aid that made possible Bhutan Telecommunications Development Master Plan received
1994	International, domestic and local calling possible
1998	Bhutan Telecommunications Development Master Plan implemented
1999	Bhutan Telecommunications Act enacted by the National Assembly Internet and national television introduced Commercial cable television regularized
2000	Bhutan Telecommunications Authority established Bhutan Telecom established
2001	IP-based rural access pilot project implemented
2002	First cellular mobile licence issued to Bhutan Telecom
2003	Ministry of Information & Communications established Cellular mobile services launched
2004	Internet Service Provider licenses issued to two private companies Bhutan ICT Policy & Strategies formulated
2005	Bhutan Telecom’s exclusive privilege for fixed-line telephony abolished
2006	Bhutan Information, Communications & Media Act enacted by the

- National Assembly; Nationwide television broadcast launched; Second cellular mobile licence awarded to Tashi InfoComm Ltd; Sector-specific Bhutan Telecommunications Authority evolves into a converged Bhutan InfoComm & Media Authority
Private newspapers licensed
- 2007 Bhutan InfoComm & Media Authority becomes autonomous
Local Area Networks in all 20 Dzongkhags implemented
Thimphu Wide Area Network project implemented
- 2008 Bhutan InfoComm & Media Appellate Tribunal established
Second cellular mobile operator launches GSM/GPRS service
Bhutan Telecom launches ADSL and 3G services

Source: Updated from Kezang & Whalley (2007: 73)

The government initiated the first telephone network in Bhutan in 1963 to assist with the construction of the national highway. This coincided with the adoption of a more planned approach to development. The telephone infrastructure then consisted of three separate networks. The first network linked the capital Thimphu in western Bhutan to the commercial hub in the south, Phuentsholing. The second network connected Trongsa, a town in central Bhutan with Gelephu, another commercial town in the south. The eastern network connected Trashigang in the east to Samdrup Jongkhar in the south. It was not until 1984 that Bhutan's first link with the outside world was established, with an analogue microwave link from Thimphu to Hasimara in West Bengal, India.

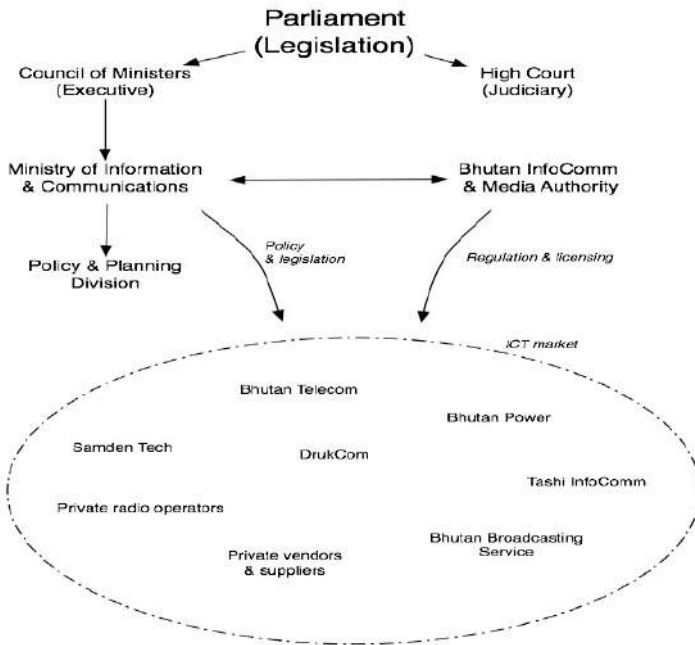
The former Ministry of Communications, with the assistance of the International Telecommunications Union and United Nations Development Programme, initiated the Bhutan Telecommunications Development Master Plan in 1989. From 1991 onwards, the Master Plan was funded by Japanese grant aid. The modernisation plan was implemented in four phases over a 7-year period with the priority being to provide services to those areas that did not already enjoy basic telecommunication facilities. In addition, the plan was also to improve cross-country telecommunications links through establishing an east-west link between Thimphu, the capital city, and Trashigang.

The east – west microwave link was established in September 1993 and by June 1998 the modernisation plan was completed. This completed the expansion of the national network to major towns that previously had no service. As a consequence, Bhutan had for the first time a national digital telecommunications infrastructure that linked together the head offices of all twenty districts. A dedicated switch in Thimphu serves as the international gateway allowing Bhutan direct international access to over 100 countries.

Since 1998 there have been considerable changes to the Bhutanese ICT market, with some of the main ones being:

- Increased rural coverage
- The establishment of local area networks in most Dzongkhags
- An increase in the number of Internet Points of Presence (PoP) across the country
- Increasing ICT literacy and awareness
- Improving customer service and reductions in prices

Figure 1: Structure of the Bhutanese ICT industry



Source: Updated from Kezang & Whalley (2004: 791)

As more ICT have been launched and they have been brought to an ever-larger proportion of the country, the structure of the ICT industry has also changed. Figure 1 shows the structure of the ICT industry. From this it can be seen that there are both institutions and companies present in the Bhutanese ICT industry. The most significant institutions are the Ministry of Information and Communications (MoIC) and the Bhutan InfoComm & Media Authority, BICMA.⁴ Bhutan Power Corporation Ltd (BPC), Bhutan Telecom Ltd. (BTL), Tashi InfoComm Ltd. (TICL), Samden Tech Pvt. Ltd. and DrukCom Private Enterprise are the licensed suppliers of telecommunications and ICT services. BTL is a 100% state-owned commercial corporation.

Government policies that affect the ICT industry are developed by the MoIC. The Ministry's policies and plans cover results-oriented resource allocation, issues relating to radio spectrum management and use, and investment co-ordination. MoIC did partially engage in the regulation of the telecommunications industry, but with the passage of the Bhutan Telecommunications Act in July 1999 by the National Assembly, it lost this role. As a consequence, planning and policy was separated from both the regulation and operation of the industry.

Regulation passed to the Bhutan Telecommunications Authority, which was established in January 2000 to "regulate and promote the development of the Bhutanese telecommunications sector". The roles of the ministry and the regulator have further been clarified with the enactment of the Bhutan Information, Communications and Media Act 2006. The BICMA is a separate agency delinked from MoIC, and funded by the government through the Ministry of Finance. The regulator is to implement the Bhutan Information, Communications and Media Act (2006), managing the process of liberalising the market so that it is opened up to competition. This liberalisation has resulted in new players entering the Internet and mobile telecommunication markets, reduced prices and improvements to the quality of services. It is worth noting that further changes in the ICT market are likely, not least due to continued liberalisation on the one hand and the possible accession of Bhutan to the World Trade Organisation.

Table 3: Basic market characteristics

	1996	2003	2004	2005	2006	2007	2008
Main lines	6,100	23,657	30,285	33,200	33,500	33,000	30,000
Mobile lines	-	4,383	18,995	37,500	78,185	125,200	250,000
Number of PCs	1,500	7,000	9,000	11,500	12,000	12,500	13,500
Cable TV subscribers	-	13,000	18,000	20,000	20,500	21,500	25,000

Number of TV channels	-	45	45	35	35	35	35
Internet subscribers	-	1,700	3,000	4,000	5,000	7,000	10,000

Source: updated from Kezang & Whalley (2007: 75)

Table 3 (above) offers basic descriptive information on the Bhutanese ICT market. BTL remains the sole provider of main (fixed) lines, whilst B-Mobile and Tashi InfoComm compete against one another in the mobile market. BTL also has an Internet Service Provider (ISP) subsidiary, namely, DrukNet. Samden Tech and DrukCom offer VSAT-based Internet services. Numerous private companies are also involved in the provision of cable TV services across the country.

Discussion

A useful starting point to understand the relationship between ICT and GNH is Kezang & Whalley (2007). They argue that the diffusion of ICT is determined by the interaction between available resources, the services being delivered and the geography of Bhutan. Although the focus here is on the interplay between services and GNH, it is necessary to briefly recount the other two as they do contribute to how this relationship manifests itself in practice through shaping the availability and affordability of the underlying ICT.

According to Kezang & Whalley (2007), the geography of Bhutan raises three barriers to improving access to ICT and the services that they bring. Firstly, Bhutan is a sparsely populated country with a low population density. Having said this, urbanisation is occurring with Thimphu accounting for around 15% of the country’s official population. Secondly, the mountainous nature of the terrain ensures that travelling from one side of the country to the other results in a difficult and often protracted journey. Finally, several languages are spoken across Bhutan with the consequences that it does not follow than everyone speaks either English or Dzongkha. The combined effect of these barriers is relatively straight forward yet profound, namely, to fragment Bhutan into a series of smaller markets.

Bhutan also lacks resources. As can be seen from the table above, Bhutan's reliance on external grants has declined over the years though they continue to play a significant role in funding development initiatives. Assistance has come from a variety of countries and international organisations, with Danida (2003: 9) identifying the following major donors: the Asian Development Bank, Austria, Denmark, The Netherlands, India, Japan, Switzerland, UN and the World Bank. Three of these donors – India, Japan and Denmark – have provided substantial assistance over the years to develop the ICT sector. The assistance provided by both India and Denmark has largely focused on the telecommunications industry, whilst Japanese assistance has tended to include the broadcasting sector as well.

The recent agreement between the World Bank and Bhutan draws attention to another type of resources, that is, human. The need to develop human capital in its broadest sense is identified as one of the objectives of the Tenth Five Year Plan. In contrast a narrower focus is taken by the World Bank (2007), which highlights the need to improve Bhutan's information technology skills and expertise. As part of a US\$8 million package, \$2 million will be spent on skills development initiatives in three areas: generic IT skills for graduates, the use of distance learning to develop IT professionals and a programme to develop IT entrepreneurship skills (World Bank, 2007: 9f). The aim of these initiatives is to develop the country's skill base to such a point that the existing ICT infrastructure, as well as the IT park at Wangchhutaba that the World Bank is also supporting, can be used productively to generate economic benefits. One such benefit is increased economic activity, whilst another is the resulting slower growth in, or even reduction of, unemployment that would occur as a consequence.⁵ The Tenth Five Year Plan (GNH Commission, 2008: 74-78) draws attention to the increase in unemployment that Bhutan has experienced in recent years, from 1.4% in 1999 to 3.7% in 2007. Two areas of concern are explicitly identified, namely, youth and urban female unemployment.

The World Bank's (2007) recognition of the need to develop entrepreneurial skills within Bhutan echoes Kezang & Whalley (2007). This cannot be considered as surprising when the emergent nature of the private sector in Bhutan is taken into account. Through an extensive range of state-owned enterprises, the government has long played a significant role in the economy⁶ In addition, the civil service has recruited many graduates into its ranks over the years, reducing in the process the degree level educated workforce available to the private sector.⁷ Although the number of graduates in general and ICT-related graduates in particular has increased in recent years, it is not clear how far this has resolved the competition for graduates between the government and other sectors in the economy that exists in Bhutan.⁸

Now that the pertinent geographical and resource issues have been outlined, attention can turn towards exploring the relationship between services and GNH. From Table 3 (above) it can be seen that the ICT services available within Bhutan has increased. Through the development of the ICT industry in Bhutan, a familiar set of ICT services are now available: radio, TV, cable-TV, fixed and mobile telephony and Internet access. Significantly not only are each of these an industry in their own right, but they also facilitate broader economic activity on the one hand and the delivery of government services on the other.

Pek (2003) provides an overview of the media within Bhutan. From this it can be seen that radio is the most effective media in Bhutan as it reaches the most people of any ICT service.⁹ It is estimated that around 60% of the population listen to the radio, with shortwave transmitters covering more of the country than FM (Pek, 2003: 18). It is arguably the case that the low entry barriers to radio have encouraged its diffusion across Bhutan.¹⁰ The geographical coverage of the TV services offered by Bhutan Broadcasting Services (BBS) has increased in recent years. Kezang & Whalley (2007: 77) state that TV production was limited with only five hours per day being broadcast, with the broadcasting of services outside Thimphu delayed by a lack of a national broadcasting transmission network.

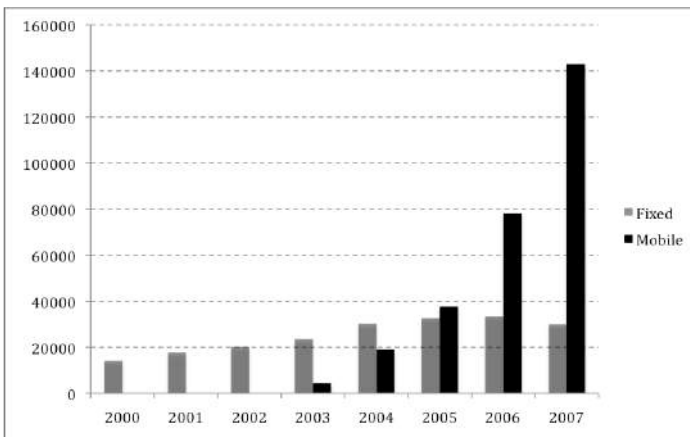
This has, however, changed – more hours are now broadcast, at around ten per day, and satellite used to deliver services to 44 towns across Bhutan (People's Project Research, 2007: 96). It is worth noting that the financial assistance that India has provided to enable this satellite coverage ends in 2009, with the cost of \$120,000 per annum then becoming the responsibility of BBS.

Since its introduction in 1999, cable-TV has grown so that more than 40 operators can now be found in Bhutan.¹¹ They provide customers with the mandatory BBS channel along with up to 35 foreign channels (People's Project Research, 2007: 97). The impact of the content delivered by cable-TV on Bhutanese culture has been debated,¹² with some arguing that the impact has been detrimental and others that the limited number of subscribers served by cable-TV operators minimises any impact that it might have. It seems reasonable to assume that the introduction and dissemination of foreign culture through cable-TV has affected Bhutanese culture, and as a consequence that one of the tenets of GNH has been challenged in the process. The difficulty, however, is determining the extent to which Bhutanese culture has been affected. The small number of subscribers ensured that the direct impact of the foreign content delivered through cable-TV is likely to be minimal, but the subsequent debate brought the availability of foreign content to a wider audience. The debate would highlight the differences in content between BBS and foreign programmes, with the latter arguably being more salacious and less educational than the former. Moreover, the debate elicited a policy response within Bhutan that changed the range of content that cable-TV operators could deliver and questioned the role of BBS as a public service broadcaster (People's Research Project, 2007).

The telecommunications market can be divided into three sub-markets: fixed, mobile and Internet access. The longest established of these three sub-markets is fixed, with Bhutan Telecom Ltd (BTL) being the sole licensed provider of fixed voice telephony with 30,000 subscribers at the end of 2007 (Royal Government of Bhutan, 2008b). The trunk network of BTL can be viewed as being in transition, from

a series of unconnected point-to-point transmission lines to one where connections between these lines occurs on the one hand and increased (national) coverage is achieved on the other. In conjunction with Bhutan Power Corporation, BTL has installed optical ground wire (OGPW) in the west of Bhutan and an east-west route is under development as well (Royal Government of Bhutan, 2008b: 3).¹³

Figure 2: Comparative growth rates of mobile and fixed telephony



Note: only B-Mobile subscribers are included in the mobile total for 2007.

Source: Ministry of Information & Communications (2007: 5); Royal Government of Bhutan, 2008b) *Global Mobile*, 2008)

There are substantially more mobile than fixed subscribers in Bhutan. In contrast to the 30,000 fixed subscribers at the end of 2007, there are 143,000 mobile subscribers (Royal Government of Bhutan, 2008b: 6). B-Mobile has more than 50 base stations across Bhutan, and is present to a lesser or greater extent in all Dzongkhags. A second GSM operator was licensed in 2007, and had 70,000 by the second half of 2008 (Global Mobile, 2008).¹⁴ Included within its license conditions was the requirement to cover all Dzongkhags within five years, and all Gewog headquarters within the following five years after that (Royal Government of Bhutan, 2008b: 7).

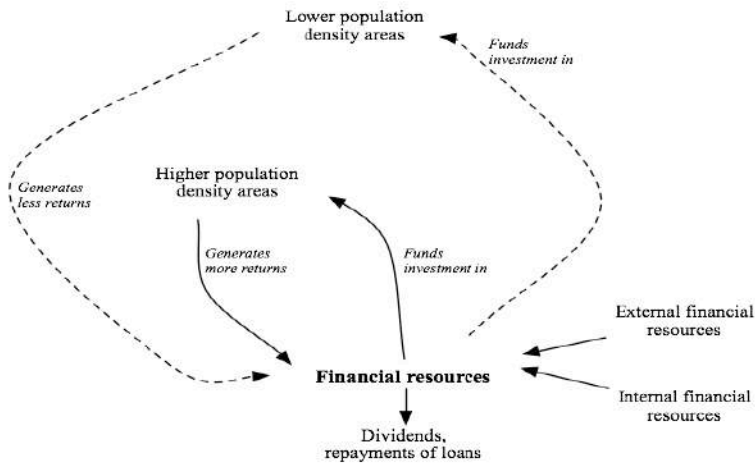
Given the relative economics of fixed and mobile telecommunication networks, it is no surprise that there are more mobile than fixed subscribers. What may be surprising, however, is the rapid growth of mobile and the recent decline in the number of fixed subscribers shown in Figure 2.

Given the relative growth rates of mobile and fixed voice telephony, as well as their economic characteristics, it is arguably the case that GNH is best served through the expansion of mobile coverage. The notion of inclusiveness runs throughout GNH, which when 'translated' into the ICT sector becomes the minimisation of the 'digital divides' that inevitably occur as technologies diffuse in a society and economy. Drawing on internal and external resources, the expansion of the mobile network would generate revenues that in turn fund the further expansion of network coverage. At the same time, the generated revenues would fund the payment of dividends and the repayment of loans. Due to differences in population densities, rates of return will differ between urban and more sparsely populated areas being higher in the former than the latter. This set of relationships is shown diagrammatically below. This would also be true for fixed telecommunications as well, though the rate of expansion would be less in comparison.

The above set of relationships is, however, idealised in that two related factors are not taken into account. No account is made of the effects of competition on the ability to generate sufficient revenues, nor on the 'substitution' that may occur between fixed and mobile telecommunications services. The rapid rise in the number of mobile subscribers compared to the largely stagnant number of fixed subscribers suggests that something more substantial than 'substitution' is occurring, fuelled by both availability and greater affordability. Substitution in itself is not a problem as it simply means that mobile rather than fixed is the means through which telecommunication services are delivered.

Figure 3: Inter-relationship between higher and lower population density areas

Do ICT Further or Hinder Gross National Happiness?



Source: adapted from Kezang & Whalley (2007: 79)

Problems do emerge, however, when competition is introduced into the market. Moves to liberalise the telecommunications market began in 2005, and are most evident in the mobile market with the awarding of a second mobile licence in 2006 and the number of subscribers that it has been able to attract is such a short period of time. Competition reduces margins and thus the surplus within the system that can be used to expand geographical coverage, develop new services and so forth. As the more densely populated areas are also the more attractive markets, those parts of Bhutan that will not receive investment are characterised by lower population densities. In other words, as the feedback loops in Figure 3 are undermined, mobile network expansion slows. The widening gap that results between those with and those without access to telecommunication services that results, directly contradicts GNH.

One benefit of competition, however, is a decline in the prices charged for telecommunication services. As prices decline, demand should increase with the consequence that revenue levels are maintained or even increased. Whilst this will provide operators with the necessary resources to expand their coverage, it will also

require them to invest in enhancing the capacity that is available within their existing footprint. According to People's Research Project, (2007: 6) B-Mobile had 143,000 subscribers at the end of 2007 but capacity for only another 7,000. In other words, if the company wishes to continue to add subscribers at anything approaching the rate it has been doing so in the past, it will need to invest in additional capacity. This will divert some of the revenue generated from lowering prices away from network expansion into, for want of a better term, network deepening.

The imposition of coverage obligations on operators is one way to minimise this gap, but those placed on TICL, the second operator, is only a partial answer due to the relatively small footprint that these obligations impose on it. Establishing a universal service fund has been discussed in Bhutan¹⁵ and would provide a way to fund investment in those parts of the country that are less attractive economically. In doing so, the digital divides evident within Bhutan would be reduced. Such a reduction would be in keeping with GNH.¹⁶ This reduction, however, will only ever be partial. Differences will remain, reflecting both the economics of ICT investment as well as the development of new services. Whilst it is likely that most new services will be developed and launched in urban areas, this does not mean that such innovation will happen solely in urban areas. Services will be developed that reflect the circumstances and demand of rural areas. As a consequence, new digital divides may emerge where rural areas are better served than urban areas.

Finally, it is worth commenting on the role that could be played by IT parks. It is self-evident that establishing an IT park is a costly affair, requiring investments to be made in both ICT but also physical infrastructure such as buildings. Given the amount of investment that they consume, it is reasonable to expect that only a handful of IT parks are feasible within Bhutan. It is also reasonable to expect that as a consequence, some parts of Bhutan will be closer to an IT park than others. In other words, the inequities that GNH is endeavouring to overcome will be exacerbated.

However, this does not take into account the opportunity for revenue growth that IT parks bring about. Through accessing the facilities provided by the IT park, Bhutanese companies could move up the value chain into more lucrative parts of, say, the outsourcing market. Alternatively, they could enter completely new markets that were previously excluded to Bhutanese companies due to a lack of facilities or human capital. As the IT parks develop and their occupants are successful, it is also likely that external economic growth will be generated. Both the occupants of the IT parks as well as those new companies that have been established as a consequence will generate taxable economic activity. That is, they will generate resources capable of funding further investment in the IT park itself or elsewhere in Bhutan.

Conclusion

There are innumerable benefits associated with ICT. They facilitate access to information, which allows informed decision making to occur, as well as services such as tele-medicine and tele-education. Markets are no longer isolated but instead part of a national, if not global, economy. Not everyone, however, has access to ICT. Moreover, even where ICT are available access may be too expensive or the quality unsatisfactory. The unequal access to ICT that results is a direct challenge to GNH.

To counter this challenge a series of initiatives have been undertaken to expand the geographical scope of ICT in Bhutan. Significant successes have been achieved, with perhaps the most dramatic being the rapid growth in mobile telecommunications subscribers. Through the licensing of mobile telecommunications, more people are able to communicate with one another than was previously the case. Having said this, the limited resources that are available within Bhutan restrict the extent to which initiatives can be undertaken to overcome the unequal access to ICT that clearly occurs across the country. Improving access to ICT in the coming years will be complicated by the decision to liberalise many ICT markets, not least because companies will, more often than not, prefer to concentrate their efforts on the more lucrative (urban)

markets. Conversely, liberalisation should result in innovation, price reduction and improved quality of service.

Acknowledgement

This paper builds on Kezang and Whalley (2004 & 2007). The former of these papers provides an overview of the Bhutanese telecommunications market, whilst the latter concentrated on the digital divide that exists within Bhutan and how this may be overcome. The second paper was funded by a travel grant from the Nuffield Foundation Small Grant scheme.

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Endnotes

¹ For a detailed history of Bhutan see, for example, Schickgruber & Pommaret (1997).

² The official population estimate is based on the Bhutan Population and Housing Census conducted during May 30-31, 2005. However, others have suggested a much higher population figure is appropriate –

both the The CIA Factbook and the UNDP suggest a population of more than 2 million people.

³ It is worth noting that Faris (2006), among others, have noted that in some official documents, five dimensions are mentioned, namely: economic development, human development, environment, culture & heritage and good governance. As socio-economic development encompasses both economic and human development, the practical differences between the two lists of GNH components is minimal.

⁴ Formerly Bhutan Telecommunications Authority (BTA).

⁵ The Tenth Five Year Plan (GNH Commission, 2008: 74-78) draws attention to the increase in unemployment that Bhutan has experienced in recent years, from 1.4% in 1999 to 3.7% in 2007. Two areas of concern are explicitly identified, namely, youth and urban female unemployment.

⁶ It is worth noting, however, that the government has announced its intention to scale back its presence in the economy.

⁷ Interestingly the number of graduate level vacancies in the government sector is more than other sectors (corporate, private, and international) for each of the following three years, 2002-2003, 2003-2004 and 2004-2005 (People's Research Project, 2007: 26).

⁸ The number of graduates increased from just below 300 in 2001 to almost 800 in 2006 (People's Research Project, 2007: 27). In 2004 the number of ICT-related graduates numbered approximately 45 in 2001, growing to 53 in 2006 (People's Research Project, 2007: 27).

⁹ Through a series of transmitters, Bhutan Broadcasting Service provides radio services across Bhutan including 75% of the national highway (People's Research Project, 2007: 96).

¹⁰ The two main barriers to radio adoption are the cost of the radio and its power source. The radio may be powered through batteries, which require 'frequent' replacement, or through the household electricity supply that has, of course, its own costs associated with it.

¹¹ There are 44 cable-TV operators in Bhutan, with 36 of these registered with the Association of Private Cable Operators (People's Research Project, 2007: 97).

¹² See, for instance, Scott-Clark & Levy (2003) or The Economist (2004).

¹³ Interestingly, nine OPGW routes have been proposed over the years by a range of interested parties that have not resulted in their actual development (Royal Government of Bhutan, 2008b: 5).

¹⁴ A comparable figure for B-Mobile was 189400 GSM subscribers and 120 WCDMA subscribers (Global Mobile, 2008).

¹⁵ See, for instance, People's Research Project (2007: 54-61) for one such discussion.

¹⁶ This, of course, does not address who should contribute to the universal service fund. One method would be to place the burden disproportionately on the incumbent operator, recognising the fact that they are likely to benefit the most from any increase in coverage, and thus use, that results. Alternatively a flat percentage contribution could be levied on all operators, regardless of their size.

Lessons from ICT Pilot Projects in Rural Haïti for Sustainable Economy with Four Inferred Coefficients for the GNH Index

Serge Miranda, Frantz Verella and Tahar Saiah

PASCAL (French philosopher): on "HAPPINESS"

Happiness is a marvellous thing: the more you give, the more you are left with

French - « Le bonheur est une chose merveilleuse: plus tu en donnes plus il t'en reste »

Creole (Haïti) - Ala yon bèl bagay se kontantman, plis ou bay ladan'l plis ou rete ladan'l!

Russian: □□□□□□ - □□□□□□□□ □□□□: □□□ □□□□□□ □□ □□□ □□□□□□, □□□ □□□□□□ □□□□ □□□□□□□□»

Arabic : السعادة شيء رائع كلما أعطيتها كلما بقيت لك

Spanish - la felicidad es un artículo maravilloso: cuanto más se da, más le queda a uno

Occitan - la felicitat es una chausa meravelhosa: mai ne'n donas, mai te'n rèsta

Your Highness ...determined to send me, Christopher Columbus, to the country of India ... and furthermore directed that I should not proceed by land to the East as is customary, but by a Westerly route, in which direction we have hitherto no certain evidence that anyone has gone.

Christopher COLUMBUS (Entry from his journal on his voyage of 1492).

Introduction

We are living in a world where, in less than 20 years, some drastic changes have occurred around four key factors:

- The end of both Soviet and American super powers with the raise of invisible walls among communities with four key dates: 9/11 (1989) with the end of the Soviet empire, 9/11 (2001) with the rise of invisible walls, 9/19 (2008) with the financial American collapse and 11/4 (2008) with the rise of invisible bridges and the melting pot richness;
- The rise of ICT (*Information Communication and Technology*) around a mobile Internet world platform for free ubiquitous access to information and WEB 2.0 leading to a globalization 2.0 digital future;
- The watershed of Information in some areas of the world;
- The people consciousness of our finite world in terms of traditional energetic resources and of danger of climate change due to ozone layer pollution bringing concern about a future with existing past models vanishing with the fall of the 2 superpowers.

Based upon a 10 years experience in creating solid ICT foundations in Haiti with some pragmatic deployments in poor rural areas, we inferred four key coefficients to be developed in joint multi-disciplinary researches around the GNH index at the Bhutanese and European level. We propose to enrich the GNH index and other European contributions like the one proposed in the Paradiso project (Torrenti, 2008) with the influence of our ICT and Mediterranean rim experience (Caribbean might be considered as the Mediterranean of America).

This paper is organized as follows:

A short summary of the recent paradigm ICT shifts in the last five years which represent a real opportunity for developing countries;

An overview of concrete bottom up approach of ICT in rural areas of Haiti for sustainable economy conducted within a long term-strategy leading to the crucial role of mobile-learning platforms;

A proposal of four inferred coefficients to be developed as a ICT Mediterranean contribution to the GNH or Paradiso Index.

1. A strategic ICT vision in a digital future of Globalization 2.0

1.1. Inform@tion: The new energetic resource of this millennium

We have been living since 1993 (1st commercial WEB site and Cell phone launching in Europe), two successful ICT revolutions of world magnitude: Internet and wireless telecommunications (cell phones) which represent the tip of the iceberg of convergence between computer science, telecommunications and multimedia.

“Information” is the raw resource of this millennium with positive properties (*enriched when shared like happiness as said by Pascal*) making tomorrow managers specialists of abundance and not of scarcity (like oil or cash/finance). Mobile Internet will enable information access ubiquity. We will call it **“mobiquity”**.

We proposed a new formula for information in the ICT future: “**E=MC3**” (Miranda, 2008) to emphasize the fact that:

- Information is becoming a key Energetic resource with
- **Multimedia** nature (text, picture, video, sound ... are digital),
- **C3** to sum up this convergence era between Communications, Computing and Consumer Electronics.

The cell phone of the future will be a real computer with Internet going mobile, a camera, a TV set, a payment tool, a key, a remote controller and occasionally a ... telephone (80% of the traffic on a cell phone in Japan by 2010 will be data other than voice cf NTT Docomo Study). The cell phone will host **a portfolio** of personal customized information **mobile services**: the **M-services**.

The mobile digital Web advent alters how we interact not only with computers but with one another. We are inhabiting a world where distance and time no longer matter and where communication becomes virtually instantaneous with potentially a mobile ubiquitous access to information (Friedman, 2005). After “tools” of the agricultural revolution, “machines” of the industry revolution, the world now gets computer “SERVERS” to open a new era of information virtual revolution. New paradigms to integrate a positive and optimistic attitude for our digital future are needed.

1.2 “We will BIP and TAG the future”

We can sum up the salient features of this digital ICT era (Miranda, 2008):

- *Broadband Internet in the pocket* (“BIP”) with the arrival of WIMAX (rev”E” on cell phones) (U5) and other wireless technologies beyond 3G (meshed wifi networks, etc..)
- “tagged” objects with RFID tags (*Radio Frequency Identification*) replacing bar codes and opening the road to tracking objects for developing coffee fair trade in Haïti for instance (see U6); 1000 billion of objects will be tagged by 2020 with each one capable of having an Internet address (with the new IPv6 addressing Internet system enabling each atom of getting and address!). Objects will communicate more than human beings with new expected added-value information services for health and education. A cell phone embedding an NFC (*Near Field Communication*) chip (Miranda, 2008) or (U4) will be able to read these tags and access information concerning the history of associated objects. More than 500 millions of NFC phones will exist in the world by 2011 (U4).

One of the most promising technologies lies with the WEB 2.0 enabling the creation of positive communities (see Wikipedia) to help each other; just let us give our project of “WIKIdeas/WIKImagine” or “Face School” project (Diamond, 2005) to enable teachers of this planet to share experimental positive

practices in developing countries (cleansing, water preservation, health, energy with solar ovens, agricultural experiments, ..). Wikipedia (U3) enables schools with no books to get a free encyclopaedia if they have an Internet access.

1.3 The crucial m-service-centrics ICT view of our digital future

The future belongs to M-services in the areas of health, education, m-government, ecotourism culture and finances (micro-credit, international fund transfer ...) with real opportunities in developing countries and mainly in Haïti as we experienced it.

Wireless information services of the future will be *location-based* and *touch-based* with new contents provided in the 4th screen of human history. Added value services could be pointed out like:

- m-learning (not only for teachers or peasants but also to fight illiteracy with new tools ; see for instance the AL ANDALUS project in Morocco, Haïti and Madagascar with NFC multi-touch virtual smart posters (Fadoua Hajji, 2008, U9) or in IRAN (Fotouhi-Ghazvini, 2008) both for illiterate isolated populations in rural areas ;
- m-alerts in case of flooding or hurricanes; see for example the SIMBI project for Haïti (U8) or the Early Warning System in the Dominican republic (U10).

Due to the widespread dissemination of cell phones in developing and emerging BRIC (Brazil, Russia, India and China) countries with touch-based capabilities opening their use by illiterate, we are aiming at M services - centrics future.

1.4 New world paradigm shifts in the digital future: from 11/9 to 9/11 and 9/19

We have to think, do, live, be the unpredictable. There are four key dates with creative and destructive foundations marking the death of predictability:

- 11/9 (1989): dismantling the Berlin wall posting the end of Russian/Soviet super power ;
- 9/11 (2001): destruction of the World Trade Centre and construction of virtual walls raised among communities
- 9/19 (2008): end of American superpower with the financial world collapse and the beginning of a new era for sustainability.
- 11/4 (2008) with the election of B. Obama, gives a threefold lesson: symbol for melting-pot culture, revival of positive American dream and building of invisible bridges. It marks also the success of ICT Web 2.0 with the great contribution of 3.5 millions of micro campaigners.

2. A long-term ICT vision for economic development of Haiti with the Casa Karibe Nova project

New wireless information technologies with broadband internet and communicating tagged objects thus represent a real chance to boost the reconstruction of the infrastructure of Haiti in every aspect, physical and virtual.

There is an historical opportunity to pair the physical infrastructure reconstruction (electricity, roads, water, sea routes...) with a twin ICT infrastructure with short-term and long term benefits for the whole economy.

The CASA CARIBE NOVA (CCN) project, the *"House of the Information future in the whole Caribbean region"* is based upon strong foundations built during the last 10 years in Haïti and strong partnership with the IT industry. CCN emphasizes the 3 balanced dimensions of success in tackling new technologies: (added-value information) SERVICES, INFRASTRUCTURE and CONTENT. Such an economic development should reverse the population flow from the overcrowded capital (Port au Prince) to self sufficient and developing rural areas with broadband Internet in the future attracting also doctors and teachers while creating new jobs (call centres, data centres, ..).

Due to the fruitful long-term partnership with a graduate master degree of the University of Nice (France) which has been settled in Port au Prince, the State University of Haiti gets the know-how to master these new ICT technologies at every level in a dynamic manner.

We thus identified three steps.

2.1 Step1 (1998-2008)

A long term investment foundation in Haiti around wireless information technologies with ICT university partnership around MBDS degree.

Implementation of the French MBDS (www.mbds-fr.org, www.youtube.com/mbdsimagine) graduate master degree in Haïti represents the proactive long-term kernel of CCN project. It took 10 years to successfully delocalize MBDS. This MBDS graduate degree is unique in Europe by its relationship with industry which enables to prototype wireless information services of the future under industry contracts

Thus, there exists a real Haitian know-how to master new ICT technologies in Haiti due to such partnership.

Very advanced projects like wireless micro-banking, municipality and hospital management, GIS, etc. were conducted by MBDS Haiti during this period. Solutions Haïti was the local software house partner to deploy the coffee fair trade tracking system in rural Haiti inaugurated in March 2008: a pilot WIMAX and NFC project was prototyped and deployed in CAP ROUGE close to Jacmel city, an isolated rural Haiti without water and electricity with more than 2000 school boys and girls.

2.2 Step2 (2008-2012)

A portfolio of real life m-services pilot projects in rural Haiti before deployment all over the country.

The Haitian telecommunication regulator (Conatel) decided to financially support the MBDS degree and Solutions Haïti to respectively prototype and deploy a portfolio of wireless information services in rural Haïti in 2008-2009 after the successful inauguration of Cap Rouge tele centre. Let us summarize 2 major achievements: coffee tracking with NFC and Wimax and literacy campaign using ICT.

2.2.1 Coffee tracking for fair trade in Haiti with NFC tags and Wimax

The first application deployed in Cap Rouge tele centre in March 2008 by the Imagine Institute of the university of Nice (France) concerns coffee tracking for fair trade from the local Haitian rural cooperative up to the Malongo factory in Nice (France). We deployed a WIMAX infrastructure (donated by Alcatel Lucent and VOILA an Haitian mobile operator) in Cap Rouge, a secluded rural coffee area, enabling to have high bandwidth Internet in a 20 miles circle around the telecommunication antenna. We used NFC/RFID technology to tag the coffee bags as soon as they leave the peasant cooperative.

This tracking enables first the peasants to be paid as soon as coffee bags are leaving the cooperative. Then Malongo Company can size the appropriate containers in Port of Prince and track the whole local coffee processing in dry and humid collectors. Finally, European customers thru 2D visual tags ("*flashcode*" derived from data matrix standard) could get multimedia information validating the Haitian origin of the coffee by just taking a picture of the *flashcode* using the camera of their cell phone (free Java applet).

The "BIP" WIMAX facility is used also by two local schools of the area equipped by PC and solar energy (by Solutions Haïti) and a doctor facility.

The tele centre is used to educate teachers and peasants to help them improving their agricultural know how. This running project is visible on a Switzerland TV broadcast at (U6).

2.2.2 Mobile Internet services 2.0 and education for illiterates in Haiti, Morocco and Madagascar

In summer 2008, at MBDS in Morocco, we developed an NFC multi-touch virtual education poster to learn how to read and write in French for illiterates having a cell phone (becoming a *tutor in their pocket*) using short video-clips from celebrities acting as teachers. By touching the virtual posters users can get (on the screen or their phones) the video clips explaining the letters and the words, exercises and personal practice. See (Fadoua Hajji, 2008, U9) for a video.

We proposed a generic literacy project (OMEGA 2.0) at OIF in September 2008 for enabling a complete deployment of AL ANDALUS with two extra features of the project to fight illiteracy:

- Synchronous and asynchronous Open Source platform for remote education in rural areas with WIMAX (both for teachers and peasants);
- A mobile WEB 2.0 site for teachers, (WIKIdeas or “Face Schools”) recording and sharing good practices in developing countries in a bottom up approach (health, education, water preservation ...).

2.2.3 Haiti ICT Lessons

Following the successful WIMAX pilot project in rural Haiti launched in March 2008, decisions were taken by the Minister of Telecommunications of Haïti to provide broadband Internet in the whole country. Haïti decided to create the BIP telecommunication infrastructure with free Internet connexion to schools and public places.

Second lesson, education should represent the kernel domain of major investment to give 50% of the population a future without loosing any generation and avoiding collapse of the country (see (Diamond, 2005) for an historical perspective of Haïti danger to collapse).

The INFORMATION economy requires skills. There is no shortage of work or opportunity in the digital world, just a shortage of skills and ideas. Haiti is rich of intellectual culture and artist creativity with a syncretism religion (voodoo). What is needed is thinking skills, service skills which will fuel the future jobs. No economy can grow a 5% p.a. with a 60% illiteracy rate. Basic literacy plus entrepreneurial skills can create economic sparks! Illiteracy issues could be overcome by video and audio streams as we demonstrated it with virtual NFC multi-touch posters in the AL Andalus project (U9).

ICT Education will concern teachers, peasants and illiterates. Most of the schools do not have books. More than 50% of the population owns a cell phone. Providing M-learning and mobile Internet services is long-term economic development prerequisite. Concerning energy renewable energy will be a primary focus with solar and wind (!) potential. Extending a famous Lenin's sentence concerning Russia in 1924, we might say that **the future of Haiti** will be "SCHOOLS + Electricity +MOBIQUITY (Mobile internet)".

Final ICT lesson stems from the present situation of Haïti and the identified potential of ICT with a large portfolio of M-Services: M-alerts (*800 deaths in September this year after 4 hurricanes*) cf SIMBI project prototyped in 2008 (U8), M-government, M-ecotourism, M-health, M-learning, M- culture (*virtual Caribbean museum with Cuba*), M-payment, M-fund transfer...

As a side effect, broadband Internet paired with education should enable to develop new economic platforms like call centres and data centres anywhere in the country to support the Diasporas activity in the USA and Canada. Finally the country islands and beaches are "raw diamonds" which should be preserved from mass building and mass tourism. There exists a real potential to attract tourists from neighbouring islands (Dominican Republic, Cuba, Jamaica) to make them discover (using their cell phones as teasing tools) **Caribbean authenticity**. Ecotourism has a great potential in this preserved island and should be addressed in a strategic people development framework.

2.3 Step 3 (2012-2020)

A “moon project”: A science park in South East Haiti around CASA KARIBE NOVA before 2020.

A Haitian science park around CASA CARIBE NOVA could exist within 10 years. In less than 10 years Haiti should become an ICT country leading the way in the whole Caribbean. ICT could be the pivotal kernel of a balanced global economic development of the country.

3. GNH with two 2 key contributing areas: The Mediterranean (and Caribbean) rims and 4 technical, economic and philosophical proposed coefficients to be studied

We were totally seduced by the appeal of GNH human-centrics index and metaphor putting aside the unique “money” resource to evaluate the well-being of a country; moreover in a world where recent world financial crisis demonstrated it: finance cannot be the neutral reference of progress, happiness or stability.

After looking at poverty and happiness in the digital world, we propose 4 coefficients of prime importance coming from our ICT experience in Haïti. We then propose some vision of a potential Mediterranean rim contribution to the GNH index.

3.1 “Poverty” and Happiness

Paul Collier points out, poverty is actually developing quite rapidly for about eighty percent of the world. The real crisis lies in a group of about 50 failing states, the bottom billion, whose problems defy traditional approaches to alleviating poverty (Collier, 2008).

The “capability factor” proposed by Amartya Sen (Sen, 1981) should apply to information *mobiquity*:

“Poverty is a denial of access to information” said F. Verela in his visionary speech in Haiti during the inauguration of the Casa Karibe

Nova project in March 2008; therefore we propose the CUC coefficient. Poverty deals also with economic development and job creation; the CBC coefficient is attached to it. Then ecological concern should exist in a paradigm shift where *prosumers* should buy and waste in a different way: this is proposed thru the CRC coefficient. Finally poverty leads to renunciation and hopeless future; thus we need an intangible coefficient which leads to positive action and it is the CDC youth factor.

3.2 Contribution with Quantitative and qualitative coefficients for a GNH Index: CIC, CBC and CDC

We plan to conduct research on four complementary coefficients which stem from our ICT experience in Haiti: CUC, CBC, CRC and CDC

CUC: Coefficient of information (access) Ubiquity Communication

Information watershed is the symbol of speed and acceleration; ten paradigm shifts are attached to the digital era inflexion point (Gates, 2000). Future focus is on intelligence which does not need expensive physical industrial infrastructure. Meshed Wimax and Wifi networks could provide low cost communication in developing countries with free Internet access to information in school and public places. We are entering the age of the individuals and communities (2.0). Education information system is the primary target in developing and emerging countries: an extra year of complementary education makes 1.3% per capita increase. Internet is both a new continent to be explored in a balanced manner, and a globalization platform for health and education and any service development. Universities represent the first companies of the digital economy.

To “BIP” the digital economy, we need a mobile ubiquitous access to information: any where any time any how; this means the capability of delivering information and education in the cell phone: “*Mobiquity*” is the future. Developing world joins digital ecosystem

via mobile phones. Mobiquity could be summarized in a very simple...*question: "TO BE connected or NOT TO BE"?*

CUC coefficient represents this capability. The portfolio and spectrum of M-services available on the cell phone then represents a great potential of people inclusion in our globalization 2.0 digital world. M-learning service will play a centre role to fight illiteracy. .

CBC: Coefficient of Business Creation

We cannot discard real economic indicator in any index evaluating "happiness" in a country. First of all people facing poverty need to survive in front of hunger as 2008 riots in poor countries sadly demonstrated it when food became a matter of financial speculation. We could prevent them by ruling out food speculation at the world level and avoiding some agricultural transformation for short term benefits (for instance agricultural oil) or meat production to meet some new standards of living in BRIC Countries.

Countries grow out of poverty when they create an economic environment that eases people and poor people to start business, create jobs, raise (micro) capital while they do not have necessarily a bank account nor being bankable. In this respect, M-microcredit services could be helpful in a future where "*bank will be in the pocket*" (the cell phone itself).

The real issue is not just employment per se, but increasingly *PRODUCTIVE EMPLOYMENT* that enables living standards to rise.

We then need to point out the CBC coefficient with CBC time and CBC Cost: Using World Bank International Finance Study (IFC) ("*Doing Business in 2004*"), it takes 2 days to start a business in Australia but 203 days to start one in Haiti; no monetary cost to start a new business in Denmark, 5 times income per capita in Cambodia and 13 times in Sierra Leone or Thailand! If we examine Credit History, then every adult in Norway, USA, New Zealand got a credit while only 1 percent of adults in Africa and Serbia.

In this respect, non-existing land property titles represent a crucial issue in Haïti and other poor countries which could be solved with a WEB 2.0 approach (like in a couple of African countries showed it): A location-based map centrics M-service could be easily prototyped and deployed.

CRC: Coefficient of “R’s” Concern: *from the 3 “R’s” to the 5”R’s”*

The Three R’s (*Reduce, Reuse Recycle*)” of “*reducing*” waste (and consumption), “*reusing*” and “*recycling*” resources, waste and products is often called the “3Rs. This 3 R’s initiative deals with people ecology concern and more precisely trash or garbage processing through a coordinated mix of practices that includes source reduction, recycling (including composting, bio gas, energy production), and disposal. See WIKIPEDIA for the “waste hierarchy”.

We could enrich the 3R’s by two others “R’s”:

- the 4th R is “**RE-THINK**” ; we have to rethink the whole consumerism model both in developed and developing countries, to rethink the waste model;
- the 5th one R we propose is “**RE-BUILD**”; in Haïti or other developing countries; digital economy to build could play a central role to REBUILD the entire economy of the country on long term values with an education and knowledge centrics approach.

CRC coefficient deals with this 4 or 5 “R’s”; it represents the consciousness of the limited raw resources capabilities, the world pollution and climate change and needed concern of our planet preservation. ICT like RFID tracking could help along with providing information on C02 consumption..

“We don’t inherit the planet from our parents but borrow it from our children” said L. Senghor a great African poet.

CDC: Coefficient of Dream Collection

Finally, cultural intangible factors are of prime importance (12). Having strong culture and openness enable “to adopt and adapt” from others.

With this CDC coefficient, we would like to stress one important intangible factor among others (strategic vision of political leaders, etc...): the DREAM factor! Society with more DREAMS than MEMORIES, have a future, the same way a teenager has one compared to an old person. Forty years ago, a dreamful visionary speech (*“I have a dream”*) by Martin Luther King, opens the road to a major evolution of the American society enabling a black American to become president of the USA 40 years later!

“If you can dream it you can do it”, “The American dream” founding American attractiveness are representatives of this intangible factor. Dream is the mark of life, long term life, longevity. Lack of dreams is a mark of short-term collapse. This is true in personal or collective relationship and a cornerstone of happiness.

Let us correlate in the following figure the 4 ICT indicators with the 4 pillars of GNH:

Note: CUC and CDC are everywhere due to the interrelation between HAPPINESS and INFORMATION and DREAM

GNH Pillars →	Environment Protection	Good Governance	Equitable Socio-economic development	Cultural Promotion
Coefficient ↓				
CUC	Yes (Wikideas)	Yes (m-govt)	Yes (m-tracking for fair trade...)	Yes (m-learning, literacy...)

CBC				Yes
CRC	Yes	Yes		Yes
CDC	Yes	Yes	Yes	Yes

3.3 Islam, Judaism, Christianity and Voodoo vision of “Happiness” and TIME value between Buddhism and Judeo Christianity

The TIME value is linear in the Judeo Christian world while it is cyclical in the Buddhist world, thus leading to different expectations from the future. This is an example of strong differences of value among world cultures. We plan to investigate how the Mediterranean roots could enrich the GHN Index.

Conclusion

Bhutan is a well-known example of a country where a strong political impetus does exist to develop a “*Beyond GDP society*” which is the motto of the Paradiso European project using ICT as a leverage tool.

We proposed 4 key ICT coefficients to contribute both to the GNH index and the Paradiso European project. GNH is rooted in the Buddhist notion that the ultimate purpose of life is inner happiness. Bhutan being a Buddhist country, Bhutan’s King felt the responsibility to define development in terms of happiness of its people, rather than in terms of an abstract economic measurement such as GNP.

“Information” has the same property of love and happiness as said Pascal: it cannot be measured and his value comes from SHARING; there is information abundance in the future. We are entering a digital future where information is the raw resource with new promising wireless ICT platforms bringing positive values and invisible bridges. That is why we are definitively optimistic about the future per se which is part of any moral or political framework.

As said in the Paradiso report

ICT in general and “the Future Internet” in particular, can be instrumental in moving forward new societies in which social, economic and environment issues will be addressed with a stronger determination than today in order to avoid major risks of breakdowns of our societal models, and thus ensure a true sustainable future” (Torrenti, 2008)

In the era of globalization 2.0, development is a voluntary process with a top down approach for predictive technology and a bottom up approach for unpredictable m-services (and culture). Creativity for m-services is unlimited.

In a world which needs new foundations and a sound referential positive vision of the future, both GNH and Paradiso represent a global stimulating challenge; it would be a passionate goal for us to proactively contribute to GNH and bring our ICT, European and Mediterranean (including Karibe) culture and experience. The 3 ICT indicators we are proposing represent the 3 strategic dimensions of ... he «VIRTUAL DZHONG 2.0 » of the digital future for the « e-generation».

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U9-Video presentation of AL ANDALUS project. www.youtube.com/watch?v=uGeAo6BsK1o

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(U8) Video presentations of SIMBI project for Flooding S/Hurricane MS alerts in Haïti along with location-based mapping (in French)

<http://www.youtube.com/watch?v=C-iYrEQQyAk> for water captor mapping and alert generation (in French)

(U9)Video presentation of AL ANDALUS project (in French)
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Health

Bhutanese Health Care Reform: A Paradigm Shift in Health Care to Increase Gross National Happiness

Dr. Chencho Dorji

Abstract

Health care services in Bhutan have improved significantly in recent decades. Yet enormous challenges remain because of the lack of resources and increase in lifestyle- and stress-related disorders. Buddhist practices, including mindfulness meditation, will have an important role to play in mitigating the effects of modernization and material desires. The hitherto doctor-centered “medical model” of treatment will need to give way to a holistic, patient-centered bio-psychosocial approach to health care management. In addition, the private sector will need to play a major role to sustain quality health care service in the country.

Introduction

In less than 50 years – a very brief time for national development – Bhutan has achieved astonishing progress. This has been particularly the case in upgrading health care services under the enlightened leadership and guidance of our benevolent Kings, especially His Majesty Jigme Singye Wangchuck, the fourth Druk Gyalpo. Until the early 1960s, only traditional systems of medicine had been practiced in the country. Modern health care services began with a handful of Bhutanese being sent abroad for medical or nursing training, while infrastructure was limited even after their return to only a few small hospitals and dispensaries. Gradually, however, both numbers of trained health workers and infrastructure grew: Today the country has 157 medical doctors, 38 traditional doctors, 559 nurses and 2,451 other types of health workers. A well-

established network of 178 primary health care centres and 30 hospitals serves patients. Most public health programmes, including a national community-based mental health care programme, are integrated and delivered through this network.

The Bhutanese health care system encompasses three unique characteristics:

1. All aspects of health care, including tertiary medical treatment of Bhutanese citizens in other countries, are delivered free by the Government;
2. Both modern and traditional systems of health care are offered side by side in all district hospitals; and
3. Both prevention and control of diseases are integrated into the well-developed primary health network, including the national community-based mental health programme.

Moreover, a less tangible – but no less important – characteristic also influences both health care as well as health-seeking behaviour in Bhutan: Vajrayana Buddhism brought here in the 8th Century by the great Indian mystic Padmasambhava, whom Bhutanese believe to be the second Buddha. Buddhism has been instrumental in shaping Bhutanese culture and psychology, tempering the effects of the harsh realities of life in the rugged Himalayas. For generations of Bhutanese, most of whom toiled physically to meet their basic material needs in this environment, an abundance of spiritual practice, social cohesion and compassion offset the hardships.

Thus, Bhutan has transformed itself from a medieval community to a modern state while still conserving most of its rich traditions and Buddhist values. Indeed, Bhutan's health indicators have surpassed many developing countries that began their development far earlier. The nation's per-capita income of US\$ 2,160.02 (NSB, September 2008) is one of the highest in South Asia, while life expectancy is about 70 years. Maternal mortality has decreased from 380 per 100,000 child births in the 1980s to 260 in 2000 (NHS, 2000), and

infant deaths have drastically reduced from 120 per 1,000 live births in the 1980s to 40 per 1,000 in 2005 (PHCB, 2005).

Yet even while Bhutan has developed its modern health system in a relatively short time, numerous challenges remain, particularly with regard to mental health care; the most important of these are briefly analyzed in the section below.

Challenges to Providing Optimal Mental Health Care

Increased Prevalence of Disorders

As a rapidly developing country, Bhutan is already facing a double burden of disease prevalence: On the one hand, it still grapples with the prevalence of communicable and nutritional deficiencies because of poor sanitation and poverty, while on the other, it increasingly faces lifestyle disorders such as diabetes, hypertension, heart disease and psychological disorders, particularly including drug and alcohol abuse. These lifestyle disorders are only exacerbated by the country's growing affluence, as seen in its availability of cars and mechanical farming tools, as well as in its relatively rich and fatty diets and more sedentary lives. By 2020, according to World Health Organization predictions, cardiovascular diseases will rank as the top cause of disability-adjusted life-years globally, while depression will be second. Even in Bhutan, the number of cases involving mental illness or substance abuse, including alcohol, at the psychiatric clinic of the Jigme Dorji Wangchuck National Referral Hospital and health facilities nationwide has shown a manifold increase in recent years – and is expected to rise further as awareness of health matters increases among the people. Sustaining free health services and improving their quality in Bhutan will become more and more difficult as costs escalate and chronic diseases proliferate with increases in population and longer lives.

Awareness and Attitudes

Many Bhutanese, especially an older, largely illiterate generation continue to think as like their forebears. This has significant implications for healthy living habits and response to treatment, given that elders remain revered for their wisdom and play an important role in family decisions, including treatment of ill family members. Such elders are likely to attribute illnesses to a supernatural cause, such as an evil spirit or ghost, and to rely upon the performance of extended rituals before seeking help from a modern health provider. At the same time, however, this may deter individuals from taking responsibility for initiating treatment themselves; for example, alcoholics experiencing withdrawal symptoms such as hallucinations and/or delusions often attribute their symptoms to spirit possession rather than accepting their addiction to drinking as the root cause.

In general, because Western medicine is relatively new to our population – and is generally considered the last resort by a small section of the society – improved awareness is needed with regard to its benefits and effectiveness, by targetting this particular section. This can counterbalance the fear, skepticism and suspicion that some Bhutanese still harbour, or the false hopes arising from oversimplified beliefs in dramatic results: the expectations of a magic tablet or injection for any problem, no matter how large or small.

Ironically, some modern Bhutanese health workers – pressed for time or lacking skills to provide bio-psychosocial holistic medicine – reinforce this belief by complying with such demands and exhibiting a paternalistic attitude. This misguided approach represents a further challenge to providing effective comprehensive management to patients. At the same time, Western psychological concepts and treatment methods have come to the country only recently. Not only are they new to the general public, but also to the modern health providers. Again, this lack of health provider skills for a bio-psychosocial approach to modern psychological treatment,

combined with the public's lack of awareness, poses major challenges in a traditional society like Bhutan. Western psychology emphasizes the individual, rather than the family or community, as the focus of treatment. However, this means that the individual should have a basic understanding of the mind-body connection and a certain level of participation in the therapeutic process – a daunting concept for many Bhutanese. Reintegrating mind and body in the post-modern world (Astin, 1999) is critical, including in Bhutan, to recapture the belief that these are one, not separate.

The country's benevolent approach of providing free health care services to an entire population also gives rise to unwanted side effects, including fostering dependency and a devaluation of services by clients, while providers are at risk of developing burnout or complacency. Continuing social stigma with regard to mental disorders, and an absence of mental health and privacy laws, further exacerbates the situation. In all, this combination imposes tremendous challenges to providing effective management of mental disorders.

Social factors

Although the Government of Bhutan has consciously tried to balance development with conservation of the country's rich traditions and Buddhist values, it has not been entirely successful in preventing the issues that arise with development and globalization. For example, rural-urban migration has accelerated: Thimphu, the capital, has grown in barely two decades from about 20,000 people to 100,000 – about 1 in 7 of the population – and the trend continues. Traditional safety nets provided by extended families in a rural, cohesive community setting are fast diminishing in urban areas, with families becoming nuclear, living in small apartments and depending entirely upon market forces of supply and demand. Monetization of the economy and low incomes force both spouses in many families to work outside the home, leaving children in the care of nannies or maids. Because of work pressure, the distractions of television, and drinking and gambling habits to some extent,

many urban parents are finding less time for children, while grandparents prefer to stay in their native villages. Thus, numerous Bhutanese urban children are left unsupervised, frequently resulting in their turning to alarming habits such as alcohol or drug use. Moreover, many other complex urban social issues – violence against women, for example – are often treated only as medical cases because of a shortage of social protection services.

While Bhutanese have not yet succumbed to what the French sociologist Aniel Durkham called anomie – whereby young people in fast-transitioning societies become disillusioned and often commit suicide – the warning signs are there. Many young Bhutanese drug addicts have died in recent years from overdoses, a new phenomenon in our society that has left the older generation bewildered and the youth without help. At the same time, these youth are experiencing fierce competition for limited job opportunities, even as materialism begins to take root. Today's Bhutanese youth thus face increasing stress and resultant mental health problems; because of the lack of a traditional support base and traditional healers in urban settings, many are now seeking treatment from modern health care services.

Lack of resources

Bhutan confronts an acute shortage of well-trained health workers, especially in the specialist medical sector, including mental health professionals. Demand is outstripping supply in all sectors of health care because of expanding workload and increasing complexity of the profession. Nonetheless, despite the hazards of burnout, the biggest issue facing our health care workers, as noted above, remains the lack of understanding of and exposure to the biopsychosocial aspects of treatment and management of mentally ill patients. This can be traced to the “medical model” of treatment emphasized during medical training outside Bhutan. Compounding this is the risk of losing the comparatively few doctors and health workers available in Bhutan to more developed countries, which can pay them much more than the Government can afford.

A need for strengthened adequate treatment facilities and supplies offers additional huge challenges to delivering adequate treatment to patients. For example, there are only five Bhutanese physicians, four surgeons, one ear, nose and throat specialist, four pediatricians, four gynaecologists, and five anaesthesiologists for the country's 700,000 people. The problem in mental health is even more acute: The mental health team for the country consists of only two trained psychiatrists and four trained psychiatric nurses; there are no clinical psychologists, social workers or counsellors. Recruitment of expatriate medical professionals to work in Bhutan also is a challenge because of low pay and difficult living circumstances. Yet beyond these constraints, opportunities are also looming that need to be capitalized upon.

Opportunities for providing optimal mental health care

Democracy

The nation has embarked on a democratic form of government at the behest of its Fourth King, His Majesty Jigme Singye Wangchuck. His Majesty's enlightened leadership also gave rise to the vision of Gross National Happiness that represents Bhutan's modern development philosophy. Democracy will influence mental health in many ways: free speech and individual freedom will encourage open debates about major issues, including mental health. In turn, such an environment will foster better understanding about these issues, as well as encourage the seeking of better answers. Thus, Western psychology, which is based upon democratic principles and an egalitarian society, is likely to find increasing relevance.

Education

Like democracy, the rapid expansion of modern education in the country is apt to spur open debates and evidence-based solutions to health issues. Increasing efforts to achieve a knowledge base for an enlightened, open society, including the embedding of a more modern analytical and examination system, offer opportunities to

more than 90 percent of school-age children and youth who attend either schools or vocational institutes. With a rapidly growing literacy rate among the youth, it is expected that the demand for Western medicine and psychological therapy also will increase. Lastly, the Government plans to establish a medical college soon, which would facilitate the training of our own set of modern doctors and health workers with traditional Bhutanese values and culture.

Complementary medicine

Traditional medicine is popular in Bhutan because it has evolved from indigenous culture, based on collective wisdom and experience. It is informal and affordable, with a more holistic and patient-centered approach rather than a disease orientation; generally it emphasizes the collective responsibility of society, rather than an individual, to cure illnesses, thereby imposing less pressure upon the individual to get well. Research suggests that one of the main reasons patients are attracted to traditional medicine is that they find many of these therapies are more harmonious with their own philosophical orientation toward health (Astin, 1999). Thus, traditional medicine plays an important role in providing care to a large section of our population – and for conditions such as psychosomatic disorders, it may offer better treatment outcomes than modern medicine.

A saying in the local vernacular called *menchoy-rimdo* – literally translated as “treatment-prevention” – points to the fact that traditional medicine addresses both the outcome as well as the cause of disease, so that similar disease conditions are prevented in the future. A patient’s beliefs about health and illness therefore are critically important for self-care and may influence both behavioural and physiological responses to illness, thereby enhancing healing. Enhancement of a patient’s self-efficacy through information, education and the development of a collaborative relationship between patient and healer is a cardinal goal in all clinical encounters (Astin, 1999). However, to maximize the effectiveness of traditional medicine in our country, a need exists to coordinate the

efforts of various actors involved in treatment, including indigenous doctors, monks, shamans and astrologers, and to establish standards of care and codes of conduct and ethics. Furthermore, collaborative research studies should be conducted to compare the efficacy of traditional and modern medicine for specific disorders.

Social support

Providing social support likewise is an important element of patient management, especially for those with mental disorders, in order to mitigate the effects of the condition as well as to promote overall well-being and prevent relapses. Social service organizations such as His Majesty's Office of Social Welfare and non-Governmental organizations such as the Youth Development Fund (YDF), Rehabilitate Educate Nurture Empower Women (RENEW) and the Tarayana Foundation must be encouraged to coordinate and collaborate to avoid duplication of efforts and maximizing of support to needy people. It is hoped that in the long run, a separate Government social service department, run by professional social workers, can be set up to look after the needs of the poor and ill.

Buddhist concepts and meditation practices

As previously noted, Vajrayana Buddhism has a profound effect on our culture and attitude to life. Buddhists believe that being born in the human realm is most auspicious for the practice of Buddhism and attainment of enlightenment and freedom from rebirth in the cycle of *samsara*. To achieve this, one must defeat the three forces that perpetuate *samsara*: greed, hatred and ignorance, the root causes of all suffering. Greed is represented by desire, lust, attachment, addiction, materialism and unrestrained desire to have more and indulge more; hatred by jealousy, rivalry, aggression, violence and unrestrained ego; and ignorance by delusions, illusions, false beliefs and lack of consciousness or insight. The Buddha's Four Noble Truths teach what suffering is, how suffering is caused, the root causes of suffering, and how to end suffering by following the Eightfold Path of right thinking, right speech and right action.

Ordinary followers practice compassion and loving-kindness, while accomplished Buddhists practice higher forms of meditation such as defeating ego and dwelling on emptiness in order to end suffering and attain sublime blissfulness and peace.

Although mindfulness meditation practice is inherently Buddhist and has been used by accomplished Buddhist monks for centuries to refine the mind and progress toward enlightenment, in recent decades Western scientists and psychologists also have used it at a mundane level to alleviate the suffering of present life. Through scientific research, they have discovered that such mindfulness meditation acts as an effective therapy for many psychological as well as physiological disorders. Ironically, something originally inherent to the esoteric East has been adapted by the West – and now can come full circle again to the East to prove beneficial to the wider population.

In Bhutan, what will be most useful is something in between the mundane practice and the highest form of renunciation and ascetic meditation practice: a “middle path,” as it were, comprising a simple form of mindfulness meditation practice that has already flourished in the West and that can be easily propagated among our own population. We already have a fertile spiritual field, and only a little effort on our part can work miracles, serving as the answer to our increasing desires and sufferings related to materialism with modernization. Although many Bhutanese Buddhists may still believe that the sacred teachings should not be diluted by letting any and all practice them, I believe that any practice should change with time and be able adapt to a changing environment. Buddhist practice should evolve as well, to find new meaning and relevance to today’s generation.

What is mindfulness meditation?

While many religions feature meditative disciplines, mindfulness has been called the heart of Buddhist meditation (Kabat-Zinn, 2003; Thera, 1962). Yet mindfulness is more than meditation: It is “inherently a state of consciousness” that involves consciously

attending to one's moment-to-moment experiences (Brown & Ryan, 2003); meditation practice is simply a "scaffolding" used to develop the skill of mindfulness (Kabat-Zinn, 2005). Simply, mindfulness means completely paying attention in a particular way, on purpose, in the present moment, non-judgmentally, and increasing both awareness and acceptance of internal experiences (e.g., thoughts, feelings, memories, bodily sensations) while decreasing attachment to these experiences (i.e., seeing oneself as separate from one's pain, thoughts, feelings, memories). Being mindful presupposes that individuals whose awareness is not impaired have a choice in what phenomena they attend to and how they act. Being mindful also may reduce tendencies to take on others' negative emotions. It is through experiential exercises in meditation practice that patients grapple with concepts of acceptance, willingness and mindfulness.

Within the fields of mental health and psychiatry, meditation as an age-old self-regulating strategy is attracting renewed interest. With its emphasis on developing detached observation and awareness of consciousness, the techniques of mindfulness meditation may represent powerful cognitive behavioural coping strategies that can transform the way in which we respond to life events. Even so, meditation research has encountered major methodological and conceptual limitations (Baer, 2003; Canter & Earnest, 2003) in design, assessment and subjects, featuring small sample sizes, sub-optimal controls, widespread reliance on self-reported results and short-term follow-ups. A significant caveat is that some therapeutic effects may dissipate if practice is discontinued, and as with many self-regulation strategies, adherence and compliance can be major issues. Nevertheless, the current literature suggests that meditation can have significant positive effects and therapeutic benefits.

Positive effects on mood disorders

Meditation can reduce arousal states, such as when someone experiences a "fight or flight" response to stressors, and may ameliorate symptoms in anxiety disorders, panic attacks, phobias and insomnia (Kabat-Zinn et al, 1992). As demonstrated in

hundreds of studies over four decades, mindfulness-based stress reduction techniques also can improve coping skills and reduce emotional distress, decreasing the subjective experience of pain and stress. At the same time, it is reported to alleviate aggression and recidivism in prisoners and to lead to the reduction of usage of both legal and illegal drugs. In one dramatic finding, it improved psychological functioning and reduced mortality among individuals living in a nursing home (C. Alexander, Langer, Newman, Chandler & Davies, 1989). Thus, stress-related benefits are consistent with the classic claim that the central effect of meditation is calming of the mind.

Positive effects on physiological disorders

Beyond the benefits for primarily mental disorders, meditation also is a useful adjunct in the long-term treatment of hypertension, heart disease, cancer, fibromyalgia and chronic pain syndromes (Schnider et al., 2005; Carlston, Specia, Patel & Goodey, 2003; Davidson et al., 2003; Kabat-Zinn 2003; Weiss-Becker et al., 2002; Williams, Kolar, Reger & Pearson, 2001). Likewise, it can cause positive responses in conditions of asthma, stuttering, type 2 diabetes, and premenstrual syndrome (Murphy & Donovan, 1997). Meditation also has been found to enhance treatment for psoriasis, prostate cancer and atherosclerosis (Kabat-Zinn, 2003; Zamarra, Schneider, Besseghini, Robinson & Salerno, 1996).

With many of these psychological and physiological diseases increasing rapidly among Bhutanese, investigating meditative traditions with greater cultural and conceptual sensitivity opens the possibility of a mutual enrichment of both the meditative traditions and modern psychology alike, with far-reaching benefits.

Positive effects of meditation on well-being

Few research studies have examined meditation's original purpose as a self-actualization strategy to enhance qualities such as wisdom and compassion. However, some pioneering studies provide a

valuable foundation. Mindfulness meditation appears to enhance perception as measured by perceptual sensitivity, processing speed, empathy and synthesis (Murphy & Donovan, 1997; Shapiro et al., 1998; Walsh, 2005). It also may improve concentration, reaction time, motor skills and field independence (Andresen, 2000; Murphy & Donovan, 1997). Likewise, it is asserted that cognitive performance is enhanced on measures of learning ability, short- and long-term memory recall, academic performance and performance on a subscale of the Wechsler Adult Intelligence Scale, as well as some measure of creativity (Carnason et al., 1991; Dillbeck, Assismakins & Raimondi, 1986; Shapiro et al., 1998; So & Orne-Johnson, 2001).

Positive effects of meditation on personality

Personality variables also have been found to be positively modified. A study of five personality factors found that conscientiousness was unchanged, but the other four factors – extraversion, agreeableness, openness to experience, and especially emotional stability – all increased (Travis, Arenander & DuBois, 2004). Because meditation is a self-regulating strategy, it is not surprising that practitioners report feelings of improved self-control and self-esteem (Andresen, 2000). Given that several studies have found that meditators had higher empathy ratings, it also is not surprising that measures of interpersonal functioning and marital satisfaction increased (Tlocznski & Tantriells, 1998). Finally, several studies have suggested that meditation may foster maturation, because meditators tend to score higher on measures of ego, moral and cognitive development, self-actualization, coping skills and defenses, and states and stages of consciousness (C. Alexander & Langer, 1990; C. Alexander et al., 1991; Emavardhana & Tori, 1997; Nidch, Ryncarz, Abrams, Orme-Johnson & Wallace, 1983; Travis et al., 2004).

Positive effects of meditation on addiction disorders

Some studies have suggested that mindfulness meditation and spirituality decrease the chances of relapse in tobacco, alcohol and

drug addiction treatment, which has important implications in the Bhutanese context. Mindfulness meditation also showed positive effects on impulsive behaviour and state of mind. Importantly, traditional cognitive behavioural therapy techniques attempt to change the *content* of thoughts (e.g., challenge maladaptive thoughts), whereas mindfulness techniques attempt to change a person's *attitude* toward their thoughts, feelings and sensations. Not only have some researchers found increased dopamine release during meditation, which was strongly associated with a reduced desire for action (Kjaer et al., 2002), but also Lazar et al. (2002) found that meditation results in neurological changes associated with increased levels of alertness, relaxation and attention control. These neurobiological findings support the hypothesis that meditation enhances awareness and the cultivation of alternatives to mindless, compulsive behaviour (Marlatt, 2002). Groves and Farmer (1994) concluded that "... in the context of addictions, mindfulness might mean becoming aware of triggers for craving ... and choosing to do something else which might ameliorate or prevent craving, so weakening the habitual response." In this sense, mindfulness meditation serves as a positive and gratifying "alternative addiction" – and more than just a coping strategy for dealing with urges and temptations.

In addition, Kabat-Zinn (1990) and Segal et al. (2002) have proposed a new cognitive behavioural intervention for substance use disorders called mindfulness-based relapse prevention. The goal here is to develop awareness and acceptance of thoughts, feelings and sensations through practicing mindfulness, and to utilize mindfulness skills as an effective coping strategy in the face of high-risk situations. The addition of mindfulness provides clients with a new way of processing situational cues and monitoring their reactions to their environment. All these can prove useful to our patients here in Bhutan: All we need is to train the patients to practice simple mindfulness meditation.

How does meditation work?

Thus far, most research has focused on the first-order question, does meditation work? Now attempts are being made to answer the second-order question, how does meditation work? Three kinds of explanations have been proffered: metaphoric, mechanistic and process-oriented. Traditional contemplative explanations are usually metaphoric. Classic metaphors include purifying the mind of toxic qualities; freeing it of illusions and conditioning; awakening it from the usual trance; and healing pathology (Walsh, 1999). Suggested psychological mechanisms include relaxation; exposure; desensitization; catharsis; and counter-conditioning (Murphy & Donovan, 1997). One important process that may be central to both meditation and psychotherapy is that of refining awareness, which may incorporate and facilitate both mechanistic and metaphoric processes. Others include cognitive mechanisms such as insight, self-monitoring; self-control; self-acceptance; and self-understanding (Baer, 2003).

Other authors like Shapiro et al (2006) proposed that in order to understand how mindfulness works, it can be broken down in to simple, comprehensible constructs known as axioms or the building blocks of mindfulness. In that, they used an often cited definition of mindfulness by Kabat-Zinn, (1994) “- paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” According to them, these three elements: 1. “on purpose” or attention; 2. “Paying attention” or attention; 3. ‘In a particular way” or attitude - embodies the three axioms of mindfulness. The role of intention in meditation practice is that as meditators continue to practice, their intention shift along a continuum from self-regulation, to self-exploration, and finally self-liberation. Paying attention involves observing of one’s moment-to-moment internal and external experiences- suspending all the ways of interpreting experience and attending to experience itself. How we attend, the qualities one brings to attention have been referred to as the attitudinal qualities of mindfulness. Rather than be immersed in the drama of our personal narration, or life story, we are able to

stand back and simply witness it. This intentionally attending with openness and non-judgmentally leads to a significant shift in perspective, which they called *Reperceiving*.

The way forward – paradigm shift in health care in Bhutan

As Bhutan's economy develops further and its society becomes increasingly consumer-oriented, the market economy will dictate demand and supply. This will affect health services as well: Not only will many people be able to pay for health care services, but they also will demand quality services.

I believe that many Bhutanese who are dissatisfied with our present system of health care are among those who have seen better-developed systems abroad and are able to pay for such services. This group neither has the time nor patience to wait for services, nor do they have much regard for the providers. Nonetheless, some use their influence to consume a disproportionately large portion of a doctor's time and services, depriving ordinary citizens of their share. One way to resolve this disparity and dissatisfaction is to provide private health services, so that these clients can go to the private sector for health care, where they can choose a doctor of their choice, at their convenience. Privatization of health care will become a reality, and quality of care will improve with the advent of competition. The revenue generated from the private health sector can then be used to improve the quality of the public health sector, and the Government can concentrate on providing quality care to the poorer sections of society while regulating health care standards in the private sector.

As a result of market forces, an inevitable paradigm shift in the provision of health services will occur, with a bio-psychosocial model and optimal healing environment (Schmidts, 2004) replacing a traditional medical model of care. Similarly, services will become patient- rather than doctor-centered. This new medical paradigm, promoting awareness, healing and transformation at the deepest level of body and mind, heart and spirit for patients and their families, will offer therapy as a collaborative effort between

therapist and patient. Patients can take lead role in solving their health problems, while the therapist's main responsibility will be to facilitate the healing process by educating, encouraging and empowering clients/patients. Multi-disciplinary health provider team consisting of doctors, nurses, psychologists, social workers and other therapists will find an increasing role in this new approach. It is not always necessary that doctors and nurses have to provide all the treatment. Experiences from Western countries show that other categories of professionals such psychologists and social workers can not only provide effective treatment when working in a multi-disciplinary team, they can also reduce costs by reducing doctors' time with patients.

Likewise, Buddhist practice will undergo major changes as the number of educated Bhutanese increase and their approach to Buddhism become more analytical and intellectual. Buddhist practices will become more individual and contemplative, and less dependent on monks performing traditional rituals and rites. Demand for highly qualified contemporary teachers adept in both Buddhist practice and Western analytic enquiry will increase, while demand for ordinary and lay Buddhist practitioners will decrease. Again, meditation practice will find increasing relevance in this new environment.

I believe that our monastic community also will need to evolve with changing times, transforming themselves in such a way so that they remain highly revered and relevant to the young generation of Bhutanese, who are growing up amid television, mobile communications and internet. It is not sufficient for our monks to just meditate or to perform religious rites in today's world, given that the competitive forces of the market economy, increasing materialism and globalization are overwhelming. I would propose that a new cadre of monks be raised who are educated in both mainstream Buddhism and modern education, to provide what I call "socialized Buddhist service," which goes beyond the traditional monk roles. This new front of Buddhist masters should engage in teaching Buddhism to our young generation; in treating

and caring for patients, especially the terminally ill; and in supporting the poor and needy, filling the much-needed role of social service providers in the modern era.

Teaching meditation practice to laypeople should be a vital tool for these modern monks. Practicing mindfulness meditation is a simple process, requiring only dedication. Any individual can learn it from an instructor; although the techniques are inherently Buddhist in origin, one need not become a Buddhist to practice it. Moreover, it can be practiced anywhere and everywhere; there is no need for special infrastructure or logistics. Likewise, there is no cost to this effective therapeutic process. It is sustainable and everlasting, and once an individual acquires the right techniques, one can use it for a lifetime, mitigating the stressors of the modern world and healing and preventing mental disorders.

Conclusion

If our monastic institutions and monks help, we can propagate this practice so that every Bhutanese will have not only an opportunity to practice meditation and achieve lasting peace and happiness in their own lives – but also, potentially, an opportunity to achieve the greatest goal of all, freedom from rebirth. Not only that, they can be instrumental in spreading the word of the Buddha and finding a balance between material desires and inner peace in this increasingly globalized and materialistic world.

Likewise, traditional healers can play a significant role if they can improve on their services and establish evidence-based efficacy of their treatment methods. It is inevitable that the demand for quality health care will increase, and with that, the costs of care as well. The private sector can play a major role in providing quality health care services to those who can afford to pay or buy health insurance, while the public sector health providers can concentrate on those who are poor and cannot afford to pay. Finally, the health care

providers can no longer remain complacent and must embrace evidence-based, holistic bio-psychosocial health care through a multi-disciplinary team approach. The benefits of all this can be enormous, and can embed Gross National Happiness even further in the Bhutanese psyche.

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Nature Affinity and the Human Conditions

Dave M. Augeri

Abstract

Human beings have a natural affinity for Nature. Research indicates Nature has positive effects on our physical and psychological well-being, changes our body chemistry and makes humans healthier and happier, but physical and psychological illnesses are increasing with loss of Nature. Nature is an integral part of our physiological, psychological, genetic, and emotional make-up. Human health and the healing of physical and mental ailments improve with contact with animals, plants and the environment and is the reason for animal and horticultural therapy and integrating the environment in architecture. Professionals in all disciplines need to incorporate Nature into the human endeavour.

Keywords: Nature, environment, human health, biophylia, nature-deficit, conservation.

Introduction

For 99% of our existence the human condition has been rooted in the natural world (Wilson 1984, 1993). Our co-evolution with the rest of Nature has been an essential influence on our physiological, emotional, and psychological development and is considered embedded in the human genome (Lumsden and Wilson 1981, 1985). The instinctive bond and deep affiliation humans have with Nature is not just an aesthetic; it is rooted in our biology (Kellert 1993, Wilson 1993, Ulrich 1993, Lumsden and Wilson 1981). It is possible, therefore, that destruction of and disconnecting from the

environment can lead to a type of 'nature-deficit disorder' (Louv 2005) and the deprivation of human health and well-being. Yet, the vast and diverse qualities of Nature provide humans and society with the essential means to heal, rejuvenate, and function on higher and healthier levels.

The evolution of nature-affinity

Co-evolution

The significant majority of human history has involved an intimate co-existence and evolution with Nature. Our brains, bodies, emotions, and cultures evolved in a biocentric world (Lumsden and Wilson 1981, Wilson 1984). Although we have a tendency to consider human history only since the end of the most recent Ice Age and advent of agriculture and permanent villages 8,000–10,000 years ago, this latest period constitutes less than 1% of human evolution. The evolution of what is today *Homo sapiens* actually occurred over millions of years and involved critical cognitive and physiological development intricately shaped by Nature (Wilson 1993). Mechanized society comprises less than 0.01% of human development and is likely a negligible influence on our evolution. Indeed, over the course of 99% of human history, the predominant influence on our development and why we are who we are today is Nature (Wilson 1984).

For example, a particular genotype may have made some individuals more prone to a certain positive behavioral response to an environmental cue and that response was more likely to enhance the individual's survival (Wilson 1993). Consequently, that genotype, which was linked to certain environmental characteristics, was passed on to successive generations and spread through the population (Lumsden and Wilson 1981, Wilson 1993). In other words, those individuals who were most able to understand and benefit from the intricacies of certain environmental attributes were most able to adapt and survive. Consequently, selective advantages that co-evolved with these environmental attributes were passed on

to successive generations over millions of years. These traits remain embedded in us today and are the basis for our affinity to certain characteristics in Nature (Wilson 1984).

The evolution of traits and their disappearance in species is a long and extensive process, but humans are a young species. Anatomically similar ancestors appear in the fossil record only 130,000–200,000 years ago (Alemseged et al. 2002) and modern humans appear only about 10,000–14,000 years ago, both of which are too evolutionarily recent for the disappearance of traits that evolved over millions of years (Stringer 2001). In fact, distinctive characteristics in modern humans may have still been evolving as recently as 10,000 years ago (Stringer 2001). Such traits have remained essential for human survival into recent pre-industrial society and certainly in subsistence-based cultures today. Essentially, the fundamental traits shaped by Nature over 99% of our evolutionary development and that ensured our survival remain in our genetic, physical, and emotional composition (Lumsden and Wilson 1981, 1985) and continue to dictate our affinity for Nature today (Wilson 1984, Ulrich 1993, Heerwagen and Orians 1993, Sagan and Margulis 1993, Rolston 1993).

Habitat selection and natural landscapes

There is increasing evidence indicating that, over the course of our evolution, humans were most attracted to habitat attributes favoring survival, i.e. those features associated with critical necessities of food, water, warmth, and security—particularly visual openness, low even vegetation, escape cover, and a lower probability of close-encounter threats (Ulrich 1993). Savanna habitats with scattered trees and water sources provided these necessities in greater abundance than most other habitats over human evolution. Paleontological evidence supports this premise and indicates that a significant portion of human evolution occurred in savannas. Our co-evolutionary affinity for open park or savanna-like landscapes suggests that evolution may have selected for certain habitat preferences in our ancestors, which has been passed on to modern

humans who may have a genetic predisposition for such settings (Oriens 1980, 1986).

Recent psychological research supports this hypothesis. Studies across diverse groups in Asia, North America, Africa, and Europe reveal that people consistently favor park or savanna-like landscapes or natural settings with similar attributes in urban environments, such as city parks (Ulrich 1977, 1993, Yi 1992), particularly with water features (Shafer et al. 1969, Bernáldez et al. 1989, Chokor and Mene 1992, Ulrich 1993). A key result of this research shows a strong tendency for all groups to favor natural scenes over urban settings—especially those urban environments lacking natural features like vegetation or water—despite apparent cultural, ethnic, political, or socio-economic differences among groups.

Flora

Plants have been central in human evolution, providing food, medicine, shelter, security, refuge, tools, vantage points, and weapons. Heerwagen and Oriens (1993) note that trees in particular have played a fundamental role in the evolutionary development of humans. Psychological research shows that people of varying ethnic and cultural backgrounds today consistently choose trees with specific characteristics, particularly low trunks with branching beginning at points lower than half the tree height, broad umbrella-like canopies, moderate to high layered canopies, small leaves, high canopy width:tree height ratio, and flowers (Oriens 1980, Heerwagen and Oriens 1993)—all of which provided humans with critical necessities and security over the course of our evolution. These data are highly consistent with tree character of savanna ecosystems where humans predominantly evolved and many cultures today prune and genetically modify trees to select for these traits.

Flowering trees are especially attractive for people today. It is hypothesized this is likely because flowering trees indicated an

important food resource throughout human evolution (Heerwagen and Orians 1993). Brightly coloured leaves are also highly attractive for similar reasons. In tropical and savanna ecosystems, brightly coloured leaves are generally indicative of a) young leaves, which have higher nutrient content, b) flushing of new leaves at the beginning of the rainy or dry seasons, which are times of increasing resources depending on the region and system, c) signaling of forthcoming flowers and fruits because many tree species flower en masse to attract pollinators at times when the flowers are at their peak of resource availability, and d) markers for locating particular species during resource-rich times as opposed to the rest of the year when most tropical plants have uniformly green leaves (Heerwagen and Orians 1993).

Studies show that people today have a deeper need to be among plants in general than just for their aesthetic beauty. An important benefit plants have provided throughout our evolutionary development is refuge, particularly in the forms of escape, security, and restorative healing (Ulrich 1993, Heerwagen and Orians 1993, Shipman 1986, Frumkin 2001). Such attributes appear to transcend the aesthetic value of plants and remain important in human behavior and psychology today. The refugia and restorative healing that plants provide leads to important physiological benefits, including lower levels of circulating stress hormones, reduced heart rates and blood pressure, increased gains in cognitive performance, and a stronger sense of calm (Ulrich 1993). Such physical and cognitive healing was critical for human performance and survival. In addition, a likely attraction to plants is the fresh oxygen they provide.

Frumkin (2001) notes that plants have also played an important role in sustaining and healing mental health. Horticultural therapy was developed over many centuries and has been used throughout different cultures as a form of both physical and mental health treatment. Today, horticultural therapy is used in hospitals, geriatric programs, disability programs, community-based programs, prisons, and special education.

Fauna

Animals have played particularly important roles in human evolution and development. Hunter-gather groups followed and learned about group hunting strategy from social predators like lions, wolves, African wild dogs, coyotes, and others. Some of these same predators and others, such as snakes, spiders, tigers, bears, etc. have also been instrumental in influencing the development of “biophobias” in human evolution—traits that continue to today (Wilson 1984, Ulrich 1993).

The theory that certain fears and phobic responses are evolutionarily linked to the environment was likely first postulated by Darwin (1877). Clinical studies provide considerable evidence that phobic responses found in people today are linked to strongly conditioned fears of particular environmental cues or objects, such as predators (including hostile humans), that have threatened humans throughout evolution (McNally 1987). Such strong fears and aversive responses would certainly provide an adaptive evolutionary advantage for survival and, thus, be passed on to successive generations. Indeed, some are so rooted in our biological and psychological make-up that such original cues (e.g. fear of attack by lions) are not the actual cause of a person’s specific fear today, but continue to influence instinctive emotive reactions to non-threatening situations.

Yet, “biophilic” (Wilson 1984) responses to animals are as strong or stronger than associated phobias. Despite obvious threats, humans co-evolved with, learned and benefitted from, and co-adapted to the environment with species that have exceptional physical powers or skills. Such learning was an adaptive advantage for early humans and our co-evolution likely developed into reverence for some species highly able to adapt to harsh environmental conditions. Unusually powerful or extraordinary species, such as tigers, bears, jaguars, wolves, whales, and others have been and still are deified and revered. Humans have held a particular kinship and fascination with these and a variety of other species throughout our

development; most notably with those that are either closest to us in behavior and co-evolution or those that appear to have mythical powers and skills. The vast majority are typically mammals, with which we have continued strong kinship today.

It is clear that humans developed strong bonds with animals and our connection carried through human evolution and is deeply rooted in our current kinship with particular species. Archeological evidence indicates that pets were present among pre-agricultural people long before domestication (Katcher and Wilkins 1993). Highly social species like wolves, which have cooperative behaviors, complex cognitive skills, and social organization similar to humans, have been the focus of especially strong kinship by humans. Indeed, it is likely that early and even recent human bands followed, learned and scavenged from, and eventually hunted along-side wolves, which likely scavenged animal remains left by humans. This led to a mutually beneficial association, domestication, interdependent security, companionship, and selective breeding for dogs as pets. Our connection with animals is evolutionarily significant and is likely allied with important therapeutic benefits noted below.

Nature's medicine

A significant majority of medicines and/or their derivatives originate from the natural world. A growing body of data also links human health and wellbeing to both direct and indirect contact with Nature. In fact, research shows that even just viewing healthy natural landscapes, aquariums, plants, gardens, trees, or animals in photos or distantly from windows without direct contact elicits remarkable physiological, psychological, and behavioral health benefits (Frumkin 2001, Ulrich 1993, Heerwagen and Orians 1993, Katcher and Wilkins 1993). Data also demonstrate that the excessive destruction and loss of Nature not only impact its capacity to provide essential medicines and life-supporting services, but also our ability to benefit from it on various physiological and psychological levels.

Physiological

Ulrich et al. (1991) conducted a study examining the stress-reducing effects of subjects' exposure to video recordings of natural landscapes versus urban settings after first watching a stressful film. People viewing the natural scenes had lower blood pressure, higher reductions in muscle tension, and lower levels of skin conductance fluctuations. There were also directionally associated cardiac responses indicating that continuous intake and attention were higher during exposure to the natural scenes (Ulrich 1993). In addition, subjects reported higher levels of positive feelings and lower levels of anger/aggression and fear. Further, recovery rates in all physiological measures occurred within only 4-6 minutes after viewing natural settings, as opposed to the urban settings that required significantly more time. The study concluded that human responses to natural settings may have significant correlations with the parasympathetic nervous system whereas there were no distinct responses when exposed to urban settings.

Studies in hospitals and prisons, where there are greater opportunities for controlling confounding variables, found notable differences in recovery times for sick and/or postoperative patients exposed to natural scenes. Ulrich (1984) examined recovery data with controls for sex, age, weight, tobacco use, and medical histories. Patient rooms were assigned randomly by the hospital with either window exposure to a small stand of deciduous trees or a brown brick wall. Records of all cholecystectomy patients over a 10-year period, restricted to the summer months when the trees were in foliage, showed that patients with tree views had statistically significant shorter hospitalizations, lower post-surgical complications, and lower needs for pain medications. Ulrich and Lundén (1990, as cited in Ulrich 1993) also found that open-heart surgery patients exposed to pictures of natural water settings experienced notably lower postoperative anxiety than control groups exposed to abstract pictures or enclosed forest scenes.

Animal therapy has also been demonstrated to induce significant health benefits. Anderson et al. (1992) conducted a study of 6,000 patients who were divided into pet owners and non-pet owners. Pet owners had statistically significant lower systolic blood pressure, triglycerides, and cholesterol than non-pet owners. In a different study of heart attack survivors, patients who owned dogs had a 6-fold higher survival success than non-dog owners (Friedmann and Thomas 1995). Katcher et al. (1983) showed that both hypertensive and normal subjects watching an aquarium had significant decreases in blood pressure below resting levels. Patients with chronic organic brain damage and autistic children with congenital brain dysfunction showed increased speech, social responsiveness, positive emotion, and focused attention when exposed to animals (Katcher and Wilkens 1993).

In a study of patients with mild to moderate depression, patients were required to discontinue antidepressant drugs and psychotherapy at least four weeks prior to being exposed to dolphins in a natural coral reef setting (Antonioli and Reveley 2005). In the experimental group, participants were able to swim, touch, play, and have spontaneous interactions with dolphins, whereas control group participants had the same water activities in the same setting without dolphins. Results showed that the mean severity of depressive symptoms was significantly reduced in the treatment group with physical exposure to dolphins than in the control group without exposure. Katcher and Wilkens (1992, as cited in Katcher and Wilkins 1993) conducted a study of ADHD children receiving education structured around animal contact versus ADHD children in an outdoor setting without animal contact. Physiologically, results indicated that consistent contact with animals resulted in a highly redundant positive correlation in the central nervous system.

Psychological

There is widespread evidence supporting the positive correlation between physical and mental health. This correlation can include positive physiological responses to Nature, such as lower blood

pressure and heart rates, reduced taxing on the sympathetic nervous system, faster and more efficacious recuperative processes, higher survival rates, diminished anxiety, decreased need for medications, etc. Any or all of these effects can lead to both direct and indirect emotional and psychological benefits and feedback to physical health, such as reduced psychological stress, which can facilitate and/or directly correlate with enhanced physical health. Indeed, our emotional attachment to Nature is an integral part of the human endeavor (Wilson 1984, Heerwagen and Orians 1993).

Frumkin (2001), Louv (2005), Nash (1982) and others review how wilderness experiences may be particularly therapeutic, especially for psychiatric patients, including emotionally and behaviorally disturbed children and adolescents; individuals with ADD and ADHD; abuse, rape and incest survivors; the bereaved; cancer patients; suffers of post-traumatic stress (PTSD); and addiction disorders, to mention a few. According to Louv (2005) almost 8 million children in the USA suffer from mental disorders and ADHD is one of the most prevalent. This syndrome is characterized by aggressive or anti-social behavior, attention deficit, restlessness and hyperactivity, and reduced or limited achievement. Evidence indicates that at least some of these symptoms are caused by lack of contact with Nature or high-sensitivity to urban settings and can be addressed by appropriate exposure to Nature in some form, i.e. contact with animals, natural landscapes, wilderness, etc. Indeed, studies by Faber-Taylor et al. (2001) demonstrated that simple exposure to green outdoor spaces help relieve ADD symptoms. Katcher and Wilkens (1992) showed a consistent positive correlation between exposure to and handling of animals and significant decreases in ADHD symptoms.

The restorative influences of Nature often exceed aesthetic values and induce strong positive shifts in emotional states (Ulrich 1993). Ulrich (1981) demonstrated that consistent exposure to natural landscapes fostered greater psychological restoration, higher reductions in negative emotions like fear and aggression, and more positively-toned emotional states compared to individuals

consistently exposed to urban environments. Concurrent tests of electrocortical brain activity in the alpha frequency range of these subjects indicated that they were more wakefully relaxed when exposed to natural landscapes. Psychological stress-recovery studies reveal that recuperation was faster and more extensive when subjects were exposed to films of natural settings, particularly park-like grassy settings with a prominent water feature (Urlich et al. 1991), similar to savanna landscapes (Urlich 1993). Clinical tests of acutely-stressed dental patients showed statistically significant reductions in anxiety and discomfort as well as higher compliance during surgical procedures after first being exposed to aquariums and pictures of spatially open natural landscapes or serene water scenes versus no exposure or views of outdoor action scenes, e.g. wind surfing (Urlich 1993).

Natural settings have also been shown to foster higher-order cognitive functioning. Evidence indicates this is evolutionarily based in our need for recuperative healing in natural landscapes. Essentially, reduced stress, anxiety, and mental or physical fatigue help increase higher-order cognition, which provided more resourceful and creative skills and thinking and, thus, adaptive advantages to survive and reproduce.

The healing spirit of wilderness

“The lessons we learn from the wild become the etiquette of freedom” (Snyder 1992). Psychologists led by Sigmund Freud supported the theory that humans are less repressed when exposed to or experiencing an “uncivilized” wilderness condition, leading to greater happiness (Nash 1982) and sense of freedom. As noted above, research shows that exposure to Nature can significantly reduce negative psychological issues and improve an individual’s overall health and emotional well-being. Data support the hypothesis that the restorative influence of Nature on emotional health is manifest in stronger shifts in positive emotional responses, reduction of anxiety and stress, higher cognitive functioning, and greater levels of peace (Urlich 1993). Ultimately, unaltered

wilderness holds the greatest potential to heal and foster a sense of peace and happiness.

Pristine Nature—‘wilderness’—is an essential element of the human condition. The significant role wilderness has played in 99% of human evolution secures Nature’s affect in human development, which has been reliant on sound mental-emotional-cognitive functioning. Technology is incapable of replacing Nature’s services and we remain wholly dependent on a healthy environment for our existence. Nature not only heals our bodies, but it has also been a fundamental element in fostering positive human emotion throughout our evolution. The latter is necessary for our survival. Exposure to secure wilderness conditions has been essential for psychological restoration to reduce anxiety and stress and to foster a sense of security and peace, which have been critical for mental health and higher cognitive functioning to survive.

“Spirit” is a natural part of an individual and the human experience. While it is most often identified with mind and consciousness, it is also a product of the brain and, thus, is affected by both physical and psychological health. In the context of this discussion, it may also be evolutionarily linked to the environment. Pristine Nature provides a vital function in sustaining and healing positive mental health, which is linked to healthy organic chemical and biological processes. Mental health is also a key element in fostering a strong spirit—a combination of resilience, patience, optimism, and associated qualities that give the individual strength to survive and prosper. Given that restorative properties of Nature have been critical for our survival (Ulrich 1993) and that mental health has been essential, humans likely required and sought specific qualities in Nature to heal and strengthen their spirit. Current research indicates that even integrating natural forms into architecture can generate spiritual inspiration (Joye 2007).

It is suggested that the mythic qualities humans ascribe to Nature were developed to foster a strong mental-emotional condition (Wilson 1996). Such qualities were likely used to give individuals the mental strength and fortitude to not only survive, but ascend to

higher ranks in their group and society. Over time, humans have tended to seek strength from the mythical qualities in wilderness as a means to imbue spiritual strength. For many cultures, the religious-type of reverence held for pristine Nature is significant and, aside from subsistence, indigenous cultures today continue to seek wilderness for spiritual strength and reasons more than any others (Snyder 1991).

A strong and healthy spirit has also been essential for human advancement beyond the individual. Throughout our evolution individual survival and prosperity have depended on the health and capacity of his/her group and community. In fact, most indigenous cultures today seek spiritual strength in wilderness for the sake of their community more than the individual (Snyder 1991). Indeed, one of the deepest human needs for wilderness is perhaps seeking humility in respect for community (Nash 1982).

The happiness quotient

Nature is critical for human happiness. Connecting with the “essence” of Nature is restorative and humans are more productive and healthy—inspired—when in contact with Nature. The stresses of urbanization are widely acknowledged (Kaplin 1984) and the incidents of physical and psychological illnesses are increasing with our detachment from and destruction of Nature (Louv 2005, Frumkin 2001). While environmental destruction creates significant socio-economic problems, perhaps the most serious deficit in the modern world is not economic; rather, it is environmental. Given that the stresses and extraordinary pace of the modern world are particularly abnormal in an evolutionary context, it is likely that humans have not had sufficient time to evolve and adapt in the absence of Nature. Human development has been critically reliant on Nature and modern humans are too young to have lost this evolutionarily based dependency. Joye (2007) notes that our attraction to natural forms and particular healthy landscape configurations can reduce stress and have positive effects on human function. However, our contact with these elements is reduced in urban life. Our detachment from and destruction of Nature can have

notable adverse effects on our psychological and physiological well-being. Thus, it is likely that modern humans are experiencing nature deficit (Louv 2005). Nature not only provides essential medicine for the body and mind, it imbues the individual with emotional and spiritual health. Being in Nature changes our body chemistry and sense of well-being, makes us healthier and, in effect, Nature makes us more whole and our entire being happier.

Nature completes the human condition. It is true that certain harsh aspects of Nature can compromise our health, indeed our lives, particularly if one does not have the proper skills or adaptations. It is equally true that some portions of the environment are difficult, even terrifying, and create fear, anxiety, and stress. Yet, much of this today is the result of removing ourselves from the core foundation that makes us whole as well as from the excessive loss of Nature around us through its destruction. Experiencing the positive aspects of Nature that correlate with our success as a species nurtures our body and mind. And, a healthy physical and mental condition invariably leads to a more restful, peaceful, and healthy spirit. In effect, a healthy mind and body through positive experiences with Nature can foster greater happiness.

Considering that happiness is a state of mind, it may be true that inner peace and happiness stem from internal emotive processes, such as compassion and contentment. In the context of the current argument, however, it is also true that such emotions are products of a relaxed, healthy, and secure mind and body fostered by positive features found in the natural world. Nature is an important part of our composition. Achieving happiness, therefore, can be facilitated by greater contact with specific aspects of Nature, even in an urban setting. In effect, our *happiness quotient* can be raised—substantially in some cases—by reincorporating various positive features of Nature into our lives.

For example, nature-based architecture provides an opportunity for specific structural elements to correspond with a particular set of innate human affiliations with Nature. Joye (2007) notes “...architectural imitation of natural elements and habitats that

promoted fitness (e.g., vegetative structures) can lead to the autonomous and quick onset of positive affective reactions, which can lead to positively toned feelings and stress reduction...such imitations can be realized according to different levels of abstraction, ranging from literal imitations to the application of more abstract geometric features of natural objects (e.g., fractal geometry) and structural features of ancestral habitats. Applying fractal geometry to architecture could be a particularly successful creative strategy, because it is not directly restricted by stylistic conventions and thus does not exclude the expression of cultural or local tastes."

In the absence of implementing sweeping architectural changes across the modern world, research now shows that increasing our contact with Nature in various simple and inexpensive forms can facilitate a path toward deeper happiness. This can include incorporating more plants, gardens, or green spaces around and in our homes and offices, increasing physical contact with animals, and spending more time outdoors in fresh air, among trees and plants, and in open green spaces with scattered trees and/or near relatively calm water bodies. City planners could also reclaim and incorporate more green spaces at relatively low cost. In general, the costs of not improving citizen's physical and mental health via such simple steps create significant deficits in human well-being and far exceeds the financial or perceived political expense.

Ultimately, pristine Nature is an essential element of the human condition and it is in the best interests of our health, survival, security, and advancement to protect Nature and incorporate it into our daily lives. In effect, we are healthier, happier and society functions on a higher level when our environment is healthy and we are able to integrate it in our daily lives. Architects, urban planners, educators, psychologists, politicians, economists, and professionals in other disciplines need to recognize both the physical and psychological health benefits of Nature and, subsequently, to society, and incorporate the natural environment into the human

endeavor. In so doing, societies would be much further along the path to well-being and happiness.

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Dynamic Aging

Ethel Lowen

As we grow older, we become more aware of what is most important in life: To be genuinely interested in the concerns of our fellows, the very same concerns of our own; to be free of pain, to be physically and economically independent. We must be alert and aware of the struggles of men and women denied basic breath, denied their human rights and their dignity, while struggling almost to death against predatory and evil men who labour to destroy the fundamental aspirations.

Energy and ingenuity take up the days of one's life to achieve and insure the basic needs of self and family. Surely, one is entitled to a measure of happiness during this prodigious life's effort. I feel that a recognition of one's worth gives satisfaction, but one's worth is measured differently at different points in our lives. It is something that we measure through the eyes of the people in our lives. Whether village or town, it is this connectedness to each other, in individual or community involvement, where long term contentment emerges. We can cultivate this contentment over time if we accept that with each stage of life we access different parts of our selves; we become different people. We understand our role in the community differently; as a child, a young woman, a mother, and a grandmother, a member of the community, a professional, a student or a mentor.

If we isolate ourselves, it becomes difficult to relate to the world, to test ourselves or learn from new experiences. Happiness should emerge from within, but happiness grows without. Happiness is a practice. It is something you build with other people. Even those who renounce the world's attachments, and choose a monastic

experience understand the value of learning and working alongside of others. This is because compassion for others makes it possible to also have compassion for ourselves. When we participate in the different rites of passage that mark a life-time, we become tuned into the things that make all of us human. In the quest for inner peace one must work on cultivating an awareness of the universals that connect us; the suffering which touches all lives and the strength which makes it possible to find beauty in life.

It is important to be aware that you are a one of the human race. We should not hold others to higher or lower standards than ourselves. We are all dealt different cards in this life but we are all going to leave this earthly home, one day; the richest, the most talented, the most devoted to family, the meanest, the cruellest, the most generous, the haters and lovers. All of us are nonetheless connected. This awareness should allow a kind of gentle feeling toward our species, as we know that we all share this reality. None of the accumulated toys accompany our departure. What remains to sustain and inspire us in our twilight years are the memories of the efforts of those who loved and cared for us.

For this reason, it is important to remember, during early stages in our lives, when we are young parents that our children learn from our example. They learn how to love their own children based on our example to them as parents. And, when young children have the opportunity to grow up interacting with their grandparents or elders in the community, it helps them understand that aging and dying are not things to be afraid of. It is important for them to learn these things by example. Fear is something we teach our children. They are not born with it. If they witness the joy and peace of older age, they can enjoy their early stages of life in peace as well. There is always something new to look forward to with confidence. When my granddaughter was a little girl, I came to visit her, and she had just learned about death and dying. She looked up at me and said "grandma, you're going to die!" I remember that I laughed out loud when she told me this and told her "yes, I am." The important part of this experience, for me, was that I did not lie to her. But, at the

same time, it did not turn into a disturbing or scary issue. Yes. We laughed. We will all die one day. But today we are alive, and what happens today is what is important. Did we laugh at least once today? That is more important than whether or not we will die tomorrow.

Besides cultivating a joyful outlook on life, one must also be realistic about what the material body requires. In the golden years, if one is sick and poor or abandoned by children and family, this is usually because we did not make the most of our earlier stages of life. When one is young, income is being generated, there are less health issues, and there is more energy to begin and renew important relationships. If we do not take advantage of these opportunities, we will definitely suffer later on in life when funds, health, and energy are not at their peak. You are responsible for maintaining your own good health. Remember to take your vitamins, to get your regular medical check-ups. Doctors are also human. They make mistakes and a greater knowledge about your own medical history can make a huge difference in enjoying good health. You need to recognize when you need to ask for help, and do it. Financial savings and careful investments in health insurance and so on, are fundamental to giving oneself the space to pursue spiritual, intellectual and social pursuits after retirement.

In addition to financial investments, we should also invest time in learning how to be a good guide to our children. Our experiences often can be of value in teaching them how to avoid mistakes, but sometimes their life paths are very different. We must learn how to guide without being forceful. Sometimes we do not have the answer they are looking for. But even if we cannot relate to their different life style choices, they still require our acceptance and unconditional love. The effort to listen requires only the skill of patience and remaining non-judgmental. Only when you are asked should you provide suggestions. Challenges should be for constructive, positive and creative thinking, always emphasizing an appreciation for the gift of life. In this way it becomes possible to stay connected to your children, no matter what surprises life throws your way. They will

always trust in the foundation of your relationship, and will enjoy spending time with you throughout their different experiences. Whether in home care, attendant care, residential placement, the dynamics of aging is changing, and the pace and pressure of sustaining an independent life for our children is overwhelming. A loving and appreciated child, however, can be expected to make more than a telephone call.

What will be child-parent relationships in the next generation"? Will it be what it has been? The variable factor is to be found in the degree of genuine connectedness of parents and children today. This means beyond the providing of food and shelter, or even the sacrifices of providing education. This requires an establishment of trust, respect, shared adventures, openness of discussion, and intellectual and cultural exposure.

As a young child I remember having a "built-in" sensitivity and awareness of my mother. She left her country Lithuania in 1913 to join my father in America, in New Jersey, to start life in this new "promised land". Somehow, I felt her loneliness. She sang when she felt most profoundly her isolation and loneliness, just as the poet Maya Angelou wrote "I know why the Caged Bird Sings." I could imagine her trauma and pain, saying farewell to her mother at the dock in Antwerp, knowing she would never again see her beloved parents and siblings again. This awareness brought us close in reciprocal love, shared joys and friendship, mutual respect and trust. Because I was aware of my mother's quiet trauma of her displacement, I keenly identify with the disorientation, and suffering of those women, men, and children forced to flee their country and adjust to survival under desperate conditions. In the 1930s immigrants were becoming acquainted with their American born children. Those with enlightened backgrounds took an active part in the growth and development of their school-going children, encouraging education, free exchange of ideas, and a desire for questioning apparent prevailing injustices. I was lucky. In those times, many parents encouraged their children to seek employment to help parents, and not to entertain ideas for education or self

development. Enormous respect for parents was assumed and grave disappointment resulted should this be absent in small or subtle ways.

My mother told me that when she was a girl, in her home in Lithuania, the children were trained to address their parents in the third person, such as "would mother (would she) like to do this or that" and not to directly address the parents, as "would you like to have, or have me do" anything. Already, in such a short time, such family relationships have changed. It was assumed that the family would remain closely involved, sharing responsibility for parents. Ideas of displacing parents to the care of others did not enter the imagination, much less being separated from them for any other reason. But ten years later, the largest human "displacement" of my mother's parents and hersiblings occurred in the cruelest "relocation" in human history: to the gas chambers of Auschwitz, Buchenwald and the other prepared extermination centers in Germany, Poland, and Lithuania.

Sixty years on, not a remnant of my family remains in Lithuania. My own parents lived together in their small house in a small town in western Pennsylvania and passed on, long before any decision regarding their care in their old age became a consideration. Now I am 91 years of age, and I attribute the person I have become to the efforts of my parents, whose sacrifices enabled me to prepare myself for life in the 21st century. I travel between India and across different parts of America to be with each of my three children, my grandchildren and my great-grandchildren. They are happy for my visits, during which time I am cared for most lovingly, even indulged in.

Family is unquestionably an important part of understanding aging, but one should not underestimate the importance of extending oneself into the community and continuing to make new friends. After a certain age, people often settle into a routine with a specific group of people. They resist making new acquaintances and this can mean that as life separates people, they can ultimately become very lonely and isolated. It can be a surprise to some of my friends that at

91 years of age, I still travel the world, and that I lead such an intensive life socially. The reason for this is that I am always looking forward to meeting the people who are waiting to meet me at the end of the long journey. My bags are packed with gifts for all my friends and I have a million stories to tell each of them. It is the relationships I look forward to which gives me the energy to live life to the fullest.

An additional challenge for me has been the excitement of interacting with others far removed from my own immediate surrounding. The Internet provides opportunities for finding answers, and information in areas of literature, environment, health, entertainment, government, news in foreign countries, and pen pals if one is so inclined...Happiness is shared in maintaining a wide circle of friends, locally and abroad via the wonder of e-mail. I start each day by checking up on family and friends, all over the world. E-mail is great way to eliminate long, boring phone conversations. I encourage those who are not so tech savvy to enquire about the easier, more user-friendly options for those of us who did not grow up accustomed to the internet.

For older citizens here, we have an inexpensive (\$100 approx.) WebTVMicrosoft Network), which uses one's own television as the screen, and one keeps the keyboard, unwired), handy on one's lap, even while lying back on one's own bed pillows! It can be a wonderful tool for staying connected to people, and for the physically disabled who cannot step out of the house often, it can provide an access to the outer world which can be liberating. You can surf the internet and look at pictures of the Milky Way, of our tiny green planet floating in space, and you can zoom in on satellite cameras and look at your own neighborhood from up above.

My way has been awareness of the connectedness of the human race, shared understanding of the joy and brevity of our trip on the planet. I have followed this mantra: to not harm anymore, to not harm the planet, to not allow oneself to be harmed. The sentient state of awareness I first learned in New Delhi, at IIC (the Indian International Centre), during a lecture in the garden by Thich Nhat

Hanh, a Vietnamese Buddhist monk. His simple lesson involved a huge basket of oranges brought in and distributed to the men and women in the group. The questioning began: How did these oranges get here? Who planted their seeds? Who watered them? Who plucked them? How did they get to the city? Which hands passed them on and on till it reached our hands? How many journeys has this orange taken before it was peeled and eaten? How does a tiny seed grow and eventually fuse with our bodies and our histories?

Throughout our lives we will eat many oranges. As a child we may experience the delight of the newness of its taste. We may not understand how it became an orange but we can enjoy it. As we grow into maturity, we can lose this awe and delight if we are not mindful of what we are doing. We must bring that orange back into focus again. And how do we shut out all of the noise of our daily lives while eating this orange? We hold it in our hands, and remember its history; focus on what connects us to the human experience of growing and eating oranges. We use this simple act of peeling and tasting a sweet slice of an orange, as a way of remembering that we are human. Like this orange, we are a part of a life cycle, and we pass through many hands and hearts to become who we are. And if we can do this with a simple orange, perhaps we can learn to do this in other areas of our lives, increasing the joy and peace obtained by the simple acts in life. And if we do this often enough, then the very last orange we eat in this life, will be the very sweetest, ripest, and will fill us with the greatest contentment as we pass pieces of it to the child sitting beside us, taking a first bite of life.

Education

Western Education, Psychologized Individualism and Home/School Tensions: An American Example

Andrie Kusserow

This paper stems from anthropological field work in New York City that I conducted for my book *American Individualisms* (McMillan 2004). It is also based on my experiences with various refugee groups in Burlington, Vermont, from 1998-2008. During the past ten years, I have become aware of a degree of tension between the upper middle class pedagogies of psychologized individualism and the home cultures of refugee and immigrant children, which tend to have what cultural anthropologists refer to as a more sociocentric or collectivistic conception of self (a more group-family-ancestor oriented conception of self), and a greater emphasis on hierarchy and respect for elders. In Burlington, Vermont, students in preschool, elementary school and high school from immigrant or refugee backgrounds often experienced a clash of cultures between home and school cultures. For many of these children, this was the first time they encountered the psychologized individualism inherent in upper-middle class Western Educational teaching practices and texts. Insofar as Bhutan has adopted a certain degree of Western educational texts and teaching practices, this tension might also develop between Tibetan Buddhist home cultures and the more Western Psychologized Individualism that is so much a part of Western educational philosophies and pedagogy.

It should be stated at the beginning of this paper that these American upper-middle class schools and teachers also emphasized the importance of learning how to be a member of a group, getting

along with others, sharing and being polite. And yet compared to for example, preschools in Japan and China, this was not as strongly emphasized as the psychologized individualism found in preschools in America (Tobin, Davidson, Wu). Hence, one of Tobin's main points is that "... popular pedagogies based on self-expression need to be critically examined and modified for use with African-American, Hispanic-American, Native-American, and Asian-American students." (1995:247) Hence, despite the importance and use of these non-individualistic values in the lives of these refugees, public schools still emphasize American mainstream individualistic values. (Tyler, Boykin, Miller, et al, 2006)

Discovering and expressing the self in school

American pop psychological conceptions of the true self depict the self as a layered entity, with more superficial or false layers on top of a core, unique, natural self. Rosaldo describes this Western conception of real vs. false self in her article "Toward and Anthropology of Self and Feeling" (1984). An analytic framework that equates "self/individual" with such things as spontaneity, genuine feeling, privacy, uniqueness, constancy, the "inner" life, and then opposes these to the "persons" or "personae" shaped by mask, social rules, hierarchies or social roles is a reflection of dichotomies that constitute the modern Western self.

Running throughout these popular ethnoconceptions of the self are strains of what Deborah Gordon and Margaret Locke, in "Tenacious Assumptions in Western Medicine," refer to as the two major Western traditions of naturalism and individualism. Gordon and Locke note that among other values and assumptions, the tradition of naturalism promotes the following assumptions about the individual: that the individual is prior to society and culture, that nature is separate from culture, that nature is autonomous from society, and that nature is universal, autonomous from time or space. They write "A conviction exists among some that underneath the cultural/social coating, a real, unique, 'deep' natural self exists, one that is 'given' to the individual. Society can sometimes pose a threat to this 'real self' in the sense that to be socially determined is

to be weak, trapped, limited.” The true self, real self, core self and true feelings are seen as the unique and individual bedrock that is natural, true and more real than the more epiphenomenal culture or social role, which can be wiped off the self like frosting on a cake. (See also Turner 1976, Shweder and Bourne, 1984; Curran, 1989; Moffat, 1989).

Inherent in much of Western education is the idea of using one’s education to discover one’s true self, to “learn about who you really are, establish oneself, discover oneself, what you really like, and hence to develop this special quality or uniqueness”. As Shils, states

There is a metaphysical dread of being encumbered by something alien to oneself. There is a belief, corresponding to a feeling, that within each human being there is an individuality lying in potentiality which seeks an occasion for realization, but is held in the toils of the rules, beliefs, and roles which society imposes. (Shils, qtd. in Gordon and Locke, 1988:10-11)

What are these practices of psychologized individualism and upper-middle class pedagogy? What is the conception of self that is implied and socialized in some Western pedagogical practices and texts?

Case Study: Parkside preschool in Manhattan, New York

Upper-middle class soft individualism as I refer to it, emphasized the delicacy of the child’s self, the extreme care, resources, wide canvas and gentle touch needed in helping this unique self “flower” and open up into its full potential. This individualism was characterized by highly psychologized discourses around the self. Parents and teachers of Parkside preschoolers brought to child rearing and education what Tipton (1982) refers to as “psychologized individualism” which stresses the importance of the child’s cultivation of emotions and the development of a good sense or knowledge of the feeling self as crucial foundations for being successful. Talk of autonomy, uniqueness, individuality, privacy, good self esteem and self confidence were intertwined with talk of how important it was for the rights of the psychological self

(emotions, feelings, desires, tastes, personality traits) to emerge and be the best it can be. For most Parkside parents, raising an individualistic child was akin to assisting the child gently in emerging, unfolding, flowering, and self-actualizing his or her own unique qualities, thoughts and feelings. Thus the self of the child was not to be too tight, vigilant, and guarded but be willing to pour itself into the world. It was thought to be a delicate process insofar as too many restrictions, direct commands, rules, conformity, physical discipline might stunt the unfolding of the unique self. One of the most common metaphors used to describe this unfolding process was that of the child as a "flower" in which images of growing blooming and blossoming were invoked.

The teacher and parent were supposed to help the child actualize their own unique qualities, thoughts and feelings through receptivity, listening, warmth, responsiveness and giving the child a wide array of choices of activities. Threats, physical punishment, insults, shaming or negative direct commands were not used.

Perhaps one of the best examples of how children learned that feelings were important, legitimate, and to be listened to was when one preschool had all of the children's "Feeling Books" hanging on clotheslines around the room. On the cover in bold letters it had the name of the child and then in dark bold letters, "MY FEELING BOOK." Inside, each page had a sentence written by the teacher that said, "I feel happy when . . ." and then a blank space where the child could tell the teacher the answer and the teacher could fill this in. On the following pages it said, "I feel sad when . . . " "I feel angry when . . . " Exercises such as these were an attempt to get the children comfortable with naming and identifying their feelings. The lesson was that feelings arise and must not be repressed. They must unfold and speak. Listen to your own feelings; name and articulate them. The other kind of book that was hanging up in the room was a "WHY I'M SPECIAL" book, in which children told the teacher one thing that made them special and different from other children in the class. An art project might involve painting a child's family for a book called, "WHAT MAKES MY FAMILY SPECIAL," or drawings of different self-

portraits, which showed different things that the child liked about himself. In one book called, "WHY I LIKE MYSELF," children drew pictures of all the things they did well and why that made them special. In this way, often artwork was piggybacked with lessons on self-confidence and pride in the special quality of the child's self or family.

Other practices and beliefs of psychologized individualism practiced at Parkside

Saving Face

Part of the unfolding process in Parkside preschools involved helping the child open up through pleasant facial expressions, comments, voice content or body language on the part of the teachers. Efforts were made to present a very kind, gentle, accepting tone of voice and a loving expression on the face. Given the constraints of the classroom (hectic, busy, high noise level), this could not be achieved all of the time, and yet the "lowest" verbal response ever reached was one of disappointment or inattentive flatness in which the teacher was busily engrossed in something else. Emotions such as anger, frustration, disgust or hatred were not supposed to be shown to the children.

The importance of not stifling creativity/imagination

Books in which children filled in already drawn pictures were discouraged. Teachers wanted students to feel that they could draw anything they wanted, and it didn't have to look like the real thing.

A sense of egalitarianism and an attempt to reducing the power differential between teacher and child

Children were often allowed to call teachers by their first name and teachers often bent down and squatted in order to speak to the child at the same level. Children were always allowed to go to the bathroom whenever they needed to. Unless one of the children was in real physical danger, discipline was almost never in the form of a direct command. Rather, a somewhat hesitantly phrased, polite question was used in its place, giving the appearance of giving power

to the child to decide what he wanted to do. Use of a question also created a situation in which the adult was seemingly following the command of the child, a command given in answer to the teacher's question. Asking a question gave a sort of superficial power and authority to the child. "Do you think it was right for you to do that?" "SIT DOWN!" became, "Would you like to sit down now, Jenny?" In getting the children to greet each other, Ellen instead asked them, "What do we say to each other in the morning?" Addressing the group with a question was also common. "You know what I am noticing? Has anyone noticed it, that people are talking without raising hands and interrupting?" The teacher was then "forced" to wait for the child's answer. She could never rush this time, and in this way the child was given a more active role in the discipline process, a period of time when he controlled the situation in silence. Until the child had formulated an answer, the teacher respected this space.

Not censoring a story, letting the imagination go

Children were asked to tell stories about their lives, and when they were obviously fabricated, no effort was made to correct the child. The creation of these stories was an important part of building imagination. Periods during the day when the children could choose whatever they wanted to do was also very important in developing the self. Pieces of art in clear view was a way of instilling pride in the children, teaching them to be proud of their own projects.

Refugee children and home/school tension/discontinuity

Many of the refugee children in Vermont (Somali Bantu, Sudanese, Vietnamese, Hmong) came from homes where respect for elders and subservience of the individual self to the needs of the family, spirits, religious festivals or God were more common than psychologized individualism. The inherent individualism based in Western teaching styles and texts was quite different from the more sociocentric emphases present in the homes of many of these refugees. Somali Bantu and Sudanese family structure is patriarchal, with the eldest male accorded the highest respect. Most cultural anthropologists would agree that the cultural values of Asians often

include collectivism, conformity to norms, emotional self-control, humility, filial piety and deference to authority. (B.S. K.Kim and Omizo, 2005) For many, the self promotion and developing of self confidence promoted by Western teaching methods were considered selfish or obnoxious by their parents. Nor were these refugee children, for example, used to talking about their personal feelings, drawing them and putting them up in the classroom for public display in FEELING BOOKS. Somali Bantu and Sudanese children were used to physical punishment as discipline and hence when a teacher asked them to quiet down by literally asking "Do you think you could quiet down for a little while Deng?" they looked baffled. This was also the first time these African refugee children had been exposed to Western folktales and stories. When teachers asked the students to bring in examples of books and stories from their own cultures, the students felt embarrassed that they had nothing to share. Because some of these students were coming from cultures with largely oral traditions, they could not share stories on a mass scale (by photocopying for classmates, etc.).

For many of the Sudanese, they had spent much of their life in refugee camps in which learning occurred through rote memorization. In class or textbooks, the individual self was not asked to be explored or celebrated. Furthermore, in American schools and textbooks, critical thinking skills are highly valued, in which a student is asked to take an issue and explore its many sides. In one instance, a teacher in elementary school asked the students to explore the issue of whether or not physical punishment is good for children. She then asked them to debate this with their parents, and to take on different stances and practice defending each stance. Hence, when texts ask the student to give their "personal take" or opinion on a particular issue and then defend it, this can be seen by parents as insulting and belittling, as challenging their own authority and knowledge.

Furthermore, the relationship between student and teacher was thought to be similar to that between parent and child, e.g. hierarchical, one of respect, in which the student acknowledged the

greater wisdom, experience of their teacher through obedience and silence and sometimes gaze aversion. When Sudanese students were asked to question their teacher, to promote their own unique opinions and talk about their personal feelings in the classroom, many of them remained silent, feeling that this was inappropriate and out of place given their status as youth. Furthermore, classrooms are quite lively and American teachers expect children to raise their hands frequently, exhibit excited, eager-to-learn behavior and even question the teacher's own statements. This went against what many Sudanese and Somali Bantu children saw as a quiet respect for the teacher and his/her knowledge and wisdom. Among Asian Americans, rather than placing an emphasis on self-expression and talking about one's feelings, emotional self-control is valued insofar as it suggests that holding emotions inside is preferable to expressing them, so that others will not be influenced by or burdened with them. Emotional expression then is not necessarily seen as strength. (B.S.K. Kim et al) Being indirect, silent is often seen as a sign of interpersonal sensitivity, humility and self-control. (Park and Kim, 2008) One of the teachers I worked with at a local elementary school came to me complaining that one of her Vietnamese refugee children seemed depressed and sullen, almost to the point of rudeness. She later learned that the boy was paying her the utmost respect in lowering his head and being very quiet in school.

One Hmong child, when asked to write a story about "who she is as a person" wanted to include the lives of her ancestors as well as where she hoped her soul would rest. She had great difficulty focusing just on herself in the present moment. For her, the boundaries of the self included ancestors, spirits and multiple souls, not just her own physical body.

Many refugee students were not used to the expectation of parental involvement in their child's education. Hence when textbooks ask the child to interview their parent, write a story together, have the parent proofread something or quiz them on math facts they are sometimes hesitant insofar as this might imply questioning the

teacher's authority and knowledge. Furthermore, the value of hard work and helping out with the household chores and home duties was considered by many parents as equally important as the homework the children were given. Many of these children were used to taking on roles (babysitter) and chores that American teachers would find only appropriate for an adult. When one Vietnamese girl said she had to take care of her younger sisters after school and then help with dinner, the teacher told her she should talk to her parents and tell them she needed more time for her schoolwork. When the girl did talk to her parents, they took this as an insult, that the child was no longer caring for the family. So much focus on one individual to the exclusion of fulfilling family duties was seen as wrong. In Vietnamese culture, a girl must learn that as a woman she must observe the 'three obediences' (*tam tong*): to her father as a child, to her husband as a wife and to her elder son as a widow. Boys and men strive to be worthy of *quantu*, a form of respect earned through the display of attitudes and actions which favor dignity over self-interest.

Internet, television, parental role loss and the loss of family time among refugees

For most American upper-middle class children, using educational programs on the internet is a part of being a good student. Learning how to type on a computer, use Google, create a blog and surf the internet is taught as early as first grade. Dictionaries and thesaurus' can now be found on-line and spelling games on the computer are encouraged. And yet many refugee elders or parents feel the children spend too much time on the computer, neglecting family duties and reducing family face to face interaction. Furthermore, many families experience the snowball effect, whereby children will log on to the computer with the intent of using an educational game and end up surfing the web and being lured in by other non-educational games, you tube, Facebook, MySpace. Once they are caught, it is extremely hard to get the child off of the computer, and refugee parents spoke of many computer fights where the child did not want to sit down for dinner, or do a chore, or engage in a

conversation with their parent or siblings. The computer (and television) gives some refugee children the kind of updated modern music and pop culture they are exposed to at school but cannot get at home. It creates a sense of separation from parents who do not live up to this MTV ideal. Studies show that 50% of American teens would rather text than talk. Many children will do an assignment that requires computer work, and while they are on-line, decide to check in with their email, facebook, blogs or chat rooms. These are also places where the parents and elders cannot enter with ease, given their limited English and limited computer skills. Popular images of Hollywood movie stars, wealth and materialism, tends to make their elders and parents appear even more outdated or limited. Another Sudanese child whose widowed father was a leader in the Sudan People's Liberation Army and was now working as a janitor in the local hospital, described his parents as "out of touch with reality" and yet this "reality" was based solely on what his children saw on the internet. Furthermore, after the father came home from work, he wanted to spend time with his children, but instead found them bickering over who could use the one computer instead. He felt insulted to say the least. The internet was not only taking away from family time, a time where he wanted to promote Sudanese values and ideals, but it was making him look "less cool, less modern, less American" than his children wanted him to be. He came to hate the computer, hate the internet and the teachers for all of their required homework on the computer, for the ways in which it "sucked his children away from him even in the home."

In the U.S. children are also encouraged to watch educational television only. And yet similar to the internet, once a child has turned the television on, she or he gets hooked into a whole host of other tv shows they find by "surfing" through the channels. Some refugee families spoke of the tv as becoming the center of their home life. They also spoke of the ways in which it was hard to "pull their children off" the television for dinner or chores or conversation. "When the tv is in the room, no one talks, we just all stare at the tv." What starts out as an attempt to show their child educational

programs often gives way to much time spent watching lower quality shows. It is extremely tempting to check out other channels and programs that are on once the television is turned on, and soon siblings and parents are also hooked into a program that has no educational content whatsoever.

Television and the brain

Two or more hours of TV a day have been linked to fear, aggressive behavior and lower emotional sensitivity. Other research on tv has shown that there are 48 violent acts per hour on children's Saturday cartoons and that heavy t.v. viewers as adults are more insecure and buy more guns, locks, security devices. The American Academy of Pediatrics advises no screen time under ages 2-3.

Paul Foxman, author of *The Worried Child*, notes in his chapter on *The Media and Child Anxiety*, that

Television is a highly stimulating medium that overloads the brain with fast-moving images. In fact, the speed of imagery on television often exceeds the brain's ability to keep pace with it, a situation that leads to stimulus overload and mental shutdown. Unfortunately, viewers often misinterpret this as relaxation and believe that watching television is restful (163; 2004)

Foxman also notes that tv activates the brain's startle response. Frequent activation of this response causes the brain to emphasize basal ganglia development at the expense of prefrontal lobe development. The ability to reason, compute, analyze, think creatively, and regulate emotions can be compromised by excessive television. There is also evidence that excessive tv watching damages the brain development of young children. He writes

For example, there is evidence that television viewing before age seven deprives the brain of developing visual thinking and imagination. By presenting fully formed visual images with sound, television usurps the brain's practice at forming visual imagery to correspond with auditory input. Without these skills, children may become handicapped in learning other skills such as reading and using visualization for problem solving. They may also have less capacity for what has been called

“mindsight” the ability to imagine what others are thinking and feeling.
(163; 2004)

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Gross National Happiness in the Classroom: A Teacher's Thoughts

Meena Srinivasan

Abstract

Inspired by the values embedded in GNH teachers can attempt to practice aspects of the four pillars of GNH (environmental conservation, socio-economic development, preservation and promotion of cultural heritage and good governance) in their classrooms through creating educational activities that promote GNH philosophy. Education is much more than imparting knowledge and skills and the values embedded in Gross National Happiness can promote an ethical and ecological outlook that has the potential to make our world a better place for all its inhabitants. Compassion, patience, tolerance, forgiveness, contentment, harmony and social responsibility must be taught in schools. Teachers must find ways to transmit these values so that they are not just dogmatic assertions. School administrations must make them a priority. This is the only way we can be witness to an era of renewed hope.

If western civilization is in a state of permanent crisis, it is not far-fetched to suggest that there may be something wrong with its education. No civilization, I am sure, has ever devoted more energy and resources to organized education, and if we believe in nothing else, we certainly believe that education is, or should be, the key to everything (Schumacher, 1999, 59).

In the past few months, India has been rocked by numerous bomb blasts fuelled by fundamentalist thinking. New Delhi alone has been the sight of five deadly attacks in the past months injuring more than 100, killing close to 25, causing our school to cancel all fieldtrips for the semester. On the anniversary of Mahatma Gandhi's birthday, I accompanied my teacher, Vietnamese Zen Buddhist

Monk, Nobel Peace Prize Nominee, and founder of the “Engaged Buddhist” movement, Venerable Thich Nhat Hanh, in a walk for Peace from Vijay Chowk outside of Parliament to India Gate. As we walked in silence trying to cultivate peacefulness within so that we can be peaceful in the world, I felt a deep sense of hope even amidst all of the bloodshed and violence my adopted city has faced and my mission as an educator became crystal clear.

The values of compassion, patience, tolerance, forgiveness, contentment, harmony and social responsibility should be taught in schools and modelled by teachers. Teachers must find ways to transmit these values so that they are not just dogmatic assertions and school administrations must make them a priority; this is the only way we can be witness to an era of renewed hope. Educating is much more than imparting knowledge and skills. In the words of Parker Palmer, “to educate is to guide students on an inner journey toward more truthful ways of seeing and being in the world” (Palmer, 1997).

For me, teaching is not a job—it is a calling. I did not choose to become a teacher, teaching chose me and I am an educator because I sincerely believe that it is how I am meant to make the world a better place. Change can be affected at the grassroots level. Teachers are not only a vital link in creating “the change we wish to see in the world” but fundamentally embody this Gandhian vision.

It is crucial that educators place their role as teachers in the larger context of the world situation. When teachers view their vocation as a “sacred task” then their classroom can transform into a community of mutual understanding, love, peace and compassion. Education is much more than imparting knowledge and skills, and the values embedded in Gross National Happiness can promote an ethical and ecological outlook that has the potential to make our world a better place for all its inhabitants.

No matter what our situation is, we all desire to be happy. Our schools teach young people so many things yet they never learn, “how to be happy.” I was first introduced to the concept of Gross

National Happiness in June of 2007 by Sulak Sivaraksa at a Spiritual Ecology conference in London. His discussion of GNH inspired me to reevaluate my educational philosophy and create a unit in the Psychology course I teach and in the "Systems of Belief" unit in the Indian Studies course I teach on "Happiness." The unit consisted of three main activities: The Happiness Lab, Project Happiness, and "Ethics for the New Millennium" by His Holiness the Dalai Lama.

The happiness lab

Sam Shapiro, a teacher at the Athenian School in Northern California introduced me to the Happiness Lab. Students chart moments of satisfaction and dissatisfaction for one week and each night they evaluate their moments of satisfaction and dissatisfaction with the following questions:

Why were you feeling satisfied/dissatisfied?

Did expectations, desires, needs, or demands have anything to do with your feeling?

Did you do anything mentally to either plan a way out of the suffering or fantasize about a more pleasant existence? Did you do anything to distract yourself from feeling fully the dissatisfaction? Did you do anything mentally or physically to try to prolong your state of satisfaction?

After one week, students handed in their examples of satisfaction and dissatisfaction along with a one page analysis detailing "what makes you happy" for my Psychology class and for my Indian Studies class their analysis answers the question: "Did your experiment prove or disprove the Buddha's First and Second Noble Truth thesis?"

Students found this to be one of the most eye opening and meaningful assignments they have ever completed because it gave them the opportunity to really reflect on what makes them happy which is something they rarely have the space to do.

Project happiness

Project Happiness (www.projecthappiness.com) is an initiative that seeks to inspire young people to create greater happiness within themselves and in the world. Students read *Ethics for the New Millennium* written by his Holiness the Dalai Lama and study the relationship between ethics and happiness. An excellent study guide is available at (www.dalailamafoundation.org/members/en/documents/enm-study-guide-2007-09-07.pdf). While reading this text they create films or multimedia presentations on the “nature of happiness.” One of the central tenets of *Ethics for the New Millennium* is dependent origination and the understanding that nothing has an absolute reality, only a present, contingent reality. Teaching dependent origination to students has really opened up their world-view. I call dependent origination the philosophy of “I am Thou” and it resonates well with my students.

Compassion meditation

When we study Buddhism in our “Systems of Belief” unit I lead my students through a compassion meditation. What follows are some excerpts from their responses to the meditation:

We went down to the bottom floor and each person grabbed a cushion and sat down on the floor. Then we were told to clear our minds completely and think of any one person that we know or we’ve seen that is suffering. Then from deep inside our hearts, we were to wish the best for this one person. Then we were to think of all the people in the world and do the same for them. I think this is a really good principle of this religion. When you think like this, you are basically telling yourself that every living person is in a way like you and is basically you. When you show compassion for these people, you are not only helping and caring for them but helping yourself. This philosophy is called “I am Thou.” - Anmol

I liked the idea of love and compassion meaning different things. Love meaning you want to best for someone else and compassion meaning you want to end suffering. I think those meanings are much better than the meanings we all, know them for. You told us to think of someone we

saw or remember or concentrate on sending them a blessing. This was interesting, in most religions people pray to a god, in this case it was like we were gods, but at the same time people. We were feeling for other people and sending them blessings, as if answering their prayers. – Alex

In this field trip to a Buddhist place, we meditated and thought about the suffering of other people. First we sat in a circle and breathed and then started thinking about someone other than ourselves who was suffering. We then offered them hope from our hearts that their suffering would stop. According to Buddhists life is suffering and when we discover the cause of suffering is desire or an expectation we understand that is we let go of our desires and expectations we wouldn't suffer. However, that wasn't the goal of this field trip. The goal was to move on from focusing on your own suffering and notice how much others around you suffer. The goal was to wish for the wellbeing of someone else for a chance. We were asked when the last time we wished for the wellbeing of someone from our hearts were, and honestly I had trouble remembering a time I wished well from the heart for someone other than myself, my family and some of my friends. This really showed me that I should be happy for what I have, because there's someone out there who doesn't have anything, and is truly suffering. – Anya

While I was meditating Ms. Srinivasan whispered to us to think about someone who was suffering and to think about them from our side. She then told us to give them a blessing from the bottom of our hearts. At that moment I felt a sense of pride coming over me because I hadn't done such a deed for someone in a long time which proves how selfish we humans can be. Others who live on the streets and live in hardships every day are satisfied and are happy to a certain degree. Those people are heroes and whom I look up to and am inspired by because they hardly complain. After that Ms. Srinivasan told us to remember the last time we ever helped anyone. Honestly for me it had been awhile because I always tried or attempted to but I never ended up helping my friend or family member. As I thought of this I felt dissatisfied. Even though it was only a blessing it came from my heart and I really care for that person but unfortunately they don't know that. I hope someday they will. This experience has made me more mature and to keep a lookout to help those in need. – Kresha

When we all got into the room we all took pillows and sat on it. Ms. S then explained what the whole place was about. After that we closed our eyes and we sent happy thoughts to one person that we thought needed

them the most. We did this because Ms. S said that we usually think only about ourselves. Which is true, people are very self-centred. I thought of this little street girl that I see every day at the stop light near my house. I had seen her crying the other day and I just couldn't stop thinking about her. It just made me feel really sad. So I tried to send her all of the happy thoughts I had within me. – Scott

Mindfulness in education

The creation of this unit on Happiness and these few activities are just the beginning. Close to 600 educators gathered from all over India for a groundbreaking workshop promoting mindfulness in education led by Renowned Zen Master, Poet, Teacher and International Peace Maker, Thich Nhat Hanh, from September 26-29, 2008 at the Doon School in Dehra Dun. The Doon School was founded in 1935 and it is one of India's premier educational institutions spread across seventy acres of lush greenery in the state of Uttarakhand. The aim of the workshop was to help teachers transform their own lives with the energy of mindfulness with the hopes of transforming classrooms into communities of mutual understanding, love, peace and compassion which are cornerstones of GNH. Mindfulness is increasingly recognized as a powerful tool for students, teachers, school administrators, and parents to promote an individual's sense of wellbeing. The practice of mindfulness decreases stress, attention deficit issues, depression, anxiety, and hostility while simultaneously providing optimal conditions for learning and teaching.

The retreat was entirely experiential and consisted of daily practice of the following: guided meditation, walking meditation, mindful movements, Dharma teaching talks, question and answer sessions, deep relaxation, singing, Dharma groups, mindful eating, noble silence, workshops with classroom applications, and mindfulness trainings. Close to twenty teachers from the American Embassy School attended. This group of teachers has been meeting weekly for 8 years in the tradition of Thich Nhat Hanh. Together they have formed an "Educators Sangha." A series of personal accounts by Sangha members from the American Embassy School, in New Delhi

is available at: <http://www.aessangha.com/>. Sharing this experience was a beautiful fruition after many years of quiet cultivation of mindfulness both individually and collectively.

Educational activities like the Happiness Lab and Project Happiness are ways to transmit these values so they are not just dogmatic assertions and school administration must make this a priority, this is the only way the world will become a better place.

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Conceptualising Education for Constitutional Monarchy System: Meiji Japan's View and Approach

Masanori Kakutani

Introduction

A constitutional monarchy system is being introduced in the Kingdom of Bhutan. It has already been placed on the political agenda. It is a significant reform to change the fundamental structure of the country. Therefore, the GNH policy will be surely affected by the performance of the system. In other words, the GNH policy will not succeed if the system failed.

For the successful introduction of the constitutional monarchy system, a variety of preparations are being made in many socio-political sectors. However, the matter of education does not seem to be central to the discussion.

When looking around the world, there are some pilot examples of considering education in relation to a constitutional monarchy system. Japan in the Meiji period (1868-1912) is one such example. In Meiji Japan's case, education was regarded as *the key* to success in the establishment of the new political system. By examining the Japanese case, some useful implications for Bhutan's attempt may become available.

In the following sections, Meiji Japan's case is explored with a particular attention to its concept of education. Its views and ideas of education will reveal why education became such an important issue. At the end of the paper, some suggestions will be offered to

concerning the role of education in Bhutan’s context of constitutional monarchy system.

Meiji Japan’s political problem

In a sociological sense, Meiji Japan can be understood as a process of national modernisation, just like the current Bhutan is. The start of the process in the Japanese case was the Meiji Restoration (1867) in which the rule of samurai warriors was finally terminated since 1192 and the power and order of Japan’s Emperor and the Imperial family were revitalised. After the restoration, the newly born Meiji government launched a series of major reforms and changes in order to catch up with the Western countries.

The road to national modernisation however was not smooth. Japanese society was unstable due to political arguments and struggles among different groups.

When looking back the chaotic socio-political situation during the first twenty years of Meiji period, three major players can be pointed out. Their political roles and characters can be simplified and summarised in the following way:

Player	Role	Character
Imperial Court	Head of the State	conservative
Meiji government	Leader for modernisation	westernised
People’s Rights Movement	Seeker for democracy	liberal

The Imperial Court with a young Emperor wanted to govern the country with Japan’s traditional Imperial authority. Their idea was conservative and maintained traditional values.

Meiji government was formed by a group of young former-samurais. They understood the difficult situation in which Japan found herself under the pressure of Western powers. Their prime task was to modernise the country as soon as possible, and for this purpose they introduced a wide variety of Western systems and values in Japanese society.

People's Rights Movement was a somewhat anti-governmental movement of those who were attracted to British, French and American liberal ideas and thus actively demanded a democratic system to the government. The movement was also supported by those who did not enjoy the new governance: former-samurais who lost their supreme status and financial standing they had enjoyed in the previous feudal period and also those who could not develop their careers as much as they wished in the new government.

The relationships among the three players were complex. The Imperial Court and the government formed the Meiji regime, and they were on the same side in that sense. But their political ideas were far different. The Imperial Court often intervened in governmental policies, promoting Imperial tradition and values based on Confucian doctrines. On the other hand, the Meiji government and the People's Rights Movement shared common aspects by understanding the necessity of introducing Western thoughts, systems and values. But those in the People's Rights Movement were more radical in thought, and therefore severely criticised the government for its authoritarian leadership. The rest of the nation was conservative, still in traditional manners in thinking and values, and did not always welcome Western-style changes and reforms enforced by the new government. The Imperial Court was close to their feelings.

The Meiji government needed to manage politics between the conservative authority and the people's liberalistic demand. The government had to pursue national modernisation in such a difficult situation.

To deal with this situation, the leaders of the government began seeking a new perspective for governance, in which the nation would be united and start making progress toward modernisation under governmental leadership. Until then, the Meiji government was inclined towards Anglo-American liberal ideas in order to catch up with those countries. But, the promotion of those ideas would only fuel the fire of People's Rights Movement and further upset the Imperial Court.

The governmental leaders came to have a vague idea that such new perspective might exist in German countries. Countries such as Prussia and Austria seemed less advanced than those like Britain though their political systems, with Kings and Emperors, were similar to the Japanese Imperial system. This led the Meiji government to examine these countries for a new idea of managing Japan.

In March 1882, the Meiji government sent a mission to Prussia and Austria. Hirobumi Ito, then governmental leader, himself led the mission and went to those countries.¹ What he discovered there will be examined in the following section.

Lorenz von Stein's view of education

The Meiji government, by the name of the Emperor, announced in 1881 that the Diet would be opened in ten years time. Ito's prime concern was to learn about constitutions and administration for Japan's forthcoming constitutional monarchy system. An important point that should be noted here is that what Ito was looking for was not just technical things and matters of constitutions and administration. He wanted to discover a new perspective of governance upon which the nation of Japan could be firmly founded.

At the beginning, however it was not easy to get an answer to that question. Although he met a number of scholars, politicians and governmental officials he thought worth to listen to, virtually none of them gave him a satisfactory answer. But eventually he met a person who impressed him, Lorenz von Stein, then a professor of economics and administration at the University of Vienna.²

Why Ito was so impressed by Stein can be seen through Ito's letter sent to his colleagues in Japan:

By studying under two famous German teachers, Gneist and Stein, I have been able to get a general understanding of the structure of the state.³ Later I shall discuss with you how we can achieve the great objective of establishing Imperial authority. Indeed, the tendency in our

country today is to erroneously believe in the works of British, French, and American liberals and radicals as if they were Golden Rules and, thereby, to lead virtually to the overthrow of the state. In having found principles and means of combating this trend, I believe I have rendered an important service to my country, and I feel inwardly that I can die a happy man (Ike, 1950, 175-176; Tsuchiya, 1962, 412-413).

In the quotation above, Ito stressed his great satisfaction in finding a new perspective to replace Anglo-American and French “Golden Rules”. Also the quotation suggests that Ito had an idea of re-organising the country by developing Imperial authority.

The next question concerns the new perspective itself. To investigate this, it is necessary to examine what aspect of Stein’s socio-political idea appealed to the Japanese he taught. The following episode is useful to understand this point. It is a part of a proposal submitted by Jun Kawashima, who was a former student of Stein’s and a member of Ito’s mission, to Japan’s then Education Secretary Takachika Fukuoka two months before leaving for Europe with Ito.⁴ The proposal is entitled “Politics for the hundred generations cannot be established without gathering people’s thoughts through education reform”. Kawashima acknowledged that the proposal was based on Stein’s idea.

The episode is as follows (Tsuchiya, 1962, pp. 414-417). One day, Stein asked Kawashima about the general situation in Japan after the Meiji Restoration. Kawashima answered that only a little more than ten years had passed since the Restoration, but added that the government recently made a petition to the Emperor to open a Diet. People were hoping to develop a civilisation like that of the British, French or Americans, and translations of scholars’ books of those countries were the most popular of all foreign literature. Then Stein asked:

I am a foreigner to your country and do not understand your language, let alone your laws and politics. In Europe, it is universities that advance people’s intelligence, gather people’s thoughts and advance the societies. What about your education system? (Tsuchiya, 1962, p. 415)

Kawashima explained that Japan's traditional education was based on Confucianism and other classics. But after the Restoration, Kawashima added, the Japanese sought universal laws of social advance and created Western-style primary, secondary and tertiary schools. In the university, literature, politics, economics and laws were founded on British or French academic traditions.⁵ There were many British and French teachers in the university. The army adopted the French system, and the navy introduced the British system. Only medical knowledge was borrowed from the German intellectual tradition. Kawashima pointed out that the thoughts of the Japanese were therefore becoming similar to those of the British and the French.

Then Stein gave the following words. Although it is quite long, it is worth to quote in order to grasp Stein's idea of politics and education:

It looks as if your country has a desire to establish itself by discarding its own history and tradition in exchange for foreign systems and matters, and hasn't succeeded yet. You can introduce the best possible medicine and other technical matters from abroad, because [technical] facts are the same everywhere. But politics and education are completely different matters. You have to make it clear whose is the principle and whose is the subsidiary, and then decide what you take from the subsidiary. [This point is important] Because the rise and fall of a country depends on its politics and education.... If you study such foreign laws and literature while ignoring your own history and customs, you study them not with reference to your real situations but as empty theories. As was so in France before, the people would fiercely assert people's rights. It is as if you would give guns to children, and therefore your country may face a crisis.... Civilisation and enlightenment are not something you can achieve soon after changing laws and politics.... They can be achieved only gradually in accordance with a country's history and trend, and the results are not necessarily the same as those in other countries'. Britain, France, Germany, Austria and Italy are all different in language and system. So they are in education. It is all because they have established an education system depending on their own customs and manners. Hence one country comes up with one particular education system. This is how they can manage themselves.... Those impetuous ones who do not pay attention to what happened in the past would not discover the history of the British or French system. They just adore the appearances,

and then attempt to decide their own national policy. That is shallow. That is what happens when you do not differentiate the principle and the subsidiary, do know other countries but yourselves and get your priorities wrong.... It is apparent that those who follow the French and assert people's rights could overthrow the state. If you need a proof for what I have said, select some more bright students and send them to the countries in the West to find out how their education systems are so diverse and why their practices are different from their theories. I hope that your country will decide on its education system and national policy by doing so (Tsuchiya, 1962, p. 416).

There can be seen a sharp contrast between then Japanese strategy of national modernisation which Kawashima described and Stein's advice. According to Kawashima, the Japanese strategy was based on a lot of borrowings from the West. The Japanese were also acquiring Western mentality, so Japan's modernisation would be in due course realised, even though the country was struggling at that moment.

Responding to this, Stein gave an extremely different advice. In the above quotation, Stein stresses that a country's fate depends on politics and education; and politics and education should be developed on the basis of the country's own history and tradition. A country can mismanage itself if it eagerly introduces other countries' approaches and methods in such areas. Kawashima made a follow-up comment in his proposal, saying that he had investigated the Western countries' education systems, as suggested by Stein, and discovered that what Stein had said was correct (Tsuchiya, 1962, pp. 416-417). He concluded the proposal by saying that the most important policy for preserving the "public order (*chian*) of the nation" was to reform the education system and establish universities (Tsuchiya, 1962, p. 415).

In terms of searching a new perspective of Japan's national modernisation, what Stein said was straightforward and practical. It accounted for Meiji Japan's socio-political turmoil caused by rushed borrowings of foreign ideas, and also offered a solution to the problem: education in accordance with Japan's own history and tradition. Stein stated definitely that Japan's education should be

Japanese, and this must be how Japan would succeed in organising herself and also starting national modernisation as well. For Ito and other governmental officials, who had been eager for catching up to the West since the Meiji Restoration, highlighting Japanese own customs and tradition in education must be a fresh idea and also a perspective for national modernisation. Ito was therefore able to show strong confidence in the letter to his colleagues after seeing Stein.

In Europe, Ito met another important person who would be able to carry out education reform upon the new perspective. It was Arinori Mori, then Japanese ambassador to Britain, and later regarded as the architect of pre-war Japan's national education (Passin, 1965, p. 88; Morikawa, 1989, p. 39, 59; Marshall, 1994, p. 57). His view of education and politics is examined next.

Arinori Mori's idea of education

Ito encountered Mori in Paris in August 1882 during the term Ito was being given a series of lectures on constitutions, administration and education by Stein.⁶ The two met and talked in a hotel for a few days. At the end, Ito made up his mind to appoint Mori as his Education Minister, when the Meiji government would establish a cabinet system with Ito as the Prime Minister. This chronological order of the events suggests that Mori's view of education and politics was quite close to that of Stein.

What they discussed can be outlined by Sadanaga Koba's writings. Koba was sent to Europe by the Department of Education to study German politics and administration with Ito. Together with Ito, Koba also listened to Stein's lectures.⁷ He described the Paris meeting of the two as follows:

Mr Mori ... visited Mr Ito's hotel and had heated discussions about the future of the State. Mr Mori insisted on the necessity to promote education. He said that it was essential to pay attention to the development and spread of education as the most important condition, if Mr Ito was considering introducing a constitutional monarchy system to Japan.... As a result, Mr Ito totally agreed with Mr Mori and was

convinced that there would be no one but Mr Mori who could accomplish this important task.... Mr Mori excused himself from accepting the offer first, but finally gave in for Mr Ito's persistence in his persuasion. After coming back to London, Mr Mori began making even greater efforts to research education (Tsuchiya, 1962, p. 435).

According to the above quotation, the two discussed education with constitutional monarchy system in mind. It was in this context Mori offered his idea to Ito that education was extremely important for the political system.

Details can be revealed through the correspondence exchanged between Ito and Mori soon after their Paris meeting. Ito's letter (dated 4 September 1882) reads:

... Although there are persons who preach the necessity of basing political progress on education ... I do not find anyone with the vision to establish the foundations of education with an eye to the future stability [*chian*] of the nation... (Tsuchiya, 1952, p. 444)..

Ito continued that he would expect the future Education Minister of his cabinet to possess "the vision to establish its (i.e. education system's) foundations in such a fashion that the common people, in the future, would have their guidelines laid down in their minds while they are young" (Hall, 1973, p. 362).

Responding to the letter, Mori wrote back to Ito (dated 12 September).⁸ His letter was titled *Gakusei hengen* or "A Fragmentary Remark on Educational Administration":

... First of all, we must take under consideration the temperament of our people and their traditional customs; distinguish between the merits and the defects of educational methods in effect up to now; and take measure of what is suitable and what is not. Having got that far, there will be one point which will require our very special attention: namely, that we should conform to the characteristic political heritage of our land...(Hall, 1973, p. 360).

The contents of Ito's and Mori's letters share a similar view of education and politics. Ito's letter expresses that education should be aimed at maintaining *chian* (public order and stability), and

suggests that Mori had the same concern. Ito also insisted that the sense of public stability should be stressed to young people through education. Then Mori's letter points out the necessity of establishing national education on the basis of Japanese people's own customs and tradition. In other words, Mori answered that education for public order and stability could be realised by using Japan's own traditional political heritage. On this point, Mori later asserted that the Japanese tradition of having the unbroken lineage of the same Imperial family was the 'peerless capital' on which Japan's own national education could be founded. It is symbolic indeed that the Imperial University, which was at the pinnacle of Japan's entire education system and established by Mori in 1886, had the word 'Imperial' in its name.

There was some more elaboration in Mori's idea. Although it was 'Imperial' University, the actual role of the school itself was not purposed for maintaining public order and stability. On universities, Stein once said:

There are two kinds of education. One is general education by which the general public acquire general knowledge. The other is higher and specialised education by which the State can develop necessary knowledge and personnel (Tsuchiya, 1962, pp. 422-423).

Similar to this idea, Mori also noticeably differentiated between *kyoiku* (education) and *gakumon* (academic study and research). With this differentiation, Ito's and Mori's concept of education can be described as follows. First of all, the entire education system should be guided by Japan's Imperial heritage. But inside of the system, the Imperial University and other higher schools were different in roles and characters from the rest of the schools. The higher institutions were purposed to contribute to national modernisation. Hence those in the university, for example, studied and researched the latest knowledge developed in the West. On the other hand, the main duty of other schools in the lower segments of the education system was to maintain public stability and order for the nation's constitutional monarchy.

After being appointed as the Education Minister, Mori carried out education reform as he and Ito conceptualised it. Meiji Japan's constitutional monarchy system was founded with the promulgation of the Constitution of the Empire of Japan in 1889, and Mori was assassinated on the very day of the promulgation. Hence Mori could not see how his education system served the country. But surely his education system survived much longer than himself; it was finally discontinued after the end of the Second World War.

Summary and suggestions

This paper has outlined how Japan conceptualised a particular educational idea with constitutional monarchy system in mind. In this respect, the Japanese experience can be suggestive to Bhutan's education policy.

The Japanese case can be summarised as follows. First of all, Meiji Japan was in a process of national modernisation. The Meiji government's prime concern was to modernise the nation. But there was a traditional authority, i.e. the Imperial Court, and their interest was to restore a conservative order and put pressure on the government. On the other hand, there were those in society who were inclined towards Western liberal ideas. They criticised the government severely for its non-liberal leadership and demanded a democratic polity and open society. In addition, the majority of the nation had little idea of why the country started so-called modernisation. Therefore they were reluctant to follow governmental policies. In such a situation, Meiji Japan was stuck in socio-political disturbance, and little could be done for national modernisation. Moreover, the government did not have a clear perspective on how to reform Japan, despite the fact that a constitutional monarchy system was to be introduced and a Diet was to be opened shortly.

The government sent a mission to German countries to study and research constitutions and administration. The mission discovered the idea of using education for socio-political purposes. They

determined that the nation should be educated with the nation's own customs and tradition, especially for the successful introduction of constitutional monarchy. Only universities ought to be directed to work and function for national modernisation. Meiji Japan reformed its education system accordingly, by which the country became able to achieve both national integration under constitutional monarchy and rapid national modernisation.

With the Japanese experience, a variety of suggestions can be offered to Bhutan's education policy. In the following, three points are put forward as a regarding education.

How education is characterised in a socio-political context?

In developing countries, education is often discussed in relation to national economy. Therefore, the acquisition of the latest knowledge and skills borrowed from foreign countries is emphasised to foster good workforce. But economic prosperity does not necessarily mean achieving socio-political stability. The thesis of market economy spreads liberal as well as individualistic ideas among people, and economic discriminations among them can lead to anti-governmental campaign by those who have been inspired by liberal ideas.

In the Japanese case, people were stabilised and integrated within the constitutional monarchy system through education. It is, however, inappropriate to stress such political use of education in this modern time; education is now regarded as an indispensable part of human rights. Still, some kind of treatment through education may be necessary for people to be founded on a specific manner. Then what option can be considered?

What should and what should not be imported from the developed countries?

For developing countries, it is reasonable to introduce useful and usable systems and ideas from outside. In addition, people are continuously exposed to foreign influences in this internet age.

Hence it is inevitable that people's minds change, influenced by the ideas and values of those in the developed countries.

But in Meiji Japan, it was foreign influence that existed behind social and political problems. Stein advised the governmental leaders that the Japanese should establish themselves by learning their own customs and tradition. It is, however, not just a matter of emphasising one's own heritage in education. There are two aspects that should be considered. Firstly, there must be a clear standard of judgement to distinguish what can be imported from outside from what should not be imported. Secondly, the emphasis on one's own customs and traditions must be done cautiously, because such an education policy can reinforce traditional authorities. If not done cautiously, such authorities could start making retrogressive and conservative interventions to governmental policies. Such a reverse effect was observed in Meiji Japan after Mori's tragic death.

Which domestic elements can be used for education?

Ito and Mori agreed to "use" Japan's traditional Imperial system as the foundation of their forthcoming new education system. In Mori's view, the Japanese tradition of having the unbroken lineage of the same Imperial family was the 'peerless capital' with which people's minds could be stabilised through education. History tells that it worked, and it worked too well; the Japanese Empire accomplished national modernisation and then recklessly challenged the West, only to perish soon after the World War II.

What can be used in Bhutan? Because the issue is deeply related to the matter of constitutional monarchy, Bhutan's honourable Royal system would be a logical choice to emphasise. But the emphasis of pre-modern aspects such as Imperial or Royal authority can be regarded as retrogressive in this modern time. The same view can be applied to Bhutan's Buddhist tradition; in the modern idea of education, however, education, especially universal and compulsory education is commonly accepted as being separate from any particular politics or religion.

Then, can the concept of GNH be the alternative? There ought to be possibilities if the GNH concept develops to be the national principle, in deliberate relation with both the Royal and the Buddhist traditions.

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¹ Ito came back to Japan in August 1883.

² Ito was so impressed by him that Ito asked Stein to come to Japan and take an advisory position for the Japanese government. Stein eventually declined the offer after considering his age. He was sixty-seven years old when the two met.

³ Before coming to Vienna, Ito met Heinrich Rudolf Hermann Friedrich von Gneist and Albert Mosse in Berlin. They gave lectures about constitutions to Ito, but Ito wrote to the Meiji government that he was struggling to get a clear idea of what Japan's constitution should be. Then he went to Vienna to see Stein. Hence Ito mentions both Gneist and Stein in the quotation though, it is clearly Stein he was impressed.

⁴ Kawashima was a senior secretary of the Department of Finance and the Department of Foreign Affairs. After becoming a secretary of the foreign office in 1874, he worked at the Japanese embassies in Prussia, Russia and Austria. While staying in Austria, he studied politics and economics with Stein. Tsuchiya suggests that Kawashima acted as a mediator between Ito and Stein. (Tsuchiya, 1962, p. 414)

⁵ The university, which Kawashima mentioned, was Tokyo University. It was later re-established as the Imperial University in 1886.

⁶ The last of the lectures which Stein gave to Ito in Vienna was entirely about educational administration (31 October 1882).

⁷ After coming back to Japan in 1886, Koba became Mori's secretary at the Ministry of Education.

⁸ On their correspondences, see also Kuki, 1984.

Schools in Rural Areas and Gross National Happiness: Endogenous Actions Of Small Communities In Japan And Sweden

Michiyo Kiwako Okuma-Nyström

Abstract

The increasing dominance of the market principle with its stresses on efficiency has brought about educational problems. In Japan and Sweden, schools in small communities have been closed due to the decreasing number of students. The impact of a school closure in a small community is both functional and symbolical, whereby school closure eventually leads the community to its death. The aim of this paper is to present the efforts made by Community K and Villages D and L to keep their school in their community, and to discuss the cases in the framework of GNH.

Introduction

During the last few decades, neo-liberalism and the market principle have increasingly intruded into the field of education. The dominance of the market principle with its stresses on effectiveness, efficiency, and freedom of choice has created the situation where the state responsibilities and controls are decreased (Burbules & Torres, 2000; Stromquist & Monkman, 2000b). Emphases on efficiency in school education have brought about several educational problems. In cases of Japan, for example, small-scale rural schools in under-populated areas have been closed down partly in pursuit of economic efficiency. In such cases, students in the closed schools are forced to commute to another school that may or may not be within an acceptable distance from parents' point of views.

However, the impact of a school closure in a small community that is losing its population is not only functional, but also symbolical (Pestoff, 2005; Woods, 2007). In a rural community, losing a school does not only mean that children and youths lose a place to study, but also that people living in the community lose the centre of the community. Also, it is highly unlikely that families with school-age children move into a community that has no school. Thus, closing a school implies, in a long run, a gradual death of the community, which creates a serious problem in sustainable social development.

When a community faces the depopulation and eventual school closure, the survival and the potential revitalization of the community depend on the quality of the civil society to a great extent. If the people in the community have a strong will to defend the school, they would take initiatives to revitalize the community by mobilizing available resources in the community. There are some sporadic cases that show such efforts made in several rural areas in Sweden and Japan. *Community K* in Japan and *Village D* and *Village L* in Sweden are small communities that have faced the crisis of the school closure. In those cases, the people in the communities defend the school in the community. The school in *Village D* in Sweden was eventually closed down in 2007 after many years of struggles. However, *Community K* in Japan and *Village L* in Sweden prioritize the sustainability of the community, and have been struggling to defend the wellbeing of the students, their parents, and the community.

The aim of this paper is to present the efforts that *Community K*, *Village D*, and *Village L* have been making in order to keep their school in their community, and to discuss the cases in the framework of the philosophy of Gross National Happiness (GNH).

GNH and endogenous development

Those who criticize the philosophy of Gross National Happiness (GNH) often see it as a utopian ideal, and some others argue that happiness is a highly subjective concept, and that it is not possible for a country as a whole to pursue GNH. Although these arguments

are reasonable to some extent, they overlook the basic social foundations that the national state can provide for the wellbeing of its citizens. Some of the examples are the state responsibilities for medical service, free basic education, unemployment support, and so forth (Timonen, 2003). Needless to say, there is a possibility that happiness and/or ideal that the national state pursues and happiness that the individual pursues are not identical. Aoki (in Nandy et al., 2003) terms the former “Big Happiness” and the latter “Small Happiness”. In the welfare state, “Big Happiness” and “Small Happiness” are rather close to each other, or “Big Happiness” tends to adapt to “Small Happiness”. On the other hand, in the globalizing neo-liberalism that emphasizes minimum state interference, effectiveness and efficiency, the elements in the welfare services have gradually been undermined (Clarke, 2004; Stromquist & Monkman, 2000a). This change indicates an increasing gap between “Big Happiness” and “Small Happiness” in the welfare states. In other words, the welfare states are gradually becoming incapable to serve “Small Happiness”.

In Bhutan where the philosophy of GNH is originated, the basic welfare services, such as free basic education and medical service, are established as basic social foundations for GNH. These foundations are based on and supported by four holistic and strategic pillars established in pursuit of GNH. They are:

- Sustainable and equitable socio-economic development,
- Conservation of environment,
- Preservation and promotion of culture, and
- Promotion of good governance (Thinley, 2005, p.9).

What are expressed in these four pillars are sustainability, preservation, and conservation that are challenging the rapid changes and uncertainty that the processes of globalization brought about. Shortly speaking, the basic foundations for wellbeing of people are linked to certainty, stability, and sustainability, although this should not be understood that only static and unchangeable society can provide the citizens with foundations for wellbeing.

The term “sustainable development” is interpreted in various ways, but Hobo (1996) defines it as a reconstruction of the development mode that leads the human society to be sustainable. However, sustainability perceived in the frameworks of “Big Happiness” and “Small Happiness” may differ rather radically. For example, sustainability from the national state’s point of view may be linked to continuous economic development that is backed up by urbanization and technology development, while sustainability for the individual may be to remain in a small village. However, it can be safely said that down-to-earth sustainability of the society is tightly linked to endogenous development. Nishikawa (1989) states that historically speaking endogenous development emerged as an ideology that would remove centralized development and reject materialization of human being. Endogenous development is the self-rehabilitation embedded in the local community based on the localism, which differs from the local development initiated by the national state. According to Tsurumi (1989), localism is the ideology with which people living within certain geographical area together pursue the political, economic, and cultural autonomy rooted in the specific characteristics of the community.

When people in a community face the school closure, the power of the civil society linked with the ideology of endogenous development is a crucial element in the counter action. Here, it is necessary to understand the concept of civil society from various perspectives. It is commonly understood that the civil society consists of various non-state organizations and institutions that are located between the private sphere and the state. Those organizations and institutions may be based on communal collectivities or associative collectivities. The social ties in the communal collectivities are primary ties that are based on, for example, the family, kin, and religion. These primary ties often provide the individuals with stability and direction (Beck & Beck-Gernsheim, 2001; Fromm, 1978; Tönnies, 1955; Wesolowski, 1995). With regard to the associative collectivities, individuals freely join the social ties in their pursuit of own interests and goals, and withdraw from the ties when they so wish. The associative

collectivities are based on cooperative behaviours deriving from individual interests (Fine, 1997; Lively & Reeve, 1997; Wesolowski, 1995).

While the communal collectivities are what the individuals are born with, the associative collectivities are what the individuals choose. Thus, Giddens (1993) characterizes the individual in the communal collectivity as a “subject”, and in the associative collectivity as an “agent”. However, to understand the “subject” as a passive individual, and the “agent” as an active individual, and to link only the latter with the concept of civil society are misleading. In the civil society, high value is placed on political, economic, and cultural participation and accountability (Chandhoke, 1995; Hirst, 1997; Seligman, 1992), which can be observed within both the communal collectivities and associative collectivities. In Japan, many rural communities consist of communal collectivities based on geographically-bound kinship ties that are akin to the primary ties.

Regardless of the different types of social ties, the crucial element of the social sustainability and its associated human wellbeing is endogenous power. Ohashi (2007) introduces a useful concept of “humanware” that supplements the insufficient coupling of hardware and software. She uses the concept of “humanware” in her discussion about the construction of the society that protects natural environment. In this context, hardware is understood as national policies and frameworks that combat the environmental problems, and software as laws and social systems that are necessary to implement the national policy. Ohashi defines the concept of “humanware” as people’s lifestyles and actions through which people realize their passion towards environmental protection. She argues that having established hardware and software is not sufficient to realize the society with environmental protection, and “humanware” is the necessary element.

Community K: A case in Japan

In Japan, the birth rate was about 2,092,000 in 1973, but was about 1,093,000 in 2006. At the same time, the population aged 65 and

above accounted for 20.8 percent of the total population in 2006 (IPSS, 2008), which indicates that Japan has become an aging society. The decreasing birth rate and the feature of the aging society, combined with the long experience of the drift of population away from the countryside, have brought about great challenges in rural Japan. The emergence and the increasing numbers of underpopulated areas have become a serious problem for sustainable social development. The devastation of the rural areas in Japan started in the latter half of the 1950s when the policy emphasis on the heavy industry brought about two impacts on those areas. One impact was the energy revolution where the main energy source was shifted from firewood and charcoal to petroleum, which affected the rural areas with the loss of employment opportunities and income in the production of fire-wood and charcoal. The other impact was that the rapid heavy industry development absorbed labour force from the rural areas (Hobo, 1996).

More recently, in the so-called “great mergers in the Heisei era” during the last few years, many small villages and towns are either merged to form larger administrative units, or absorbed into larger municipalities. Some of the justifications for this reform are to enlarge the size of an administrative unit, to strengthen the financial capacity of the administrative unit, and to increase the administrative efficiency. With those mergers, schools in such villages and towns are often merged as well, which resulted in the closure of many small-scale schools with a small number of students. According to estimation, more than 1,100 public compulsory schools will be closed down during the next few years, many of which are located in rural areas (Yomiuri Shinbun, 2008).

Community K is one of the communities that belong to *Town T* that was an autonomous town in Niigata Prefecture until 2005, when it was merged with a neighbouring city. Even though *Town T* is administratively a part of a larger city today, it is still recognized as a local autonomous district. *Community K* is located in a low mountainous area that is based on the rice production on small-scale rice fields. This community as a whole is the unit of the

neighbourhood self-governing body (“jichikai” in Japanese), and has a chairperson and vice-chairperson of the self-governing body. The population changes in *Town T* as a whole are shown in Table 1 below, which indicates a gradual population decrease. *Community K* itself has 125 households with approximately 320 residents, but the members of only 116 households are actual residents in the community. The rest are living outside the community or stay in old people’s homes and other places. Those who are more than 65 of age in *Community K* account for about 48 percent of the population.¹ Despite the rather small population, it has been quite common that people marry within the community, and the social tie in this community is close to the primary tie.

Table 1: Population changes in Town T²

Year	1995	2003	2004	2005
Population	2,802	2,326	2,285	2,195

Currently, *Community K* has one primary school, consisting of grades from one to six, which has a long history dating back its establishment to 1871. Until 1972, there was a lower secondary school in *Community K*, but was merged with another lower secondary school in the neighbouring *Community O*. As a result, lower secondary school students in *Community K* commute to *Community O* that is about six kilometres away. In 1990, one primary school in the neighbouring and further remote *Community I* was merged with the school in *Community K*, and the school bus was arranged between *Community I* and *Community K*. The primary school in *Community K* today covers the area of three communities: *Community K*, *Community I*, and *Community T* (Sakaino & Hosogane, 2008).

Currently, there are 14 students enrolled in this school, but there are not all successive grades from one to six. There is no student in grade four, and only one student with special needs in grade two. Grades five and six are integrated one class. Among the 14 students, three are from the neighbouring *Community I* that is about 6 kilometres further remote from *Community K*. In 2009, five students

in grade six would leave the school for the lower secondary education, and four students are expected to enter grade one. Thus, there will be only 13 students in 2009 unless a family with school-age child(ren) moves into the community.

This primary school has been supported and fostered by the residents in the three communities (*Communities K, I, and T*) that consist of the geographical area that the school covers. Education at this school is held in tight collaboration with the community people where people go into the school on various occasions, and school students learn in the community. Community people are regarded as “masters” who have rich knowledge, skill, and wisdom. One example is that students grow rice ecologically in the school rice field with the help from the community people. They follow the whole process of the rice production, such as planting the rice, removing unwanted grasses, and harvesting and refining the rice. Finally, students in the fifth and sixth grades go to Tokyo in order to distribute the rice that they grew³, and in the community they invite community people for a dinner with the rice at the school (Sakaino & Hosogane, 2008).

Before *Town T* was merged with the neighbouring city in 2005, discussions on the merger of the primary school in *Community K* and *Community O* started in around 2000 at the town administration level. Since there was the suggestion for the merger of *Town T* with the neighbouring large city, in fear of the loss of town autonomy after the merger with the city, the town mayor wanted to make a decision on the school merger while *Town T* still had its autonomy. The conclusion drawn at the town administration level, without any discussions with the students, parents and the community people, was that there was no way to avoid the school merger. According to Mr. S, a resident of *Community K*, the *Town T* administration planed to build an old people’s home at the school locality after it is closed down. Mr. S, who was then the chairperson of the PTA at the school in *Community K*, protested the rather unilateral decision of the town administration, and many parents followed.⁴

There were two mothers of school children who thought that the school merger was unavoidable, but there were strong voices from fathers that were against the school merger. At the end, the feeling to defend the school became stronger (Sakaino & Hosogane, 2008). Parents eventually insisted that they would build a school on the ground of the Shinto shrine in the community and hire teachers, if the school should be closed down.⁵ Thus, the primary school in *Community K* was defended by the parents and the community people. This does not mean that the continuous presence of the school in *Community K* is perfectly guaranteed. In practice, the kitchen of this school where the school lunch has been prepared by a community member will be closed down in 2009. The lunch then will be prepared in *Community O* and delivered to the school in *Community K*.⁶

For the moment, there is no discussion about the school closure in the near future. The chairperson of the *Community K* self-governing body also stated that this community would defend the school as long as there are students commuting from the further remote *Community I*. These communities belong to the heavy snowfall area, but the snowfall in *Community I* is much heavier than in *Community K* even though the distance is only about six kilometres. For the school students, longer traffic communications from *Community I* would be very difficult during the wintertime, if the school in *Community K* disappears. To defend the school in *Community K* is not only for the students in the community, but also for the students in *Community I*.⁷ Mr. M, the vice-chairperson of the *Community K* self-governing body, stated that the school closure may become true in the future. However, the feeling towards the school closure is not acquiescence, but rather preparedness.⁸ The school has been the centre of the community, and both the chairperson and the vice-chairperson of the self-governing body state that negative impacts of school closure on the community would be quite major if it should happen. On the other hand, Mr. S states that the school closure would not mean an immediate disappearance of the community, and that it would take several decades before the community disappears. He also states that the most important point is not

whether the school remains, but whether the authorities respect the desires and expectations of the community people.

The people in *Community K* see the school as the centre of the community, and the action to defend the school is based on localism. The action may also be seen as a rejection of materialization of human being. When emphasis is put on economic efficiency, arranging a school bus is calculated as cheaper than maintaining the small-scale school. Then the school students are transported certain distances by bus with very little consideration, if there is any, for the climate conditions under different seasons, which can be seen as materialization of human being. The attitude of the people in *Community K*, that would defend the school not only for themselves, but also for the students commuting from the neighbouring *Community I*, is a rejection of materialization of human being.

Village D: A case in Sweden

Village D is a small village that belongs to *Municipality A* in Dalarna County in Sweden. Historically, this village was based on small-scale forestry, but affected by the decline in the forestry and depopulation (Halversson, 1999). The closest population centre (“tätort” in Swedish) *Village I* is located about 25 kilometres away from *Village D*. Table 2 below presents the population changes in *Village I* and *Village D*. As the table shows, compared to the population changes in *Village I*, the population has been rather rapidly and constantly decreasing in *Village D*. *Village D* consists of both the communal collectivity and the associative collectivity in that there are people who moved into the village as adult.

Table 2: Population Changes in Village I and Village D⁹

	1990	1995	2000	2005
Village I	692	815	765	769
Village D	-	92	71	62

Village D had a small public primary school consisting of grades from one to six. The threat of the school closure in *Village D* started

in the 1970s (Halversson, 1999), but when the municipality proposed to close down the school, parents in the village opposed it (Pestoff, 2005). The municipality nevertheless closed down the school on August 10, 1983, without officially informing the parents in advance. On August 11, 1983, one parent living in the *Village D* visited *Village I*, and saw a newspaper headline that said that the school in *Village D* was closed down. It was only 11 days before the school start for the new school year. On the same day, parents were called to *Village I* by the local education authority, and were informed that the primary school in *Village D* was closed down the day before, and that the school students should be sent to the public primary school in *Village I* by school bus (Halversson, 1999).

Since it was expected that the number of the school students would increase in the following years, it was an unreasonable school closure from the villagers' point of view. The parents in *Village D* started a boycott instead of sending their children to the school in *Village I*. Students were educated by the parents at home, but Mr. H was supervising the students' learning. There are several volunteer teachers who came to the village to help the students, and the village received various supports from outside the village, such as financial support, books from the authors, teaching materials, and so forth.¹⁰

This boycott lasted from 1983 to 1989. Meantime students who finished the grade six in the village primary school went on to the lower secondary school in *Village I*. According to Ms. M who later became the school principal in *Village D*, there was no major problem with students' academic competence when they entered the lower secondary school. Although they did not have enough learning in physical education and craft works, such issues were solved easily.¹¹

After six years of boycott and negotiations, in 1989 the government finally accepted that the school should remain in *Village D* as an independent school ("fristående skola" in Swedish) that is funded publicly but is not run by a public body. The school in *Village D* became the first independent school in Sweden. The school

foundation (“stiftelse” in Swedish) was established in *Village D* to run the school. Since then, the number of the independent school has gradually increased in Sweden, and there have been small-scale rural schools that were transformed from the public school to the independent school. Table 3 below presents the number of students in different types of schools in Sweden. The independent school in *Village D* was finally closed down in 2007 due to an unacceptably small number of students in the village and no expected increase in the number.

Here, it is useful to revisit the concepts of hardware, software, and humanware in the contexts of school closures in underpopulated areas. Both in Japan and Sweden as welfare states, hardware (national state’s educational policies) and software (educational laws) to ensure citizen’s equal access to the compulsory education have been well established and followed. However, in the case of small-scale schools in underpopulated areas, the presence of hardware and software only is no longer enough to defend such schools that are regarded economically inefficient. Humanware is crucial in defending such small-scale schools. The case of *Village D* shows that humanware could even affect hardware and software, and the actions of people in the village led to the creation of new hardware and software that allow the establishment of independent schools. These new hardware and software enabled small-scale schools in underpopulated areas to be maintained by non-public bodies, when the public bodies withdraw their responsibilities to run the schools.

Table 3: Numbers of Different Types of Schools and Students¹²

		Number of Schools	Number of Students
2002/2003	Public school	4,565	997,037
	Independent school	538	60,045
2003/2004	Public school	4,470	979,244
	Independent school	565	67,054
2004/2005	Public school	4,381	952,125
	Independent school	576	71,451
2005/2006	Public school	4,306	919,174

2006/2007	Independent school	596	76,145
	Public school	4,256	881,505
2007/2008	Independent school	610	80,712
	Public school	4,185	849,514
	Independent school	635	86,205

Village L: Another case in Sweden

Village L is located in *Municipality S* in the south-western part of Värmland County in Sweden. Traditionally, this area was based on agriculture and stock farming, but large percent of the population today is employed in towns and cities within commutation. This village currently has one public primary school that covers from the pre-school (six-year-old children) to grade six. In 2007, the number of students was 45. The pre-school is one class, but grades 1-3 form one class, and grades 4-6 form another. The population in Parish L is shown in Table 4, although the area that the school covers is not completely identical with the parish.

Table 4: Population in Parish L¹³

	2000	2001	2002	2003	2004	2005	2006	2007
Male	369	365	364	358	356	358	351	355
Female	331	321	320	312	314	314	311	312
Total	700	686	684	670	670	672	662	667

The collectivity in *Village L* may be seen as a mixture of the communal tie and the associative tie, because there are people who moved into the village as adult. It may be characterized as the “communitarian” collectivity (Etzioni, 1993) in which the collectivity is based on shared morality, responsibility and spirit, which is akin to the communal collectivity. This village has an active village development group that aims to act step by step in a proactive manner, not to react after something worrying has happened. This group built an old people’s home in the village which is run by an economic association initiated by the group. One school teacher

stated¹⁴ that the village development group has a plan to increase collaborations between the old people's home and the school. One of the goals of the group is to keep both old people and young people within the village.

According to Dr. R¹⁵ who is the leader of the village development group, there has been a repeated threat of the school closure in *Village L*. There is a belief in the group that a village without school cannot attract families with children, or cannot keep the youths who want to establish themselves in the village and form a family there. Dr. R states that if the school closure becomes the reality, the village development group is prepared to take over the currently public school in *Village L*, and transform it to an independent school.

In this village, the village development actions are future-oriented, and the maintaining the school within the village is seen in the more holistic picture of the village development. The development activities in this village are endogenous and differ from state-initiated development programs. The endogenous development in this village is based on strong localism in that people in this village, regardless of their birthplace, pursue the social self-efficiency in the village.

Summary

The three cases presented above show endogenous actions in civil society that defend the small-scale school in *Community K*, *Village D*, and *Village L*, although the social ties in those communities differ. The collectivity found in *Community K* is akin to the communal tie based on people's historical geographic bond with the community. *Village D* and *Village L* have a kind of combination of the communal tie and the associative tie in that there are members who were not born in those villages but moved in as adult. The efforts made in those communities to defend their school are endogenous, because they are embedded in the local community, and are based on localism.

The fact that the people in the three case communities need to defend their school depicts the gap between “Big Happiness” and “Small Happiness”. On the one hand, the national state or local authorities pursue economic efficiency by closing down small-scale schools. On the other hand, members in those small communities want to defend and keep the small school in their community. One important factor in all three cases is that those schools are at the level of the compulsory education for which citizen’s right is protected by law. As welfare states, both Japan and Sweden established hardware and software that guarantee an equal access to the compulsory education regardless of the place where students live. However, as the nature of the welfare state changes, such a guaranteed access has become less self-evident in the cases of small-scale schools in underpopulated areas.

The case of *Village D* clearly shows that hardware and software alone are not enough for the small-scale schools in underpopulated areas to continue to exist. Humanware is crucial in defending small-scale schools. The case of *Village D* shows that humanware could even affect hardware and software, and the actions of people in this village led to the new hardware and software that allow the establishment of independent schools. Although the school in *Village D* was finally closed down in 2007, in *Community K* and *Village L*, endogenous community development continues, and the school in those communities are situated in the endogenous development.

Considering the philosophy of GNH, the national state may or may not be able to provide basic welfare services for happiness and wellbeing of its citizens. Regardless of the responsiveness and competence of the national state, it may be stated that endogenous development initiated by healthy civil society is an important key and necessary element in the pursuit of GNH.

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¹ Interview with Mr. M, the chairperson of the *Community K* self-governing body, held on July 15 2008 at the public hall in *Community K*

² Source: 1995: www.stat.go.jp/data/kokusei/1995/08-16.htm; Others: www.maff.go.jp/hokuriku/rural/kouryu/jirei02.html

³ Interview with Mr. M held on July 15 2008

⁴ Interview with Mr. S, held on July 29 2008 at the primary school in *Community K*

⁵ Interview with Mr. M held on July 15 2008

⁶ Interview with Mr. S, held on July 29 2008

⁷ Interview with Mr. M held on July 15 2008

⁸ Interview held on July 15 2008 at the public hall in *Community K*

⁹ Statistics Sweden: www.ssd.scb.se/databaser/makro/SaveShow.asp

¹⁰ Interview with Ms. M., former school principle of the independent school in *Village D*, held on June 14, 2008, in the school building in *Village D*

¹¹ Interview, June 14, 2008

¹² Adapted from National Agency of Education: www.skolverket.se/sb/d/1638#paragraphAnchor0

¹³ Statistics Sweden: www.ssd.scb.se/databaser/makro/start.asp

¹⁴ Interview held on May 7, 2008

¹⁵ Personal communications October 27, 2007; September 24, 2008

Living Standard

Shift in the Measures of Quality of Life viz-a-viz Happiness:

A Study of Phongmey Gewog and Trashigang Town in Eastern Bhutan

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Abstract

The measures of Quality of life are very similar to the measures of happiness for the people. The objective of the present study is to find out the variations in the different measures between the year 2000 and 2005. The first survey was conducted in the year 2000-2001 on the residents (n=406) of Trashigang town and Phongmey gewog and a follow up study was carried out at the same places (n=330) during 2005-2006. The sample includes farmers, government employees, business owners, priests, and housewives. The study compares the variations on the opinions as to the importance of certain factors (neighbourhood, spiritual activities, respecting others, relationship with local authorities, awareness of local laws, TV, newspapers and radio, family planning measures and environment protection) and the satisfaction level as to these factors. The satisfaction level gauged on the 5 point Likert scale (1 being Very Satisfied and 5 being very dissatisfied) on the factors like development plan, education and medical facilities, transport, sanitation and water, police services, electricity etc. is studied to find out the shift during the given period. It is found through the study that the satisfaction level is going down over time which questions the general hypothesis that with the improvements in the facilities and services (electricity, water, sanitation, transport, public utilities etc) the satisfaction level should also improve.

The paper discusses the issues involved in quality of life viz-a-viz happiness with the help of available literature as well as the policy documents of the government of Bhutan.

Bhutan has introduced the world with a concept of Gross National Happiness (GNH). There have been works carried out in the country to find out its variables, ways of measuring GNH and sensitizing the residents about this noble philosophy. *GNH is an attempt to define quality of life in more holistic and psychological terms than Gross National Product.*¹ The whole philosophy is based on the basics of quality of life (QOL) of the people. Better QOL is supposed to improve happiness level of people as well. This is the main premise on which the paper is based. There have been many contributions in the area of welfare economics about the public policy being initiated to look after the welfare or wellbeing of the people. The nations have invested hugely on building infrastructure in order to provide better services to its residents. This has helped the nations to improve their development and growth parameters. This development is primarily based on human development and then leads to economic development. As human capital or population in general, is the back bone of any country's economy, it becomes important to study their satisfaction level. Their perception about the importance of public services, laws of the land, environmental issues, spiritual activities etc is also an area which relates to their QOL.

The resources and allocations are all directed towards the wellbeing of the people but still there are people who are not able to reap the good fruits and who are not aware of real development. Their understanding of development is much broader and better in many ways than that of so-called developed and powerful groups of the society. Their level of happiness and contentment, their sense of understanding, and the mind with the least expectations speaks volumes of their goodness as human beings.

The satisfaction of people, QOL, human development or population quality are very closely related to the concept of Gross National Happiness (GNH), which is one of the guiding principle of economic, social, and political planning in Bhutan.

A great deal of consistency exists between the Bhutanese concept of GNH and human development...The pursuit of GNH calls for a multi-dimensional approach to development that seeks to maintain harmony and balance between economic forces, environmental preservation, cultural and spiritual values and good governance.²

The Royal Government of Bhutan (RGOB) has been targeting to provide better facilities and services to the people to ensure their development through its Five Year Plans and other planning instruments. The importance of family values and various issues like protection of countryside and environment, the role of newspaper/s, radio, & television, laws of the land and taking part in spiritual activities, provision of public utilities and services, infrastructure, etc., play important role to satisfy the citizens of a nation. The premise of QOL is derived theoretically from human needs (Figure 1) and once these needs are fulfilled it results into Subjective Well-Being (SWB). The objective aspect of QOL can be taken care of by looking around the economic and social indicators as well as through human development index. However it is important that the satisfaction level of people is studied from QOL perspective which can provide some policy guidelines which can further be used to improve satisfaction.

Table 1

	PM					
	2000		2005		total	
Age in years	No	%	No	%	No	%
<25	16	7.77	48	26.23	64	16.45
26-35	35	16.99	38	20.77	73	18.77
36-45	56	27.18	45	24.59	101	25.96
46-55	46	22.33	29	15.85	75	19.28
56<	53	25.73	23	12.57	76	19.54
	206	52.96	183	47.04	389	100.00
AV Age (years)		46.14		37.43		41.78
Male	127	61.65	80	43.72	207	53.21
Female	79	38.35	103	56.28	182	46.79

Table 1 continues...

	TG					
	2000		2005			total
Age in years	No	%	No	%	No	%
<25	30	15.00	64	43.54	94	27.09
26-35	92	46.00	42	28.57	134	38.62
36-45	54	27.00	20	13.61	74	21.33
46-55	21	10.50	14	9.52	35	10.09
56<	3	1.50	7	4.76	10	2.88
	200	57.64	147	42.36	347	100.0
AV Age (years)		34.965		30.57		32.77
Male	141	70.50	96	65.31	237	68.30
Female	59	29.50	51	34.69	110	31.70

The literature on happiness has dealt in detail with different components of QOL as Veenhoven (1991) put it (on happiness) - *the degree to which an individual judges the overall quality of life favorably*. Further he describes four qualities of life viz., Livability of environment, Life-ability of the person, Utility of life and Satisfaction. (Veenhoven 2000) (Figure 2). This description of qualities of life is not related to physical quality of life unlike its relationship with 'human needs' and 'SWB'.

Table 2

Factors/ Variables	Mean Values				SD			
	TG		PH		TG		PH	
Importance of	2000	2005	2000	2005	2000	2005	2000	2005
Neighbour- hood	1.37	1.30	1.30	1.11	0.60	0.84	0.55	0.40
Spiritual activities	1.67	1.65	1.40	1.42	0.78	1.16	0.85	1.02
Respecting	1.38	1.58	1.46	1.16	0.69	1.11	0.70	0.67

Shift in the Measure of Quality of Life viz-a-viz Happiness

others								
Relation with local authority	1.86	1.96	1.86	1.70	0.70	1.49	0.89	1.44
laws awareness importance	1.33	1.66	1.36	1.47	0.63	1.41	0.68	1.42
TV importance	1.94	2.10	2.21	2.11	0.97	1.32	1.13	1.60
Newspaper & radio importance	1.35	1.48	1.62	1.27	0.62	1.02	1.00	1.19
family planning importance	1.25	1.52	1.39	1.27	0.54	1.21	0.72	1.19
environment protection importance	1.22	1.43	1.37	1.21	0.52	1.02	0.68	0.84

Table 2 continues...

Factors/ Variables	coeff SD				1+2 (Very Imp+Imp in %)			
	TG		PH		TG		PH	
Importance of	2000	2005	2000	2005	2000	2005	2000	2005
Neighbourhood	0.44	0.64	0.43	0.36	95.50	93.79	97.52	97.78
Spiritual activities	0.47	0.70	0.60	0.71	89.89	82.39	93.48	91.48
Respecting others	0.50	0.70	0.48	0.58	93.91	82.19	95.54	100.00
Relation with local authority	0.38	0.76	0.47	0.85	85.71	70.37	86.46	85.63
laws awareness importance	0.48	0.85	0.50	0.97	95.58	80.71	96.00	94.05
TV importance	0.50	0.63	0.51	0.76	74.87	70.63	69.39	71.78
Newspaper & radio importance	0.46	0.69	0.62	0.94	94.21	88.11	83.87	97.11
family	0.43	0.80	0.52	0.94	98.42	85.92	95.16	95.43

planning importance								
environment protection importance	0.42	0.71	0.50	0.70	97.40	89.58	94.71	97.21

The Big-Push theory as propounded by Rosenstein (1943) and the Balanced Growth Theory by Hirschman (1958) provide models to be followed for improving economic growth and subsequently developing a nation. But to poor countries, the main concerns are always identified as health and hygiene, education, social security, poverty alleviation, gender related issues, people participation and empowerment etc. The trade-off between quantity and quality of life has been studied by Jones (1977) with the help of health status indices. The study is based on the indices which allow an increase in the quantity of life to offset decrease in average health status. The impact of health on happiness also has been studied from philosophical angle.

Well-being has been taken as a very near variable to QOL. A paper by Grinde (1996) looks into a biologically-based understanding of what constitutes the QOL. Brotchie (1978) related the concept of QOL with focus on freedom of choice and diversity for urban population and community. Further, Falkenberg (1998) studied Scandinavian and American cultural view on three basic elements of QOL which are social equity (including issues like virtues, justice, fairness, equal moral value, human rights, resource ethics etc), efficiency (including liberty, pursuit of happiness, individual choice, exit and voice options, etc.) and freedom (including liberty, pursuit of happiness, individual choice, exit and voice options, etc.). The argument concentrates on social equity being a driving force for efficiency and freedom of choice.

The present work is based on the background that happiness is derived from satisfaction, as Frey & Stutzer (2002) puts it – *happiness is not identical to utility, but it well reflects people's satisfaction with life.*³ Hence once we are able to assess satisfaction, we could be able to project happiness level of the people. As discussed earlier it is closely related to QOL as well.

Objective

The objective of the paper is (1) to study the shift in the measures of QOL from the year 2000 to 2005, and (2) to compare the status of QOL in Rural and Urban settings.

Method

The data is collected through opinion survey conducted during December 2000-March 2001 and December 2005-March 2006. The data was collected from Trashigang (TG) representing urban population and the villages under Phongmey (PM) gewog to represent the rural population. Random convenience sampling was used to select the respondents both from TG and PM.

There were 21 items related to satisfaction and importance and respondents were from different individual characteristics. Individual characteristics such as gender, age, education, marital status, occupation and place of stay were included in the first part of the schedule. Apart from these 21 items, questions as to 'whether they are aware of the development plan of the government, whether their lives are peaceful and comfortable, whether they think that they are happy family, were put towards the end. 5 point Likert scale was followed, 1 being very satisfied/important and 5 being very dissatisfied/not important at all. Another option 6 was also there which was to be selected if they 'did not know' the answer. The data was recorded in MS Excel work sheets and is analyzed on the basis of Mean, Standard Deviation and coefficient of standard deviation. Further, the satisfaction level is assessed by adding the option 1 (very satisfied/important) and 2 (satisfied/important), which indicates the percentage of people which were satisfied with the services and utilities.

Results

The data is analyzed on the basis of the information provided by the respondents in the given questionnaire (schedule). Their individual

characteristics are discussed first and then the importance and satisfaction level is analyzed.

Demographic/individual profile

The respondents were between the age of 16 and 93 years. The average age of TG respondents was 33 years as compared to 42 in case of PM respondents. Total valid samples were found to be 736 which included 406 for the year 2000 and 330 for the year 2005. 49% (n=200) were from TG in 2000 and 51% (n=206) were from PM whereas in 2005 this was 45% (n=147) and 55% (n=183) respectively. The respondents were divided in 5 age groups as below 25 years, between 26 to 35 years, 36 to 45 years, 46 to 55 years, and 56 years and above. TG respondents consisted of 39% (highest) between the age group 26-35 whereas at PM 27% (highest) were between 36-45 age group. Overall 60% were males and 40% were females, however there were more female respondents from PM (47%) than TG (32%). Single respondents were more from TG than PM.

Importance of different services & factors

There were 9 items in this category which included the questions related to the perception of the respondents as to the importance of neighborhood, spiritual activities, respecting others, relationship with the local authorities, awareness of the laws of the land, television, news paper and radio, family planning measures, and environment protection. It is observed that PM had a better mean value (1.30 <2000> and 1.11 <2005>) than TG (1.37 <2000> and 1.30 <2005>) so far as the importance of neighborhood is concerned. It shows that relatively, PM residents thought that having a good neighborhood is more important as compared to the residents of TG. There seems to be no two opinions about having a good neighborhood both at TG as well as at PM during both the surveys. As far as their opinion about the importance of spiritual activities is concerned, PM residents thought it to be more important than the residents of TG and at both the places it had an uptrend in their mean from 2000 to 2005 which reflects the opinion that with the time spiritual activities are becoming less important. There was a

significant difference as to the importance of respecting others. At TG with the time the importance of respecting others was going down however at PM it was going up. There was a downtrend for the people thinking it to be important at TG (94% in 2000 and 82% in 2005) as against an uptrend at PM (96% in 2000 and 100% in 2005). This could be because of urban impact on society at TG. The importance given to the relationship of common people with the local authorities was found to be same at both the locations in 2000 (mean 1.86) but in 2005 at TG it became less important than 2000 whereas at PM it was found to be more important than 2000. The importance of being aware of the laws of the land was found to be more at TG than PM and interestingly it was becoming less important with the time both at both the locations.

Until 1998, TV viewing was banned in Bhutan, however there were many video libraries in the urban areas to make available entertainment software like Video cassettes and CDs. But Bhutan was away from the telecasted information. When TV viewing was publicly allowed in 1998, the residents were happy and its impact on society was being discussed and debated in the local media. The mean values at both the places in both the times was highest amongst all the factors which indicates that the residents both urban as well as rural, thought it to be least important amongst all other factors. However the percentage of people finding the importance of owning a TV was on a downtrend (75% to 71%) at TG as compared to PM where it was having an uptrend (69% to 72%). Though the residents at PM were not having wider electricity coverage in 2000, still people were aware of TV and thought that it is important to own one. The size of the respondents giving importance to news paper and radio was more as compared to TV at both the places in both the years. It could be because of the slow growth of TV network in the eastern Bhutan between 1998 and 2005. There were inconsistent views so far as the opinion of the respondents regarding family planning measures is concerned. Contrary to the general belief that urban people are more aware about family planning measures, and thought may be more important than their counterparts from the rural settings, it was found that in 2005 at PM

respondents thought it to be important whereas as compared to TG respondents, though in 2000 it had just the reverse views.

Bhutan had 72.5% forest coverage (RGOB 2001) and the highest legislative body, i.e., the National Assembly had mandated that the country should maintain at least 60% of the land area under forest cover for all time to come.⁴ Environment protection was also one of the highly important factors for the respondents especially at TG where amongst all the factors it was thought to be most important factor in 2000. It was found to be third most important factor amongst 9 factors by PM residents in 2000. Its awareness in villages seems to be improving as it became more important at PM in 2005 than 2000 whereas at TG it became second most important factor in 2005. Still it shows that the RGOB has been quite successful in providing awareness about environment protection for both urban as well as rural population.

Satisfaction level with different services

This section had 12 items covering satisfaction level of the respondents as to their neighborhood, development plans, public services and utilities, education facilities, public transport system, police services and crime prevention measures, medical facilities, electricity, housing status, sanitation and water, newspapers, radio and TV, and leisure activities.

Table III

Factors/ Variables	Mean Values				SD			
	TG		PH		TG		PH	
Satisfaction								
Neighbour- hood	1.63	1.77	1.52	1.45	0.66	1.21	0.72	0.81
Development plan	1.73	2.14	2.02	1.73	0.65	1.75	0.93	2.54
Education	2.04	1.75	1.54	2.33	1.24	1.19	0.94	1.54
medical facilities	2.22	1.59	1.52	1.83	1.30	1.25	0.66	1.29
Sanitation & water	1.74	1.98	2.11	2.20	0.86	1.35	1.08	1.24
Local public services & utilities	1.94	2.04	1.89	1.90	0.75	1.27	0.83	1.16
Police services & crime prevention measures	1.60	1.96	1.75	1.58	0.75	1.38	0.73	1.48
Public transport	2.07	2.03	2.03	2.32	0.93	1.29	0.94	1.61
Electricity	1.79	1.53	na	1.49	0.98	0.96	na	1.03
Housing	2.12	2.19	2.06	2.38	0.98	1.35	0.93	1.30
Newspaper & Radio, TV	1.77	1.83	2.00	2.03	0.70	1.30	0.95	1.29
Leisure activities	1.56	2.13	1.49	1.86	0.74	1.56	0.65	0.94

Table III continues...

Factors/ Variables	coeff SD				1+2 (Very Imp+Imp in %)			
	TG		PH		TG		PH	
Satisfaction								
Neighbour- hood	0.41	0.68	0.47	0.56	94.36	81.56	95.59	90.66
Development plan	0.38	0.82	0.46	1.47	94.08	62.50	81.05	100.00
Education	0.61	0.68	0.61	0.66	78.19	80.85	94.85	64.12
medical facilities	0.59	0.78	0.44	0.71	72.82	84.29	94.50	79.66
Sanitation & water	0.49	0.68	0.51	0.57	89.29	72.14	78.57	74.30
Local public services & utilities	0.39	0.62	0.44	0.61	81.72	67.63	86.60	77.84
Police services & crime prevention measures	0.47	0.70	0.42	0.94	90.96	72.86	87.66	89.76
Public transport	0.45	0.64	0.46	0.69	76.96	73.57	82.47	64.88
Electricity	0.55	0.63	na	0.69	86.98	85.42	na	93.14
Housing	0.46	0.62	0.45	0.55	75.90	63.64	80.00	57.95
Newspaper & Radio, TV	0.40	0.71	0.47	0.64	86.41	75.35	77.08	71.35
Leisure activities	0.47	0.73	0.44	0.50	89.53	67.65	95.35	86.29

The percentage of satisfied people with their neighbourhood had a downtrend between the years 2000-2005 both at TG and PM, though the mean values at PM had gone down during these years indicating improvement in their satisfaction level marginally. The satisfaction of respondents at PM as to the development plans was quite high as compared to TG respondents where there was a downtrend in their satisfaction level during the given period. The awareness about the plans was quite high both at TG as well as at

PM. For the basic facilities of education and health, TG residents were found to be more satisfied than PM residents. The percentage of people satisfied with education and medical facilities was found to be decreasing in case of PM whereas it was increasing at TG. In the year 2000 TG residents' level of satisfaction as to medical facilities was least among all the factors; however it had improved significantly in the year 2005. On the other side at PM the satisfaction level had a downtrend both in case of education as well as medical facilities. The trend as to the satisfaction level with water and sanitation facility was similar both at TG and PM it was going down and the percentage of people satisfied also was going down. However, TG residents were found to be more satisfied with these facilities as compared to PM residents. The satisfaction with local public services like banks, post offices, telephones, and other utilities like public toilets etc was found to be better for PM than TG in both the years; however at both the locations it was going down with the provisions of better services which was quite unexpected. So far as availability of these services is concerned, TG certainly has better services than PM. Still TG had lower satisfaction level. It could be because of the expectations people had at TG. PM residents were having better satisfaction level as to the police services and crime prevention measures adopted by the government as compared to the residents of TG in 2005 whereas in 2000 it had just the reverse trend. The public transport system in Bhutan is not yet developed and still only few public buses are operating on the designated routes. In the last 5-6 years, good numbers of private taxis are operating which has made things easier for the people. However it is important to mention here that ownership of personal vehicle is very common in Bhutan. And it could be assumed that there is a cause and effect relationship between transport facility offered and ownership of vehicles. There was an improvement in the satisfaction level of people as to public transport system at TG, though it was going down at PM. The percentage of people satisfied with public transport was also on a lower side as compared to many of the factors both at TG as well as at PM.

In general, Bhutan does not have problem of electricity as they have huge potential of hydro-power and the government has recognized it as one of the most important potential. Bhutan exports electricity to the adjacent states of India. And for the economy of Bhutan power generation is one of the most important sectors. It was also reflected in the satisfaction level of the people as it was found to be highest amongst all the factors at TG in 2005, even in 2000 it was having relatively better mean value than many of the other factors. The position as to PM was very different as in 2000 most of the respondents expressed that in their villages there was no electricity, however it was witnessed that during 2000-2005 there were initiatives taken by the government to provide electricity in the villages falling under PM geog. Hence in 2005 PM residents expressed very high satisfaction with electricity as 93% of the respondents were satisfied with it.

The satisfaction level with their housing status was relatively low as compared to other factors both at TG and PM. At PM in both the years it was one of factors with which people expressed lowest satisfaction. In 2005 only 58% of the respondents were satisfied with their housing status and it was much better in 2000. At TG as well the satisfaction level of the residents was having a downtrend. The satisfaction level as to media (newspaper, radio and TV) services provided, was found to be better at TG than PM in both the years. And at both the places there was a decline in the satisfaction level though marginally. Leisure time activities are found to be very important component of assessing quality of life or life satisfaction of people. PM residents were found to be better satisfied with their leisure time activity as compared to the residents of TG and as in case of media; in case of leisure activities also the satisfaction level was observed having a downtrend with time. Playing archery or *khuru*,⁵ weaving, and praying were observed as common leisure time activities for PM residents whereas at TG it were playing games, watching TV, socializing and reading.

Table 4

	2000			2005			2000		2005	
	Mean	SD	coef	Mean	SD	coef	Yes	No	Yes	No
Life comfortable / peaceful										
TG	1.94	0.89	0.46	1.63	1.37	0.84	92	8	80	20
PM	2.95	0.98	0.33	2.60	1.21	0.46	92	8	84	16
happy person/ family										
TG	2.00	0.86	0.43	1.65	1.39	0.85	93	7	83	17
PM	2.91	0.93	0.32	2.60	1.23	0.47	90	10	86	14

The respondents were asked whether their life was comfortable and peaceful and do they think that they are a happy person and family the trend of the results was quite similar (Table 4). As in case of many factors mentioned above the size of people giving affirmative answer went down during the given period. However when we look at the mean values it shows that the number of respondents thinking that their life was most/very comfortable and peaceful and they had high level of happiness and it had an uptrend.

Major findings

On the basis of the above results, following major findings are drawn -

- Having good neighbourhood was found to be consistently having lower mean value which indicates they thought it to be more important than other factors. Relatively it was more important for rural residents as compared to urban residents.

- Least importance was given to own a TV both by urban as well as rural respondents in both the years.
- Protecting environment was found to be very important for both urban as well as rural population.
- Highest satisfaction level was observed (amongst the factors given) from the leisure activity in 2000.
- The satisfaction level with electricity services provided was observed to be highly important factor (amongst the factors given) both for urban as well as rural population.
- Least satisfaction level was found from the medical facilities by urban residents whereas it was sanitation and water facilities having lowest satisfaction at rural setting.
- Urban residents in 2005 were least (amongst the factors given) satisfied with development planning of the government for their areas.
- Rural residents ranked least satisfaction from housing status as compared to other factors in 2005.
- The satisfaction level with housing status and public transport was relatively lower as compared to other factors during all the years in both areas, rural as well as urban.
- Urban residents were using their leisure time for socializing and/or playing whereas rural residents were using it for spiritual activities and/or weaving.

Discussion

Bhutan has been placed 8th in the World Map of Happiness (White, 2006) based on the parameters of life expectancy, access to education, GDP per capita and life satisfaction. This shows that though Bhutan is lagging behind in GDP (an indicator of economic growth) and Human Development Index, but on the basis of happiness of people it enjoys much higher status as compared to many developed nations. A fact sheet published by RGOB (2006)

also records very high percentage of people enjoying happy status of life. This is based on 3 point scale (1 being very happy, 2 being happy and 3 being not very happy). As reported 45.2% people responded to 1, 51.6% to 2 and remaining 3.3% choosing 3. This data is based on the sample of 126115 persons which can easily be taken as representing the status of the nation. This also convinces that the development mantra called 'Gross National Happiness' has really worked well in the nation.

This present work also more or less, focuses on this aspect. On most of the items the responses are very positive resulting in very high level of satisfaction. Neighborhood was taken as one of the most important variable and the satisfaction level with existing neighbors was also found to be higher than many other variables similarly as electricity service. Environment protection was also in the top priority of the people on the basis of the importance of its conservation. Though it was observed that most of the people were involving themselves in some spiritual activities during their leisure time, however respecting others, importance of media and family planning measures were thought to be more important by relatively larger respondents. TV ownership was given least importance. Another important concern is housing with which relatively the satisfaction level was low. The satisfaction level was higher for medical facilities as compared to education in 2005 whereas in 2000 it was just reverse.

On the basis of the satisfaction level of the people it could be concluded that they are happy people and their happiness level is very high as most of them feel that their life is comfortable and peaceful and they are happy person and happy family. The government has been quite successful in implementing their programs with a focus on GNH rather than concentrating on just improving economic indicators. However, on many of the parameters it has improved, access to primary health care is over 90%, access to safe drinking water in rural areas is around 65%, more than 90% children are immunized, life expectancy at birth has gone up to 66 years.⁶ Bhutan attained the status of "Normal Iodine

Nutrition Country” becoming the first South Asian country to do so.⁷ Bhutan has been identified as MDG fast-track countries on the basis of governance qualification.⁸ *Bhutan has been one of the most successful countries in South Asia in its development and delivery of social welfare* (Rutland, 1999). *It (Bhutan) has enjoyed a strong growth record over the last decade through a combination of sound macroeconomic management, good governance and rapid development of hydro power resources.*⁹ As discussed in a paper by Shrotryia (2004), the development philosophy called GNH, can teach lot of lessons to the other nations which might have better economic conditions and so called much favorable economic indicators. *Bhutan can lead the breed of the GNH economists who can tell the world that even within lot of constraints and having been under pressure, it can sustain its developmental process. GNH is a phenomenon which has transpired the citizens of this kingdom to put forth their efforts to maintain peace, tranquility and sovereignty* (Shrotryia, 2006). The general perception is that economic growth takes care of human development and human development takes care of the happiness of people. This is a traditional approach to guide public policy in a state. With the lessons from Bhutan it could be concluded that if this cycle is reversed and the public policy is initially targeted at providing satisfaction (happiness) to the people, it could take care of human development which further would influence economic growth positively. Bhutan has basically experienced it. The time would prove it with more success stories and evidences brought out from this unique kingdom which is marching ahead slowly but steadily in order to sustain the fruits of development. The switching over from a monarchy to a democratic sovereign nation and moving towards more democratic process of decision making has won the confidence of its residents and their happiness level is on the high. The nation has a new king whose youth would guide the future destiny of this heavenly abode and teach many a lesson to sustain and survive successfully by maintaining good relations with its neighbours without making a compromise on its development mantra.

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Endnotes

¹ http://en.wikipedia.org/wiki/Gross_National_Happiness retrieved on 20th Sept 2008.

² See BNHDR, 2000, 20.

³ See Frey & Stutzer, 2002, 12.

⁴ See RGoB, 2002, 30.

⁵ *khuru* is one of the popular games played by the locals of Bhutan hitting a target through a smaller arrow. It is a lower version of archery.

⁶ See BNHDR, 2000, 7.

⁷ See BNHDR, 2005, 29.

⁸ See UNMP Report 2005, 234.

⁹ Bhutan – Joint Staff Advisory Note of the Poverty Reduction Strategy Paper, Dec 2, 2004, prepared by staffs of the International Development Association and the International Monetary Fund. p7.

Annexure

Figure 1 - Quality of Life (QOL) as the interaction of human needs and the subjective perception of their fulfilment, as mediated by the opportunities available to meet the needs (Costanza, et al 2007)

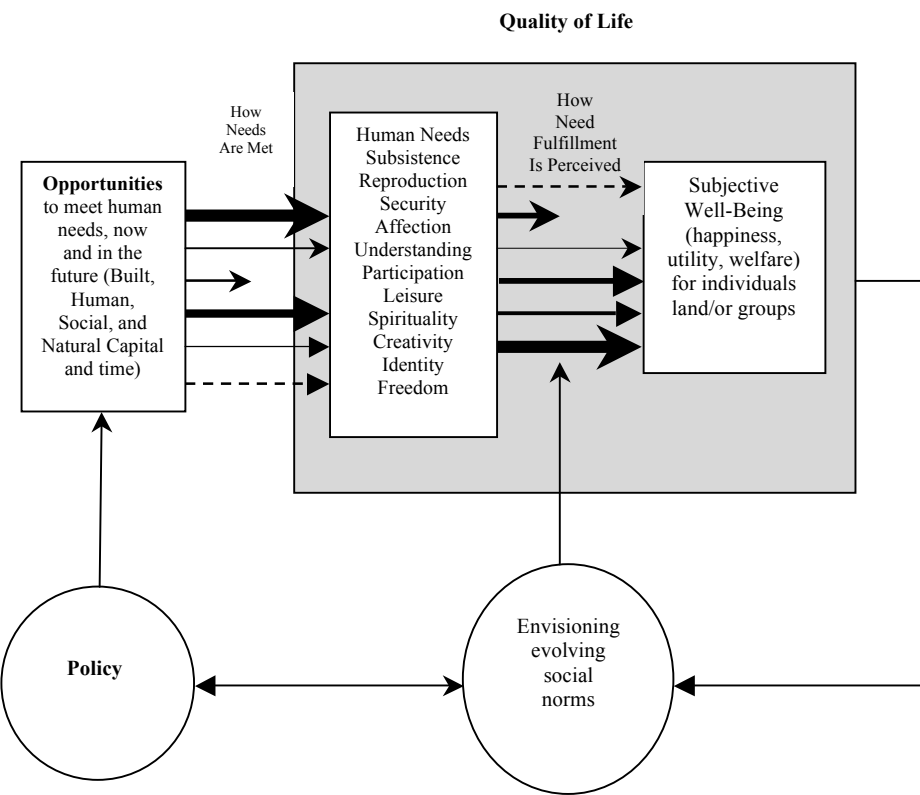


Figure 2 - Four Qualities of Life (Veenhoven, 2000)

	Outer qualities	Inner qualities
Life-chances	Livability of environment	Life-ability of the person
Life-results	Utility of life	Satisfaction

Japan's Paradigm Shift From Growth To Happiness:

Slowing Down to Advance Wellbeing

Junko Edahiro and Riichiro Oda

Abstract

Economic growth, often measured by gross domestic product, has a mixed record in enhancing the sense of people's happiness while exacting a high price from society – paid in environmental and social problems – as data from Japan show. We need to see not just events and patterns but also underlying structures and mental models. A systemic view reveals that the real problem is blind faith in infinite growth in a finite world. We must shift our focus to understanding and pursuit of what constitutes happiness. The new paradigm requires a new framework and a new set of indicators.

In Japan today, we are beginning to see many grassroots activities that enable us to depart from blind faith in economic growth. The authors present a framework for a more holistic view of happiness, with cases from Japan, such as a company shifting its primary goal from sales growth to enhanced GCH (Gross Company Happiness) and the "Candle Night" movement co-initiated by one of the authors.

The myth of economic growth

The notion that economic growth or income growth leads to happiness has become an unspoken premise for today's world. Economic growth, often measured by gross domestic product (GDP), however, has had a mixed record.

Japanese GDP per capita increased eightfold from 1955 to 2005. In the early years, the growth of the economy not only raised the

standard of living but also helped boost school enrolment and human longevity, thereby enhancing human capital. In the past 30 years, however, we have seen an overall decline in the sense of happiness.

People are gradually finding out that high economic growth has not brought them happiness or fulfillment. In modern-day Japan, since the 1960s, people believed that working hard day and night at a job would make them happier.

But what have we really got as a result? Our society is suffering from dysfunctional families because of absent fathers, juvenile delinquency, and mental depression. There has also been a rash of shocking murders. Elementary school kids have been killed by their friends. Parents have been killed by their children, and vice versa. In some incidents, for no other reason than a sense of frustration, some people have taken the lives of strangers.

Economic growth's side effects

While economic growth doesn't lead to happiness, it has created many side effects.

Globally, human activities emit over eight billion tons of carbon into the atmosphere every year, about twice as fast as the rate of removal by ecosystems. Global oil production may have peaked in 2006. Some 36 countries worldwide face serious food shortages. By the middle of this century, no fewer than seven billion people in 60 countries may experience water scarcity.

Material consumption and production has gone well beyond its sustainable levels, and as a result, we are experiencing crises in the world in terms of climate change, energy, food, water, and so on. We address these issues with efficiency, especially through technological advances, but the appetite for growth has overtaken those efficiency improvements.

Further, contrary to the widespread notion that economic growth saves nations or households from poverty, it has actually widened

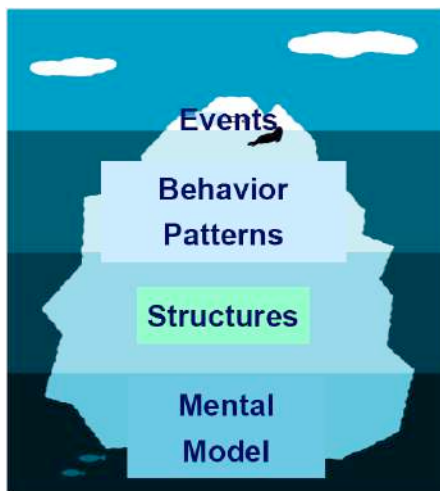
the gap between rich and poor, and our political systems haven't been able to reconcile skewed distribution of income and wealth, resulting in social problems of poverty, education, health, and human rights.

Systemic view of economic growth

Albert Einstein pointed out that “We can't solve problems by using the same kind of thinking we used when we created them.” It's time for us to step back and see it differently.

To change our level of perspective, we should first recognized that underlying the events we take part in or witness there are behavior patterns that lead to the events, structures that create the patterns, and mental models behind such structures. The deeper we understand the problem, the more holistic and essential we can approach problems. (Chart 1)

Chart 1: Levels of Perspective



Patterns of “overshoot and collapse” are rampant throughout Earth’s ecosystems as the growth of human population and economic activities have gone beyond the planet’s limits. On the

other hand, the level of happiness in Japan and other industrial nations such as the UK and US, despite continued economic growth, has been stagnant, if not decreasing.

Population and the industrial economy are known to be strong reinforcing feedback loops. People give birth, and children born increase the population, which will lead to more births. Industrial capital manufactures goods. Some goods are consumed or designed to provide services such as agriculture, resource extraction, and human services, but others become industrial capital, which will result in the manufacture of more goods.

In the past century, we have seen exponential growth of both population and industrial capital. This growth has driven more growth in the consumption of materials and food, the use of energy, water, and chemicals, and emissions of polluted air, water, substances and waste. Their trajectories are all the same—upward.

Can the Earth sustain these activities, and if so, for how long? Many signs around the world indicate the answer is no, and that we have already gone beyond the limits. A delayed consequence could be the collapse of civilizations.

Mathis Wackernagel and Bill Rees developed an indicator called the Ecological Footprint. It measures the impacts of human activities relative to the Earth's capacity to provide various services such as resources and sinks. According to their analysis, human activities require 1.4 times the capacity of the Earth. But we have only one available.

Right leverage point but wrong direction

Nations address growth as a leverage point to deal with economic, social, and environmental problems. They are correct except that they push the growth in the wrong direction.

Economists often see the economy as a process to transform capital comprised of materials, labor, and money into flows of goods and services that provide utilities for the people. One of their

fundamental assumptions is that the higher the utility, the happier people will be.

As is evident with industrial nations, the ever-growing flows of goods and services have not made people any happier after they've fulfilled their basic needs. In fact, they made people less happy because they're paralyzed by pursuing *more*, not just *enough*.

We have to realize that accelerating and maintaining economic growth isn't a solution to these problems. Actually, it creates more problems. At the core of these problems is blind faith in economic growth in our finite world. This unchecked growth has been creating many more symptoms of the problem rather than fixing them.

Framework for sustainable development

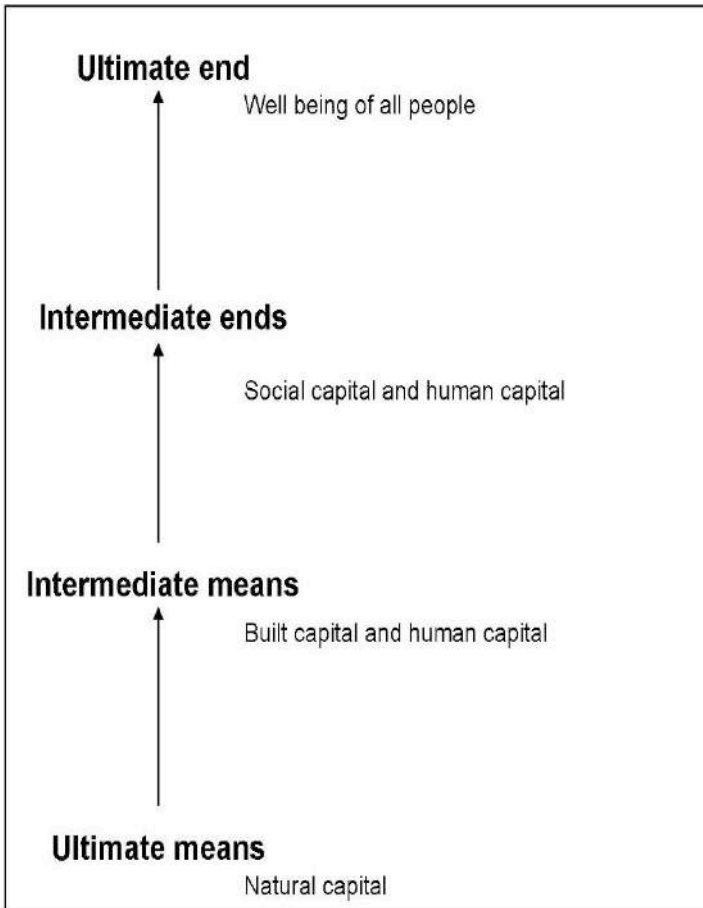
We must shift our focus to understanding and pursuit of what constitutes happiness. The new paradigm requires a new framework and a new set of indicators.

We must first examine what are ends and what are means. What we need to pursue is the wellbeing of people, and economic growth is only a means to that end. We must shift our paradigm of economic growth to that of pursuits of a higher purpose of life.

The new framework needs to address the fact that capital should create wellbeing rather than flows of the economic outputs. It needs to take into account natural, human, and social capital that enables the wellbeing of people.

Herman Daly drew a diagram called the "Daly Triangle." Its main idea is to situate the human economy within a hierarchy, resting on a foundation of natural capital and reaching to the ultimate purpose of people's happiness (Chart 2).

Chart 2 Daly's Triangle



In this hierarchy, at the base is the ultimate means, or natural capital, such as solar energy, the biosphere, earth materials, and biogeochemical cycles, out of which all life and all economic transactions are built and sustained.

The intermediate means are tools, machines, factories (built capital), skilled labour (human capital), and processed raw material and energy, which define the productive capacity of the economy.

The intermediate ends are the outputs of the economy—consumer goods, health, wealth, knowledge, leisure, communication, and transportation. They also constitute social and human capital.

At the top of the hierarchy is the ultimate end—wellbeing—embodied by happiness, harmony, fulfillment, self-respect, self-realization, community, identity, transcendence, and enlightenment.

Donnella Meadows underscored the central ideas of this hierarchy: that the economy is borne up by and draws from nature and that it serves higher goals and is not an end itself. The primary goal of a sustainable society is to produce the greatest possible ends with the least possible means.

Its basic aggregate indicators are the *sufficiency* with which ultimate ends are realized for all people, the *efficiency* with which ultimate means are translated into ultimate ends, and the *sustainability* of use of ultimate means. The focus should be wholeness, not maximizing one part of systems at the expense of other parts.

The goal of perpetual economic growth is nonsensical, because the material base can't sustain it and because human fulfillment doesn't demand it. What we need is to pursue good science to use natural capital sustainably, to make economy and politics just and efficient, and to nurture a culture that illuminates the higher purposes of life.

Slow society—Japan's emerging paradigm

Although Japan has been no exception to following the growth paradigm, we are starting to see many grass-root level activities that shift the paradigm to a new realm. To shift our attention from economic growth to wholeness, one of the possible leverage points is to slow down the economy. Slowing down allows us to regain our time—with which we can step back, see the whole, and contemplate what is really important.

In Japan, the concept of a "slow life" movement has been booming for several years. The movement is evident in books, magazine feature articles, websites, and newspapers ads. Some big bookstores

have a section dedicated to slow life and slow food. You can even hear "slow music" on Japanese airliners.

If people who were originally slow start to slow down, it may not make much difference, but if tense and fast-paced people become relaxed and slow down, it may be an indicator of something major.

In general, the Japanese people are very punctual, and their society may be regarded as a fast society in many aspects. According to data from electric power companies, for example, the average length of accidental blackouts per customer per year is only two minutes in Japan. In contrast, it is 80 minutes in the United States, 70 minutes in the United Kingdom, and 45 minutes in France.

Data on delays in train arrival times, collected by the Central Japan Railway Company, indicated that the average delay for its high-speed bullet trains was 0.7 minutes per train last year, and 0.1 minutes two years ago. In Japan, if a train arrives at a station more than 1.5 minutes behind the schedule, it is counted as delay. The equivalent delay is five minutes in the city of New York, and three minutes in Berlin.

A typical businessperson in Tokyo spends only five minutes to eat lunch. And many do so while reading a document or newspaper. Generally speaking, the Japanese are fast-paced people.

It seems, however, that the structure or mindset of Japanese society has been changing slowly but steadily.

An increasing number of people have noticed that something is wrong. Although they have worked really hard, they have not become happy. They feel unconsciously or subconsciously that they might have lost something precious in the process, which makes them stop and say, "Wait a minute." Such a feeling seems to underlay the emergence of a slow movement in Japan.

Iwate's take-it-easy declaration

Iwate Prefecture issued a "Take-It-Easy Declaration" in 2001 to launch a movement away from the prevailing ethos of economic efficiency. "Let's make our life in the new century more human, more natural, and simpler"—these ideas indicate Iwate's ideal, epitomized by its "Take-It-Easy" slogan. For example, Iwate's approach to buildings is to preserve traditional wooden houses that stand in harmony with nature, rather than to cut forests to make way for state-of-the-art buildings. Such a sense of harmonious coexistence between nature and humans is highly valued in Iwate's take-it-easy movement.

The expression 'working hard' has been a symbol of the high economic growth period in Japan," said then-Governor Hiroya Masuda of Iwate Prefecture. "Iwate's Take-It-Easy Declaration might appear to encourage laziness, but in fact it does not. Rather, it symbolizes our intention to live a more natural life.

Iwate tried to reach a larger audience by placing national newspaper advertisements for its "Take-It-Easy Declaration." The slogan, encouraging an intentional shift away from contemporary values emphasizing economic efficiency, has been well received by people across the nation.

The rise of slow cities

Not only Iwate but also other local governments are campaigning for a more relaxed and comfortable lifestyle instead of the current lifestyle characterized by efficiency and speed. In the last couple of years, increasing numbers of municipalities have joined this movement, for example, by adopting "Slow Life" as their slogan and by assigning a "Slow Life Month" for special events to raise residents' awareness of slower lifestyles.

Kakegawa City, which adopted the nation's first "City Declaration of Lifelong Learning" in 1979, has been actively promoting the development of human and community resources through lifelong learning. The city's twenty-year experience with this endeavor has

culminated in the creation of a new vision fittingly called "Slow Life." Mayor Junichi Shinmura was reelected after advocating slow life in his campaign during the most recent municipal election.

A Slow Life Summit was held on August 24, 2003, in the city of Gifu with the participation of 20 municipalities from around the country that have embraced slow life as their slogan. They adopted the Gifu Declaration on Creating a Slow Life Community for designing a community where citizens can enjoy life to the fullest.

Japan's Environment Ministry mentioned the term "*slow life*" for the first time in the 2003 edition of its Environmental White Paper—a sign that the movement is spreading.

Minamata's transformation from "polluted" to "environmental" city

In the last few years, a new movement to "rediscover one's community" has been growing throughout Japan. Local residents are leading this new drive, known as *Jimoto-gaku*. It encourages citizens to rediscover the uniqueness of their lifestyles and regional culture in order to plan a thriving and livable community while being aware of outside influences, worst cases of industrial pollution started unfolding in the 1950s, with its after-effects lasting still today. The city came up with the idea of *Jimoto-gaku* to redesign itself as an environmental model city, transforming a bitter legacy into a positive future for its citizens.

All residents in a community take part in examining and learning about the wisdom, skills, and human and natural capital of their community. In *Jimoto-gaku*, local people are referred to as "people of the earth" and non-locals as "people of the wind." When working together, "people of the wind" offer ideas and viewpoints to "people of the earth," an approach that helps keep the community vibrant. Sometimes unique characteristics of the community can only be seen through the eyes of "people of wind." This "cross-breeze" helps to stimulate co-operation among residents who may have had little contact with each other before. In addition, the wisdom of the

elderly is a vital part of the equation of *Jimoto-gaku*. They have valuable ideas and lessons to impart to the next generation. In return, the elderly are infused with the power of youthful ideas and exuberance.

The first step to understanding the uniqueness of a community begins with an evaluation of its strengths and assets. Locating and understanding all assets is an important part in this process. A community's assets can include its environment, climate, culture, tradition, history, and ethnicity.

The next step is studying how these assets have evolved through time. Unique ways of life exist in unique environments, this is known as *shindofuji*, a Buddhist term meaning our bodies are inseparable from the environment. That is to say, the environment makes us what we are. Understanding the uniqueness of the environment and daily life helps local residents to decide how much outside influence is appropriate.

People in Minamata have long suffered from what became known as Minamata disease, an industrial illness caused by eating polluted fish and shellfish. Around 1954, many cats started dying of an unknown cause in local fishing villages. Although methyl mercury discharged by the Chisso Corporation had been suspected as the cause, the central government took no measures until 1968, when it acknowledged that the disease was caused by pollution from the Chisso factory. The government's failure to take prompt measures such as banning fishing, and the company's failure to stop producing the pollutant pushed the number of direct victims to over 10,000. Forty years since the discovery of the disease, no cure is yet available, and many victims of fetal Minamata disease still suffer to this day.

Although the disease became known internationally, however, other than people in the fishing villages, the residents of Minamata knew little about it or its victims. Both the local government and also ordinary citizens with various interests clashed with the victims. Over the years, they have learned to avoid this issue.

Tetsuro Yoshimoto, a local government official in charge of promoting regional revitalization at the time, thought that if citizens understood correctly what had happened in Minamata and knew more about the community, it might contribute to solving the problem. To ensure that the many Minamata disease victims had not suffered meaninglessly, he thought of applying this idea of community regeneration. He proposed a new idea for the community where local citizens could feel connected and proud. This was the birth of *Jimoto-gaku*.

Yoshimoto then gathered ten citizens from the age of 20 to 50 from each of the 26 districts and organized a group that facilitated various activities in the area. Under the motto, "We will stop asking for things we don't have, and will start doing what we can," the group began searching for positive aspects around them. They also reexamined how the Chisso Corporation had contaminated the food chain, the plight of the victims, and the state of their community. Gradually, dialogue between the victims and the rest of the citizens started taking place, and their communication improved.

The conflict generated between the citizens and the victims was transformed into positive energy to generate something new. Open, non-judgmental dialogue helped each group to recognize and accept differences with other groups. Citizens became eager to create a new community by and for themselves.

The first theme the citizens took up was water. They investigated the source of their water and wrote down the findings on a map. They then began inventorying other assets, including locally grown yams, mountain plants and herbs, sweetfish, Shinto shrines, and ancient trees. Anything in a community could be seen as a precious asset. At first, people didn't imagine these things could be their assets. "These are assets? We have lots of them!" The residents all cooperated in making a local "resource map."

By practicing *Jimoto-gaku*, the citizens realized how the city had capitulated to outside influences for short-term gains. They now have a clearer vision of what they would like to bestow on future

generations and how to best accomplish that vision. Their conclusion was the creation of a community in harmony with nature, industry, and local traditions and customs.

Today, Minamata declares itself to be an environmentally conscious city. It established the Minamata Environmental Prize, and Environmental Meister System that recognize producers of environment-friendly products. As of October 2003, a total of 23 producers of organic green tea, rice, mandarin oranges, additive-free dried fish, and chemical-free traditional Japanese paper were officially recognized.

The concept of rediscovering your community has spread to over 100 municipalities across Japan. The town of Mihama in Aichi Prefecture, which was one of the first to take up *Jimoto-gaku*, has become a successful bamboo charcoal-producing village. This charcoal has become a specialty item in the area. The citizens in the town of Yuta in Iwate Prefecture have been promoting alternative energy sources such as wind power and biomass. On a prefectural level, Iwate launched an "Iwate *Jimoto-gaku*" project in 1999 as part of a ten-year development plan, and has been reassessing local assets in the prefecture. Similar efforts are now underway in the prefectures of Gunma, Gifu, Kochi, and Miyagi.

En (a wonderful Japanese word, translated as bond, fate, or karma in English) is appropriate in considering the underlying ideas of *Jimoto-gaku*. There is *en* with nature, *en* with ancestors, and *en* with local residents who share a common future. *Jimoto-gaku* helps remind citizens of their communal *en*, a feeling that had been fading in recent years.

By taking good care of the precious gifts of nature and the value of local customs and traditions, residents develop a wonderful sense of pride and love for their community. Ultimately we are all connected and decisions we make at a local level have the power to extend around the globe. Across the mountains, crossing the oceans, each community is connected with an invisible bond.

Non-growth-oriented companies

Comparable changes in mindset, though less extensive or visible, are steadily taking place in the corporate world as well. Many business people and owners of small- and medium-sized businesses now ask, "How can we incorporate slow-life elements into current business activities, which tend to assume that we must always have economic growth?" Questions like this trigger an awareness that our socioeconomic system must change drastically. Some businesses have started to adopt a set of values that departs from the prevailing ones.

Ina Food Industry, the country's leading agar product (edible gelatin from seaweed) manufacturer, declares that its "Tree Rings" form of management has given it 49 consecutive years of financial growth despite being in a volatile industry. This company never follows the fads, but has focused its innovation on what is really good for customers. The secret of success is that even when it had developed new products, it timed the product launches with the capacity growth of its employees. The company believes that the growth of people and organizations should be just like tree rings—slow and steady.

This type of change in mindset toward growth is steadily taking place in the corporate world. Many business people now ask, "How can we incorporate slow-life elements into current business activities, instead of assuming that we must always have economic growth?" Questions like this trigger an awareness that our socioeconomic system must change drastically.

Another such example is Mukouyama Painting, a small paint supply company with about 20 employees. The company's president was a typical business owner until ten years ago, pushing his people to work hard with slogans like "Boost sales by 20 percent!" But many of his employees left the company and recruiting new workers was difficult, making him stop and wonder about the huge gap between his approach and reality.

He asked himself soul-searching questions. "Who am I?" "What is the company for?" "What should I do?" Influenced by various people, he came to this conclusion: "We live in a capitalist society where people are self-centered, but I really want to live in a world full of love, peace, harmony, cooperation, and self-sufficiency." Since then he has carried out various reforms based on this new perspective.

For example, the company measures the success not by the amount of sales or profits but by what he calls GCH (Gross Company Happiness), namely, the total happiness of all employees. He took this idea from Bhutan's GNH (Gross National Happiness) index. In each of the past eight years, he set a sales goal that meant negative growth, say, 92% of the previous year's sales, thinking that aiming to serve customers well rather than to increase sales would be good for the happiness of his employees.

Now the company is known for its commitment to social responsibility and is well received in the community. The turnover rate of employees has dropped to zero. The president is happy, and so are his employees and the community.

An increasing number of companies have decided not to try to expand their business, or adopted a no-growth policy, so as to realize the real happiness that these companies were established to offer.

The candle night campaign

The Candle Night, an evening when people turn off their electrical lights and instead use candles at a predetermined time, was initiated by two Japanese non-governmental organizations (NGOs)—Daichi-O-Mamoru-Kai (also known as the Association to Preserve the Earth) and the Sloth Club—which worked to start a voluntary blackout movement in Japan. The first Candle Night, held on the summer solstice, June 22, in 2003, was launched together with other environmental groups using the slogan "Turn off the lights. Take it slow."

The Candle Night initiative simply suggests that people switch off their lights for two hours, from 8:00 to 10:00 p.m., on the night of the summer solstice and enjoy some time by candlelight in any way they want—having dinner, listening to music, taking a bath, etc. Some join in local Candle Night events, while others simply enjoy a quiet night without watching TV. It is a voluntary, participatory, and creative cultural campaign that suggests that people share "alternative ways of spending time" and "more diverse scales of affluence" by temporarily turning away from goods and information as an experience shared by society as a whole.

Beyond political messages such as saving energy and protesting the use of nuclear power, Candle Night encourages a broader concept that calls for enjoying time on one's own terms by "turning off the lights and taking it slow." It has attracted many supporters. The initiative was started with the hope of involving as many as one million people. It turned out that some five million across the country participated the first time (according to an estimate by the Ministry of the Environment), and more than 200 major landmarks such as Tokyo Tower and Himeji Castle turned off their lights.

Since then, Candle Night has taken place on the summer and winter solstices every year, and involved more supporters and events each year. In 2007, a total of 39,845 major facilities, including the famous landmark, Tokyo Tower, switched off their lights, reducing power consumption by 812,508 kilowatt-hours across the country during the event.

The event is now spreading across the world. The Korean Environmental Women's Network, an NGO in Korea, worked closely with Japanese Candle Night organizers to hold its own Candle Night. Events were also held in Taiwan, Australia, China (Shanghai), Mauritius, and many other countries. The Candle Night Committee now sends out newsletters in English to 64 countries in its bid to connect activities and share the inspiration.

Featuring a sense of connection and happiness

The key promoters of this event only provided a platform, however, and do not take the lead in spreading the movement. That is probably why many events are independently organized and the movement has spread so fast around the world.

Each of us may feel that alone our impact is small, but when people act together positively as one, the results can be powerful. The Candle Night Committee is hoping to connect with other movements in the world, such as the group organizing Earth Hour in Australia, identify the links among the motivations behind the various movements, and then make them visible. Many people are concerned about our planet and future, but we have not yet reached the point where these feelings are strong enough to turn into actions that drastically change politics and the economy. The Candle Night Committee would like to connect people through these shared thoughts and feelings and transform them into power.

The Candle Night website, the "Candlescape," uses advanced information technologies such as cell phones and the Internet to help share such feelings and reinforce a sense of connectedness. Participants not only in Japan but also around the world can send messages that are displayed in real time globally. The messages appear as "lights" on the world map displayed on the website. The website enables participants to realize the existence of other participants around the world who share the same feelings.

Candle Night is now being observed twice a year on the summer and winter solstices. In Japan and around the world, in communities, cafes, and homes, people who share the idea have started to gather and to take action. Candle Night provides an opportunity for them to put their ideas into action.

People who participate in Candle Night are encouraged to stop a moment and think not only about their immediate personal issues but also about true happiness and the things they believe are important, even in the middle of their busy daily lives. Organizers

believe that the result of taking this time to think and ponder can be used as one of the leverage points to redirect our society and economy onto a better path, both in Japan and around the world.

"Street sprinkling" cools Japan in summer

Another movement is spreading across Japan, drawing attention to a type of activity that anybody can join: the Sidewalk Sprinkling Campaign. The Japanese language has a special word, *uchimizu*, which refers to sprinkling water on the streets and sidewalks to cool them down in summer. It is a traditional custom in Japan, and was especially common during the Edo period (1603–1867). A contemporary poem on the website expresses the spirit of this reborn tradition.

All together on the same day, at the same time, sprinkle water to cool the summer heat, recycling bathing and other water. It's just little effort.

Just a little effort can cool the scorching summer.

Just a little effort can cool the heat-island effect.

Just a little effort can save electricity in midsummer.

Just a little effort can make you gentler to the Earth.

Just a little effort can refresh your mind and body.

Just a little effort can unite a community.

Just a little effort can make everyone happy.

The Edo Period Street Sprinkling Campaign was carried out for the first time ever in Japan—and of course in the world—at noon on August 25, 2003. Many people participated and rediscovered that the wisdom of this watering custom from the Edo Period was still useful and effective today. It has been attracting new supporters, who have rediscovered the joy of doing "just a little effort." (Part of the message in Japan is about recycling water. For *uchimizu*, people are to use rainwater, bathwater, etc., rather than water from the tap.

Bathwater is quite clean in Japan, as the tradition is to use the bath only for soaking after washing.)

In 2004, *Uchimizu* organizers set a target of lowering the temperature in central Tokyo by two degrees Celsius, appealing to the public with the slogan "Bring on the wind." This attempt was planned as a real-life test of computer simulations of the cooling effect of water sprinkling that had been conducted by the Public Works Research Institute (under the Ministry of Land, Infrastructure and Transport of Japan). This time, sprinkling by the 300,000 participants succeeded in dropping the temperature by one degree Celsius.

Neither Candle Night nor the Edo-Period Sprinkling Water Campaign is huge movements that could dramatically reduce human impact on the environment. But global environmental issues are ultimately concerned with our ways of life and our happiness. So no matter how advanced our technology, or how excellent our products or laws, it will not be possible to shift toward a sustainable society if each person does not have a fresh look at his or her lifestyles and values.

In that sense, these movements could be seen as new and noteworthy in that they show us the meaning and significance of "just a little effort," and let us feel the joy of translating ideas into action to lead to the wave of social change.

Final remarks

For many developed nations, "slowing down" is not only effective in changing our "overshoot and collapse" trajectory, but it gives us a chance to stop and see wholeness, to ask ourselves what really matters, and to collectively take action toward our vision of *sustainable, efficient* and *sufficient* society. For developing nations, other considerations are needed, but perhaps they can leapfrog over the struggles with "growth" that most industrial nations have faced. Humanity has been chasing after growth for a long time. Now it's time to apply what we've learned.

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Food Security and Gross National Happiness

Akiko Ueda

Abstract

This paper reconsiders the concept of food security to reflect Bhutan's Gross National Happiness framework. Through various case studies relating to people's food security, including production, circulation and consumption, it analyses factors that would affect GNH indicators. By comparing the conventional concept of food security with the GNH framework, the paper suggests that while the conventional concept focuses on "what" and "how much", namely what is produced, traded and eaten and quantities, it lacks a perspective on the "how" questions, namely how food is produced, how food is traded and distributed, and how food is consumed.

Introduction

This paper reconsiders the concept of food security to reflect the idea of Gross National Happiness (GNH). It represents preliminary thoughts on how much the conventional concept of food security can be expanded, and how food security relates to Gross National Happiness. The paper uses data, apart from secondary sources, from fieldwork that was carried out in Bhutan between 2004 and 2007 in several phases.¹ Geographical areas it covers were Paro, Wangdue Phodrang, Punakha, Trongsa, Bumthang, Mongar, Trashigang and Trashi Yangtse. The fieldwork originally aimed mainly at tracing trading routes and trading practices of chillies – both in the past and in the present but the data have implications that are more widely applicable. Besides information on trading practices of chillies, the

data include aspects of people's lives such as food production patterns and eating habits and customs.

This experimental paper starts by looking at the conventional understanding of food security. It then moves on to outline aspects of the idea of Gross National Happiness and its indicators, the Bhutan Development Index. Based on these, the main part of the paper explores various facets relating to people's food security, namely production, circulation and consumption, and will examine factors that would affect GNH indicators. This will indicate aspects of the food security concept that might affect the GNH framework, and the paper also attempts to refine the concept of food security to take account of the GNH framework.

The concept of food security

The concept of food security has experienced several transformations. In 1974, when the concept was launched at the first World Food Conference, food security was understood as an issue relating to food supply. It was defined as "availability at all times of adequate world food supplies of basic foodstuffs" (United Nations, 1975). In order to achieve food security, each government was "to remove the obstacles to food production and to provide proper incentives to the agricultural sector", and the highly industrialised countries "should promote the advancement of food production technology, and should make all efforts to promote transfer, adaptation and dissemination of appropriate food production technology for the benefit of the developing countries" (United Nations, 1975). A new perspective emerged in the early 1980s, with Amartya Sen's work on hunger and markets (Sen, 1981). Sen emphasises "access to food" rather than simply production, and thereby turns attention from supply to demand. The World Bank report, *Poverty and Hunger*, maintains this perspective, defining food security as "access by all people at all times to enough food for an active, healthy life" (World Bank, 1986: 1). Since then, new elements have been added such as safe and nutritious food and food preferences. For instance, in 1996, at the World Food Summit in Rome, the definition was refined as follows:

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. (FAO, 1996)

Pottier points out that this Rome Declaration goes for the widest possible approach and reflects postmodern uncertainties.² The mention of “food preference” is seen as an attempt to address context specificity of the issue (Pottier, 1999: 13-14).³

We have so far understood that there are a few turning points in the definition of food security. Although various documents emphasise the complexity of the issue, at the level of definition it should be safe to understand food security as a matter of availability of and access to food with considerations of nutrition, safety and preferences of people.

GNH

The concept of Gross National Happiness was coined by the fourth king of Bhutan, Jigme Singye Wangchuck in the 1970s, and proposes a holistic approach to development.⁴ It is a broader approach compared to the conventional approach to development, which mainly focuses on material progress. The contribution of the idea of GNH to development thinking cannot be exaggerated. The framework encompasses not only material aspects of life, but also culture, tradition and natural environment. It also integrates objective realities with subjective elements, namely what people feel about their own lives. In order to capture overall progress in GNH, the Bhutanese government is formulating comprehensive set of indicators of GNH, the Bhutan Development Index (BDI). The indicators are divided into nine domains. These are: Psychological Well-being; Good Governance; Education; Health; Community Vitality; Time Use and Balance; Culture; Ecological Diversity and Resilience; and Living Standard.

Dasho Karma Ura, the Director of the Centre for Bhutan Studies, which takes a lead in formulating the BDI, points out in his recent

TV interview some of the very important features of the idea of GNH (Ura, 2008). Firstly, he says that under the GNH concept we need to look at reality as a whole, taking a multi-sectoral integrated approach. He points out that the concept of GNH calls for a perspective which goes beyond one sector, and states that we have to be mindful about consequences which policies/programmes of one sector would have on another. If a solution within a certain sector becomes a cause of a problem in another, it is actually not a solution. Secondly, the concept encompasses both subjectivity and objectivity and hence its indicators integrate both aspects. This is to say that progress in, for instance, the health sector should be measured both using conventional health indicators (such as infant mortality rates and population count per doctor), as well as people's feelings about their own health. Thirdly, Dasho Karma Ura emphasises "relationships" as being fundamental to happiness. According to him, "relationships, or shared situations, are where happiness spontaneously arises: you are not looking for happiness, but it comes out when relationships improve". He continues that "in some sense, happiness is really a by-product of improving relationships".

In the next section, I will examine the concept of food security from the perspective of the GNH framework.

Food security and GNH

Here I do not address the issue of whether the Bhutanese people have sufficient food *per se*.⁵ Rather, I look at some of the stages of food production, circulation and consumption, and try to analyse how these would relate to the GNH way of thinking shown above, and how this could affect GNH indicators. I shall do so through citing some experiences from my previous fieldwork, and also using secondary sources.

Needless to say, food security is fundamental to sustain life. Food security however relates to many more aspects of people's lives than merely meeting biological requirements. How food is produced,

circulated and consumed; all of these have implications for GNH and its indicators.

On producing food

When I visited villages in the western part of Bhutan in 2004 in order to research the production and trading of chillies, I met a woman who grew cabbages. She usually took these cabbages to markets to sell – both local and export. She told me that by selling cabbages she could earn cash, which was important in many ways including sending her children to school, but, she continued, while growing cabbages she had to use lots of pesticides to kill insects and worms which would harm the harvest. In her mind, this was not a Buddhist act and certainly led to losing religious merit, therefore she said that she did not want to grow cabbages so much.

In this short sketch of food production, we can see many elements relating to GNH. Cash income from selling cabbages improves the elements of material accumulation (“Living Standard”) and “Education”, however the use of pesticides might adversely affect “Ecological Diversity and Resilience”. The religious aspect she pointed out would affect the “Culture” element of the GNH indicators. Moreover, as she feels uneasy about using pesticides, it would affect “Psychological Well-being”. When we look at this example from the view-point of the conventional food security concept, the focus is on availability of food items, which she grows and also buys with money she earns by selling cabbages, their nutritional value, and personal preferences. These are mainly material aspects of the food i.e. which food, what nutrition and its amount. When we examine the case in the light of GNH, it becomes more obvious that how those food items were grown also means a lot to people, namely the process. It is a matter of the “relationship” people have with food, in other words, how people are engaged in the foods they produce.

On trading food

Chilli is a very important food item in Bhutan. It is used more as a vegetable rather than a spice. Some people even say that it is a “staple food” in Bhutan, along with rice. While rice can be substituted with other grains, such as maize, buckwheat and millets, chilli cannot be replaced by anything. Those who live in areas where chilli does not grow also eat chillies, so they have to obtain it somehow from other sources. Trading occurs not only between chilli-producing and non-chilli-producing places, but also amongst chilli-producing places. This is mainly because of differences in the timing of harvests due to altitude and climate. In some areas, the chilli harvest is in the middle of the monsoon season, so that they cannot dry chillies for future use. Hence they depend on harvests in higher altitude areas where the harvest is after the monsoon, so that chillies can be dried and people can get seeds for the next year.

Trading of chillies can be largely classified into two categories, one is cash medium transactions at the markets, and the other is barter both between and within villages. There can be barter in markets and also cash medium exchanges in villages and houses but these are relatively smaller in scale, and this article therefore focuses on the first two transaction modes, namely cash medium transactions at the markets and barter between and within villages. The features of these two modes are applicable to trading of other food items such as grains, fruits, dairy products and vegetables, therefore the discussion has wider implications than the case of chillies.

The market-based cash medium transactions include exports, local markets, and shops. They are mainly for those who have relatively easy access to markets and shops. Prices fluctuate to varying degrees in markets and in the case of chilli, the highest price is ten times greater (or even more) than the lowest price in the season. In barter, communities or households generally have their own regular trading partners. This partnership is usually stable and in some cases it is a relationship of several generations. If Community A and Community B exchange chillies and rice, the terms and rates of

exchange are usually fixed within the area. Many people engaging in barter have their own individual counter parties, who act as “hosts” when they visit, arranging the distribution and the collection of items within their community.

While cash earned at markets can be exchanged with any items and services available, in barter the items farmers bring are directly exchanged with items that are available in the partner village. Usually this is something that the farmers would like to obtain (since they know what is available where), but to be fair the range of items available is limited. On the other hand, one farmer in eastern Bhutan told me that, while in the vegetable market he had to wait for a whole day for customers to come, in barter he can rely on his partner for distribution; all he has to do is to deliver items for barter together with some gifts for his host. He later receives the exchanged items from the host. For him, transactions through barter are less tedious. The same farmer, however, pointed out other aspects of these two modes of transaction. According to him, when he buys in markets and shops, he can choose the quality of the items, but in barter he cannot be too choosy about the quality of the items that people in the partner community bring for exchange, partly because he has a long-term relationship with them. In barter, however, he would be sure, from the beginning, about the physical amount he would receive for the items he takes for exchange. In the market, since the price fluctuates, and also since he would not be sure how much he will be able to sell, he cannot predict how much he will earn.

From these comments, we can see that trading itself is about managing “relationships”. It represents a relationship with the market in terms of physical accessibility, fluctuations in price, quality and quantity of items, and human interactions with shop-owners and customers. As for the barter, trading encompasses relationships with partner communities and hosts, their socio-economic circumstances, and the quality and quantity of items they exchange.

Among the GNH indicators, market transactions are most obviously directly related to “Living Standard”, and, using the cash obtained, indirectly related to many of the other indicators, particularly “Education” and “Health”. Barter transactions most obviously affect indicators in the area of “Living Standard” and “Community Vitality”.

The conventional food security framework does not readily accommodate issues such as whether community spirit and partnerships are strengthened during food transactions. It is not within the scope of the framework to assess how food items are transferred from producers to consumers. The most important aspect of transactions from the perspective of the conventional food security framework is perhaps the price of and accessibility to food items. Taking an extreme example, the conventional food security framework does not differentiate between rice obtained from long-term partner communities and that acquired illegally. The concept of GNH very much differentiates how rice is obtained.

Pottier aptly observes this point with a different example. He looks at food distribution to poorer sections of society through the “self-targeting” mechanism, and poses an important question: “Does self-targeting enable the poor ... to access what they really want or is the strategy perceived as a social control mechanism which stigmatises and reinforces social hierarchy?” (Pottier, 1999: 15). Food items provided through such a mechanism and those bought in ordinary shops must have different meanings. In other words, how food items are obtained makes a significant difference in the light of GNH thinking.

On consuming food

Food is consumed primarily to sustain life biologically. At the same time, since humans are social beings, there are also socio-cultural elements to consumption of food. Kunzang Choden in her recent book titled, *Chilli and Cheese: Food and Society in Bhutan*, illustrates this point in detail. She describes vividly the role food

plays in Bhutanese society. While she introduces on a number of different occasions the social and cultural importance of food, one chapter is devoted entirely to “Food for Hungry Spirits”. She says, “Food is a means for maintaining a reciprocal link between the humans and the spirits; the malevolent spirits that harm humans must be propitiated and appeased by gift of food” (Choden, 2008: 53-54).

What to eat is defined not only by availability of food, but also by individual preferences and food’s appropriateness to certain occasions and circumstances. Food items and preparation methods for everyday meals are differentiated from those for festivals and special occasions. Some food items and cooking methods signify regional identity, such as *puta* for Bumthang, *branja* for Mongar and *hyuentey* for Haa.

How to eat is also an important and complex issue. There is a large difference between eating alone and sitting for a family meal in the light of GNH. There are special occasions when people get together and share foods. What to eat and how to eat have to match. In other words, there are food items and cooking methods that are considered appropriate for certain occasions. Some items are even indispensable for some events, such as *desi* in celebrations and rituals. One farmer told me that he always makes sure that his family has enough red rice for rituals and festivals.

There are certain cooking skills and recipes that have been passed down through generations. At the same time, however, there are nearly forgotten food items and menus. Kunzang Choden (2008: 139-140) points out that we are inclined to forget our traditional and indigenous foods, and that this trend is accelerated by urbanisation and the growing cash economy. She argues that many people associate eating wild plants and herbs with backwardness and poverty, and that consequently, we have forgotten many of the plants eaten by our parents and ancestors. She takes an example of one herbal plant, marjoram, which urban dwellers may import in bottles with fancy labels as an “exotic” herb, not knowing that there is plenty of marjoram free for the picking in their own backyards.

Like wild marjoram, she points out, other cultivated and wild plant species used in the past are no longer used or, worse still, their use in Bhutanese cookery is forgotten (Choden, 2008: 140).

There are many implications from her observations. A loss of menu is a loss of a society's cultural asset. One might argue that, while we lose certain menus as socio-economic conditions change, new menus are introduced from abroad. In terms of the number of "recipe cards", one can hardly say if there is an increase or decrease. But the issue is not only the number of recipes but also their components. For instance, we might introduce hamburgers to our menu, but at the same time lose a recipe that was once used in certain rituals or celebrations. The number of recipe cards remains the same, but new food items may not be able to substitute for all aspects of the item that used to be served in a ritual. This is because food and cooking methods carry cultural and social meanings and replacing certain dishes, whose recipe has been passed down for generations, signifies a change of meanings that circulate in society.

During my fieldwork in eastern Bhutan, an informant showed me a soupy, thin porridge-like dish made of maize flour. When I come back to Thimphu, I talked about the dish with a friend from the same area. The friend said to me that he remembers that his grandparents used to eat the dish, especially on cold winter mornings, in his village when he was small, but he does not eat it these days. The talk of the dish actually stirred his memory of his childhood.

In consuming food, it is obviously not only nutritional factors that are important, but also the cultural and social elements which foods carry. Consequently, the GNH indicators that are directly affected by food consumption are not only "Health" and "Living Standard", but also "Psychological Well-being", "Community Vitality" and "Culture". "Ecological Diversity and Resilience" might be also affected by the kind and amount of fuel that is used to prepare food. The "Time Use and Balance" spent to prepare and consume food is another consideration. As modernisation progresses, new convenient equipment is introduced and people may not have to

stand in front of fire for a long time, but, at the same time, as life becomes busier, people might also spend less time for meals.

In the conventional concept of food security, what people eat is important since it is a matter of nutrition and sustaining life. The framework takes very little account of how people eat. Even when menus are the same, eating alone, family eating and communal eating are significantly different in terms of their socio-cultural implications and certainly in terms of GNH. It is a matter of relationships among people sharing food. As Sutton (2001) illustrates, memories of sharing food stay for a long time, and work to strengthen human relationships.

Conclusion

The conventional concept of food security is actually not very much concerned with “how” questions; namely, how foods are produced, how they are traded, and how they are consumed. The concept identifies that food security is a matter of access. Such access can mean to production: farmers in Bhutan produce food for their own consumption. Access can mean to trading: food items that are not available from a farmer’s field have to be obtained through some sort of transaction. Access can mean to consumption: food has to be finally consumed and fuels and cooking utensils are required. However, the conventional understanding of food security does not differentiate among different methods, modes and styles of production, transaction and consumption of food.

A further consideration is that these “how” questions, apart from implications for the GNH framework, may have a strong relation to the sustainability of food security. An example may be how vegetables and grains are grown. An excessive use of chemical fertilisers and pesticides might decrease long-term productivity of the land. Another example could be how food items are traded. An excessive dependence on the market might make farmers more vulnerable to price fluctuations and other factors which are outside their control.

This paper has examined the concept of food security divided into different stages from production to consumption, and considered how GNH indicators are affected. It is clear that food is not only required to meet our biological requirement for survival. It has far wider implications when we consider food security using a GNH framework. The conventional concept of food security requires refining in the light of GNH, primarily based on “how” questions.

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Notes

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² Maxwell (1996) also suggests that a post-modern perspective is reflected in this concept of food security.

³ There are critiques on the definition of food security provided by the Rome Declaration. For example, Pottier (1999) says that the Declaration's consciousness to cultural specificity may be only a token gesture as the declaration concerns only on food preferences, and not on social and cultural "perspectives".

⁴ A detailed analysis on the concept of GNH in Bhutan's development policies is found in Ueda (2003).

⁵ There are recent studies on the food security situation in Bhutan, for instance, *Poverty Analysis Report 2007* (National Statistics Bureau, 2007) and *Rapid Impact Assessment of Rural Development* (Planning Commission, 2007).

Optimal Condition of Happiness: Application of Taguchi Robust Parameter Design on Evidences from India

Prabhat Pankaj and Roma Mitra Debnath

Abstract

The present empirical paper attempts to quantify the optimal condition of happiness, measured in terms of subjective wellbeing (SWB), by using Taguchi Robust Parameter Design. The study uses evidences from survey conducted in New Delhi across various segment of people covering 193 respondents. Responses on a total of 25 sources of happiness pertaining to three broad facets-domain satisfaction, lifetime pursuits and global experiences have been obtained. Taguchi orthogonal array design has been used separately on sources of happiness for these three broad facets at 3 and 5 levels. The optimization results suggest that among domain facet, a marginal change in good family life & wellbeing, good inter-personal relationship and good employment & job satisfaction would cause a large change in happiness. While for lifetime pursuit of happiness, most important sources are yoga & meditation, principles & responsibility, and cultural participation. Among the extra-domain sources pertaining to global experiences, factors such as responsible political leadership and low inflation have been found most important. The paper suggests that a prudent public policy could address these factors and also account for ways to improve them for achieving greater happiness for greater number of people.

Keywords: Subjective Wellbeing, Facets of Happiness, Taguchi Orthogonal Design, Optimal Scaling, Public Policy, India.

I. Introduction

The growing stock of knowledge on happiness research suggests that self-reported happiness is a real scalar variable and hence its quantification and the inter-personal comparison are possible. The recent work by Centre of Bhutan Studies (2007) provides the first evidence of a comprehensive applied research on happiness, measured in terms of subjective wellbeing (SWB). It takes into account a holistic approach and applies non-parametric tests to ascertain the relationship between conditions of happiness and self-reported happiness per se. Factor analysis has been used extensively and the findings could establish the underlying factors being contributed by an array of conditions of happiness. However, a pertinent question still remains to be answered is-which array of conditions make into an optimal condition for happiness. Once such array possibly can be arrived, the public policy focus may be tuned to enhance country's happiness.

The econometrics and non-parametric measures fail to answer this question as they mainly are designed to establish cause-and-effect relation between variables. But, in order to obtain a total solution, it is imperative that optimal condition is looked into. Taguchi Robust Parameter Design provides the basis for obtaining an orthogonal array of conditions out of the given conditions which would explain the optimal situation. With this method, the impact of a marginal change in an individual aspect of happiness can be assessed and thereby such results may hold key to mould public policy for achieving greater happiness. The robustness of Taguchi approach over other methods is that it does not exclude the noise factors and consider them as part of the design. This is significant for happiness study as conditions of happiness has been reported to be as significant as conditions of unhappiness. The present study uses evidences from survey conducted in New Delhi, India across various segment of people.

The study is divided into six sections. Section I introduces the study and outlines the objectives and purpose of undertaking the study. Section II reviews relevant literature on happiness studies with a

view of deriving a proper framework support for the present study. Section III describes the data collection process and size of sample for the present study. It also describes the methodology used in empirical estimation. Section IV outlines the results derived on the socio-economic characteristics of sample and their relationship with happiness. Section V provides the output of empirical results on optimal scaling. The last section is devoted to discussion of results and conclusion.

II. Review of literature

There has been a phenomenal growth in happiness research since 1960s with over 3000 published studies explored this subject in a variety of ways [visit, www.authentic happiness.sas.upenn.edu). As more and more has been discovered, there is also a growing realization among scholars that more needs to be explored. Like the subject of happiness itself, the convergence of opinion on its research is far from the sight. Happiness research hasn't been more about understanding it as perfectly as possible but it has been more about how the research can help individuals and societies to become as happy as possible. This makes research more relevant on a subject as elusive as happiness. There is a shift in domain of happiness research from psychology to that of applied psychology wherein the focus is on happiness increase research. The contribution of gross national happiness (GNH) in enhancing the status the happiness research is enormous. In fact, GNH has provided an alternative world view which will go a long way in securing the greatest happiness for greatest mass.

The literature on subjective wellbeing or happiness is fast growing and a comprehensive review of these literature can be found in Veenhoven (in press); many attempting to seek interventions to increase happiness (Fava 1999; Fava and Ruini 2003). Studies have pointed out clearly the distinction between the two components of "satisfaction" (happiness); "life (global) satisfactions" and "domain (work, family, self, etc.) satisfactions." The leading researcher and authority on happiness Rutt Veenhoven visualized happiness as the degree to which an individual judges the overall quality of life-as-a-

whole favourably. Psychologist Jonathan Freeman pointed out that people may pursue happiness differently, but by and large it is the same happiness for everyone. Therefore, happiness can be viewed and discussed both as a global as well as individual concept.

Myths about happiness

Despite a phenomenal growth on happiness research by social scientists across the globe in recent time, the generally held myths about happiness still continues. This seems more influenced by the lack of clinical research on happiness and in general on positive emotions. Understandably, clinical research on human emotions has tended to focus more on negative emotions. It has been observed that about 83% of research in psychology has dealt with negative feelings. However, theorists like Abraham Maslow, Carl Rodgers and others started focusing on positive emotions and initiated research into areas such as peak experience, optimal mental health, self-actualization, love etc. Partly, the lack of objective research on happiness is also contributed by a sort of mystical and philosophical view about it, which says that happiness is all that we are looking for but it is all pervasive. The more we think about it, the more distant it becomes. Therefore the myth about happiness continues that it is unexplainable because it is something that just happens. More so, the situation assumes a dark proposition when added by the myth that it is not advisable to talk about happiness (any good thing that happens to you) because if any one tries do so, he/she would tend to loose it. Happiness sharing therefore is a big no-no!

Three facets of happiness to break the myth

Studies have pointed out that happiness is to be understood in its various facets. Three of such facets for a better understanding of happiness could be when we look at it from domain, lifetime and global experiences point of view. Happiness is good emotional feeling in the first place and our domain experiences add to it. This results in happy mood, largely contributed by our family, workplace, living conditions, access to basic facilities etc. But “I am

in happy mood" is a different response in comparison to "I am a happy person" response. In the second response, individual counts on past experiences and weighed on lifetime experiences on whole. Such experience would entail extra-domain factors which the individual has derived from society and world at large. Happiness, in this sense, is a generalization that has been made about life. It becomes an index of satisfaction with life. The larger the time frame considered for such evaluation of life, the greater the chances of its being influenced by extra-domain factors. Therefore, when we ask: "How are you these days?" The response evaluates domain plus lifetime pursuits of happiness. Similarly, when we ask: "How happy are you keeping your whole life into account, overall?" The response most likely is based on the evaluation of domain along with lifetime and global (external/societal) pursuits.

Happiness, in this sense, has three facets. All three are similar as they explain positive emotional feeling and they are inter-related too. Shorter the period of evaluation, greater it tends to be mood based. Larger the span of evaluation, greater it tends to be experience based. Therefore, macro and societal factors are truly significant for a lifetime based evaluation of happy experience. More importantly, against the commonly held myth, happiness becomes explainable!

Determinants of happiness

Bentham provided one of the earliest accounts of the calculus of pain and pleasure while bringing the discussion on utility to the forefront in England in 1789 (Stigler 1965). Bentham's thirty-two circumstances explained pleasure and pain. However, discussion in economics thereafter centered on discovering and rediscovering the principles of marginal utility and later on their measurement. Utility is akin to welfare. An enhancement in welfare can be measured in terms of changes in utility. More income brings enhanced consumption which increases utility and hence welfare (happiness). The object of public policy would be to maximize the sum of happiness in society. Since marginal utility of money is more for poor, it makes sense to focus on the redistribution of income.

Studies have confirmed that happiness, not income, constitutes the ultimate goal of most individuals (Easterlin 1995, 2001; Oswald 1997; Ng 1997). Easterlin provided one of the earliest empirical works about self reported happiness. The decade of 1990s witnessed increased awareness on the subject and economists have shown that happiness is not an entirely personalized phenomenon; rather, it also depends on conditions like unemployment, inflation and income (Clark and Oswald 1994; Oswald 1997; Easterlin 2001). Some scholars have also tried to quantify the effect of variables such as freedom (Frey and Stutzer 2002), air pollution (visit: www.authentic happiness.sas.upenn.edu), aircraft noise (Praag and Baarsma 2001) and climate (Rehdanz and Maddison).

A good deal of discussion on this subject can be found in Layard (2003) which emphasized that GDP is a hopeless measure of welfare demonstrated by the fact that despite several fold increase in per capita GDP the happiness of the population tended to stagnate. Layard points out that Pareto optimality lends us to a situation where no one could be happier without someone else being less happy. Even if we account for problems such as asymmetric information, short-sightedness, externalities and diseconomies of scale, it only can suggest that higher real wage will make population happier. It fails to realize that our wants once we are above subsistence level, are largely derived from society and they are major factors affecting happiness. Karl Marx said-“A house may be large or small; as long as the surrounding houses are equally small, it satisfies all social demands for a dwelling. But if a palace rises beside the little house, the little house shrinks into a hut.” (quoted in Layard 2003). Layard concludes that rational policy-making is possible since happiness is a real scalar variable and can be compared between people.

Helliwel (2001), perhaps, is the only author who attempted to analyze international and inter-personal difference in subjective well-being while making use of data from three waves of the World Value Survey covering about fifty different countries. The study uses large international samples of data combining individual and

societal level determinants of well-being. The study establishes the link among social capital, education, income and well-being. It also identifies the direct and indirect linkage between social capital and well-being. Happiness depends on a lot more than people's purchasing power. It depends on tastes which people acquire from environment and on the whole social context in which we all live. Therefore, situation such as pertaining to income, work, family, and health do contribute to happiness and they also account for the overall happiness rating/index. Layard's (2003) discussion also focuses on factors such as pertaining to freedom, religion, trust, and morality as important facets of life resulting in upward movement in happiness index.

Layard and Helliwell's study lends great deal of support to the presumption that establishing the link between individual and aggregate happiness is important, as both individual and societal factors determine the extent of rise or fall in well-being (happiness) index. But, an important questions still remains to be answered is-which combination of individual and societal factors would lead to greatest happiness. Answering this question would provide insight as to how public policy can address the issue of happiness. A question still largely unanswered. This is here the present study makes headway and attempts to provide a framework for possible explanation.

III. Data and methodology

The pioneer work by the Center for Bhutan Studies (CBS) on *Gross National Happiness and Material Welfare in Bhutan and Japan* (2007) provides a comprehensive outline of domain, lifetime and global factors which are comprehended as important. The pilot survey for assessing psychological and subjective wellbeing of Bhutanese people outlined 14 such sources of wellbeing. These sources are a combination of domain, lifetime and global pursuits. The sources outlined are:

1. Financial security
2. Good family life and wellbeing of family

3. Good health
4. Resources for farm production
5. Access to basic facilities
6. Personal development and education
7. Faith and spiritual pursuits
8. Employment and job satisfaction
9. Good governance & welfare system
10. Good inter-personal relations
11. Principles and responsibility
12. Community vitality
13. Country's peace and security
14. Recreation

Based on the findings of CBS study and others (as reviewed earlier in this paper) and also keeping the situational analysis of Delhi as an urban mega city, the following sources of happiness under broad three facets of domain, lifetime and global have been incorporated in the study:

Domain Satisfaction	Lifetime Pursuits Satisfaction	Global Experiences Satisfaction
Financial security	Cultural participation	Good governance and welfare system
Personal development & education	Cultural identity	Buoyant economy
Good health	Faith and spiritual pursuits(religiosity)	Responsive law and order
Employment & job satisfaction	Honesty & integrity	Responsive justice system
Own house	Principles and responsibility	Low inflation
Own vehicle and personal transport	Yoga and meditation	Responsive political leadership
Marriage		Pride in nationhood
Children		Global linkage (globalization)
Good family life and well-being of family		
Good interpersonal relations		

Leisure and recreation		
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Data have been collected through a structured and pre-tested questionnaire. The five point scale is used for each response. The happiness question has been framed by using the most prescribed overall experience question on five point scale. The sample has been selected on random basis, using six employment categories as the purposive benchmark. No definite number for each category sample has been fixed. A total of 193 valid responses have been used for empirical analysis.

As stated earlier the method of Taguchi Robust Parameter Design has been used for estimating the optimal combination of factors separately among three broad facets. Taguchi estimation uses signal-to-noise as a metric designed to optimize the robustness of a factor. The method also provides rank orders of factors. Rank values tend to order the factors from the greatest effect (based in the delta values) to the least effect on the response characteristic. Delta measures the size of the effect by taking the difference between the highest and lowest value for each response characteristic.

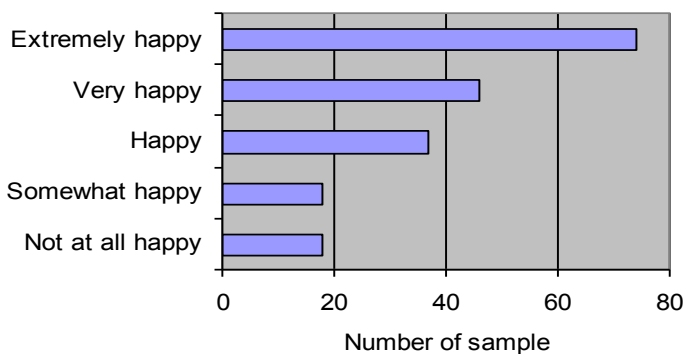
The empirical estimation with respect to Taguchi orthogonal array design has been done using MINITAB software. The other estimations in the paper have used SPSS software.

IV. Socio-economic characteristics and Happiness

Happiness trends

Chart 1 provides the distribution of sample according to their responses on happiness status. The overall experiences of urban city people in Delhi looks fairly mixed with of course larger proportion of population reporting to be above average on five point scale. About 62% of the sample reported to be happier than average, while about 18.5% of them are lower than average. If we take the middle point in the scale representing a neutral position in happiness scale, about 19% of sample seems to have stuck over it.

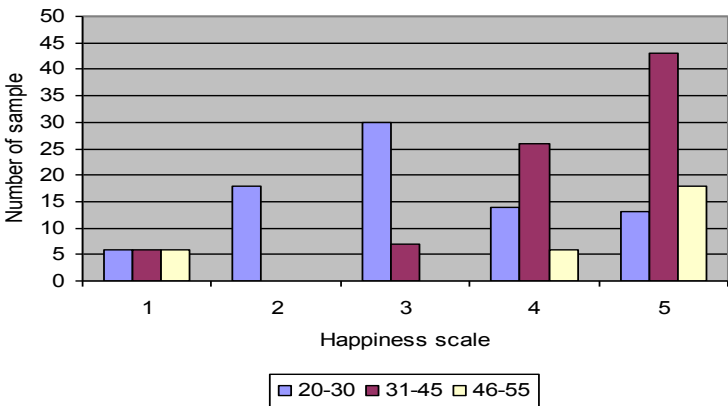
Chart 1: Overall Happiness



Age group and happiness

Age group seemingly contributes to happiness as the chi-square test on the sample is found significant. Any definite pattern in the relationship between age and happiness is difficult to discern, but the data seem to suggest that number of high and middle age group sample increases as we move up the scale in happiness. The lower age group sample demonstrates mixed pattern with a higher cluster on neutral point in happiness. Their number increase below the neutral point of happiness while it tends to decrease after this point.

Chart 2: Age*Happiness



Chi-Square Tests: Age Group and happiness

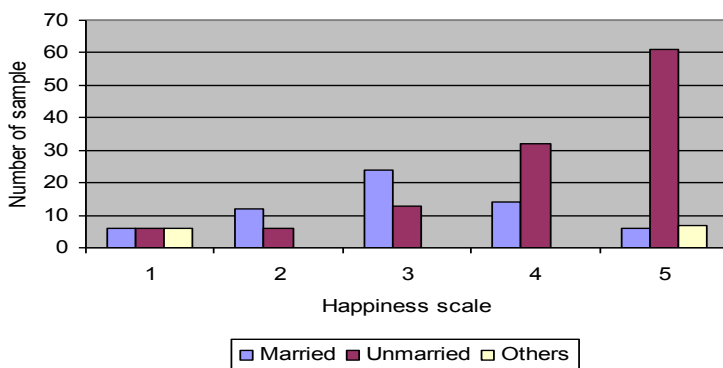
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	75.498a	8	.000
Likelihood Ratio	87.065	8	.000
N of Valid Cases	193		

a. 2 cells (13.3%) have expected count less than 5. The minimum expected count is 2.80.

Marital status and happiness

The chi-square test is significant, suggesting that marital status has a relationship with happiness. The distribution of sample depicted in Chart 2 suggests that more number of unmarried people tend to be happier as we move up the happiness scale. The reporting by married people seemingly gives the feeling that the distribution is bell-shaped with more number of people reporting to be just happy. The number tends to increase below this point while it tends to decrease above this point. The other category people are mostly widow and their size of sample is very low. Their reporting suggests that they are either extremely happy or not at all happy.

Chart 3: Marital Status*Happiness



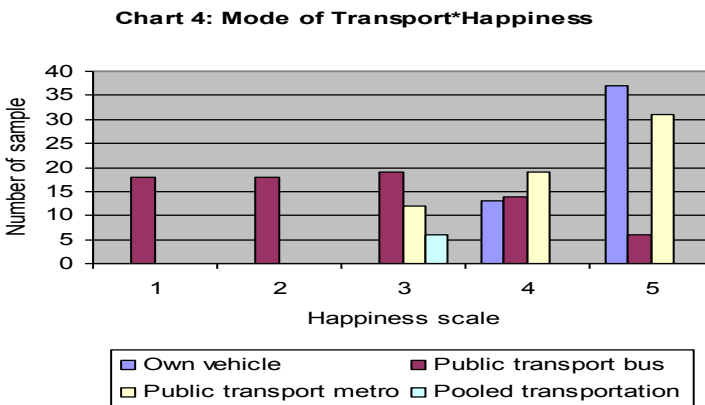
Chi-Square Tests: Marital status and happiness

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	73.557a	8	.000
Likelihood Ratio	73.361	8	.000
Linear-by-Linear Association	11.734	1	.001
N of Valid Cases	193		

a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is 1.21.

Mode of transportation and happiness

Mode of transportation in an urban city like Delhi matters a lot and it has significant relationship with happiness. The chi-square is reported to be significant. The pattern in happiness of those who own personal vehicle is either very happy or extremely happy. There seems to be an important difference in the pattern of happiness of those who uses buses and auto as public transport and those who uses metro. People are generally very happy using metro. Pooled transportation does not seem to add much happiness to people.



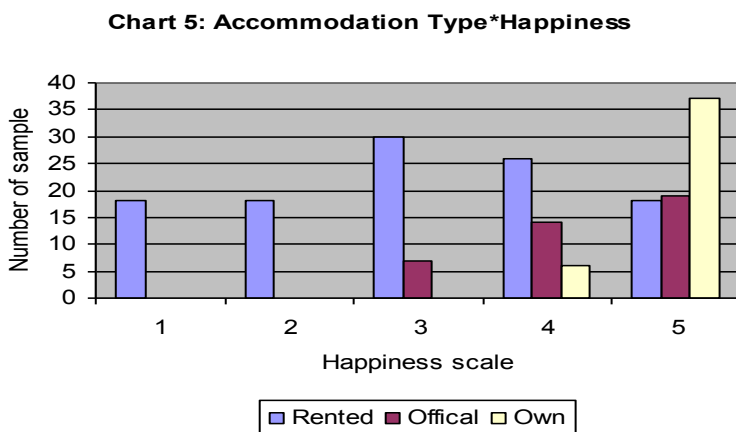
*Chi-Square Tests: Mode of Transportation*Happiness*

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.308E2a	12	.000
Likelihood Ratio	149.977	12	.000
Linear-by-Linear Association	2.394	1	.122
N of Valid Cases	193		

a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is .56.

Accommodation type and happiness

Yet another significant factor contributing to happiness in a mega city like Delhi is the type of accommodation people live in. The significant chi-square suggests that accommodation type is not independent of happiness. Those who own house are happier in comparison to those who do not and are forced to live in rented accommodation. People in government and official accommodation are comparatively happy perhaps depending upon the type of accommodation and locality.



*Chi-Square Tests: Accommodation Type*Happiness*

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	83.342a	8	.000
Likelihood Ratio	101.555	8	.000
Linear-by-Linear Association	65.137	1	.000
N of Valid Cases	193		

a. 4 cells (26.7%) have expected count less than 5. The minimum expected count is 3.73.

V. Optimal Scaling: Empirical Results

The optimal scaling for finding out the best sources of happiness has been undertaken using Taguchi robust parameter design. This exercise is undertaken separately for the three facets of happiness as described earlier. The three facets are Domain Satisfaction, Lifetime Pursuits, and Global Experiences. There are 11 sources identified under domain facet of happiness. For the facet of lifetime pursuits of happiness, 6 sources have been listed while for global experiences facet of happiness 8 sources have been identified. The selection of sources are based on CBS study, other empirical and theoretical literature and finally the prevailing socio-economic condition of India and specially that of urban mega city like Delhi. For example, selection of transportation mode, accommodation type and yoga & meditation are primarily based on the prevailing socio-economic situation of Delhi city. Further discussion on these sources is undertaken in the next section.

Domain satisfaction and happiness

Domain satisfaction results are presented in Table I, II and III. Table I provides Taguchi's unique orthogonal array used for 11 sources on three level analyses. The response calculation has been done on the basis of given orthogonal structure, converting five level responses into three levels of low, medium and high. Table II presents the list of sources used for domain satisfaction analysis. Table III presents the results of robust parameter design. Delta measures the size of the effect by taking the difference between the highest and lowest value for each response characteristic. Based on three levels mean responses, the ranking of sources suggests that the top five sources which provide domain satisfaction to the largest extent are good family life & wellbeing of family, good inter-personal relationship, good employment & job satisfaction, and leisure & recreation. Financial security and children have emerged as the least important source of domain happiness. Rank orders the factors from the greatest effect (based in the delta values) to the least effect on the response characteristic.

Table I: Orthogonal array (L_{27}) of the happiness parameters on domain happiness

A	B	C	D	E	F	G	H	I	J	K	Response
1	1	1	1	1	1	1	1	1	1	1	565
1	1	1	1	2	2	2	2	2	2	2	895
1	1	1	1	3	3	3	3	3	3	3	4105
1	2	2	2	1	1	1	2	2	2	3	1521
1	2	2	2	2	2	2	3	3	3	1	2610
1	2	2	2	3	3	3	1	1	1	2	1815
1	3	3	3	1	1	1	3	3	3	2	4580
1	3	3	3	2	2	2	1	1	1	3	3689
1	3	3	3	3	3	3	2	2	2	1	3944
2	1	2	3	1	2	3	1	2	3	1	2631
2	1	2	3	2	3	1	2	3	1	2	2895
2	1	2	3	3	1	2	3	1	2	3	2847
2	2	3	1	1	2	3	2	3	1	3	3336
2	2	3	1	2	3	1	3	1	2	1	2136
2	2	3	1	3	1	2	1	2	3	2	2775
2	3	1	2	1	2	3	3	1	2	2	1920
2	3	1	2	2	3	1	1	2	3	3	3432
2	3	1	2	3	1	2	2	3	1	1	2652
3	1	3	2	1	3	2	1	3	2	1	2795
3	1	3	2	2	1	3	2	1	3	2	2726
3	1	3	2	3	2	1	3	2	1	3	3041
3	2	1	3	1	3	2	2	1	3	3	3546
3	2	1	3	2	1	3	3	2	1	1	2052
3	2	1	3	3	2	1	1	3	2	2	3015
3	3	2	1	1	3	2	3	2	1	2	2152
3	3	2	1	2	1	3	1	3	2	3	3331
3	3	2	1	3	2	1	2	1	3	1	2875

Table II: Description of the parameters and their levels used in the domain happiness

Factor	Description	Levels
A	Financial Security	1 2 3
B	Personal Development & education	1 2 3
C	Good Health	1 2 3
D	Employment & Job Satisfaction	1 2 3
E	Own House	1 2 3
F	Own Vehicle and personal transport	1 2 3
G	Marriage	1 2 3
H	Children	1 2 3
I	Good family life and well-being of family	1 2 3
J	Good interpersonal relations	1 2 3
K	Leisure and recreation	1 2 3

Table III: Mean Response of various parameters under study of Domain happiness

Level	Financial Security	Personal Development & education	God health	Good Employment and job satisfaction	Own house	Own Vehicle and personal transport
1	2636	2500	2465	2463	2561	2561
2	2736	2534	2520	2501	2641	2688
3	2837	3175	3225	3244	3008	2980
Delta	201	675	760	781	447	419
Rank	10	6	4	3	7	8

Table III continues...

Level	Marriage	children	Good family life	Good interperso	Leisure and
1	2673	2672	2458	2466	2473
2	2662	2710	2494	2489	2530
3	2873	2827	3258	3253	3205
Delta	211	155	800	787	732
Rank	9	11	1	2	5

Lifetime pursuits and happiness

The results on the sources of lifetime pursuits of happiness have been presented in Table IV, V, and VI. Table IV provides the orthogonal array and the calculated response on happiness. Table V reports the sources used in the study and the levels used for them. Table VI reports the main results on delta and ranks. The ranking suggests that top three sources for lifetime pursuits contributing to happiness are yoga & meditation, principles & responsibility and cultural participation. The least important is faith & spiritual pursuits reflected in religiosity.

Table IV: Orthogonal array (L_{25}) of the happiness parameters on lifetime happiness

A	B	C	D	E	F	Response
1	1	1	1	1	1	41
1	2	2	2	2	2	324
1	3	3	3	3	3	794
1	4	4	4	4	4	462
1	5	5	5	5	5	1433
2	1	2	3	4	5	943
2	2	3	4	5	1	1017
2	3	4	5	1	2	710
2	4	5	1	2	3	355
2	5	1	2	3	4	523
3	1	3	5	2	4	1001
3	2	4	1	3	5	1082
3	3	5	2	4	1	821
3	4	1	3	5	2	885
3	5	2	4	1	3	825
4	1	4	2	5	3	828
4	2	5	3	1	4	767
4	3	1	4	2	5	1220
4	4	2	5	3	1	816
4	5	3	1	4	2	697
5	1	5	4	3	2	858
5	2	1	5	4	3	1056
5	3	2	1	5	4	1211
5	4	3	2	1	5	1080
5	5	4	3	2	1	663

Table V: Description of the parameters and their levels used in the Lifetime happiness

Factor	Description	Levels
A	Cultural participation	1 2 3 4 5
B	Cultural identity	1 2 3 4 5
C	Faith and spiritual pursuits(religiosity)	1 2 3 4 5
D	Honesty and integrity	1 2 3 4 5
E	Principles and responsibility	1 2 3 4 5
F	Yoga and meditation	1 2 3 4 5

Table VI: Mean Response of various parameters under study of Lifetime happiness

Level	Cultural Participation	Cultural Identity	Faith and spiritual pursuits
1	610.8	734.2	745.0
2	709.6	849.2	823.8
3	922.8	951.2	917.8
4	865.6	719.6	749.0
5	973.6	828.2	846.8
Delta	362.8	231.6	172.8
Rank	3	5	6

Table VI Continues...

Level	Honesty and integrity	Principles and responsibility	Yoga and meditation
1	677.2	684.6	671.6
2	715.2	712.6	694.8
3	810.4	814.6	771.6
4	876.4	795.8	792.8
5	1003.2	1074.8	1151.6
Delta	326.0	390.2	480.0
Rank	4	2	1

Global experiences and happiness

Table VII, VIII and IX report the results of global experiences and their relative significance in happiness. Table VII presents the orthogonal array and the calculated responses. Table VIII presents the eight selected sources contributing to global experiences which are likely to affect happiness and the three levels used. Table IX presents the results of calculation and reports delta values and the ranking of sources. The results indicate that most important four sources among global experiences are responsive political leadership, low inflation, global linkage, and good governance & welfare system. The bottom positions are occupied by responsive justice system and responsive law & order.

Table VII: Orthogonal array (L_{27}) of the happiness parameters on Global Experiences and happiness

A	B	C	D	E	F	G	H	Response
1	1	1	1	1	1	1	1	26
1	1	1	1	2	2	2	2	125
1	1	1	1	3	3	3	3	714
1	2	2	2	1	1	1	2	149
1	2	2	2	2	2	2	3	366
1	2	2	2	3	3	3	1	611
1	3	3	3	1	1	1	3	418
1	3	3	3	2	2	2	1	481
1	3	3	3	3	3	3	2	952
2	1	2	3	1	2	3	1	336
2	1	2	3	2	3	1	2	468
2	1	2	3	3	1	2	3	646
2	2	3	1	1	2	3	2	650
2	2	3	1	2	3	1	3	614
2	2	3	1	3	1	2	1	448
2	3	1	2	1	2	3	3	524
2	3	1	2	2	3	1	1	430
2	3	1	2	3	1	2	2	490
3	1	3	2	1	3	2	1	498

Practice and Measurement of Gross National Happiness

3	1	3	2	2	1	3	2	456
3	1	3	2	3	2	1	3	715
3	2	1	3	1	3	2	2	596
3	2	1	3	2	1	3	3	672
3	2	1	3	3	2	1	1	587
3	3	2	1	1	3	2	3	727
3	3	2	1	2	1	3	1	459
3	3	2	1	3	2	1	2	600

Table VIII: Description of the parameters and their levels used in the Global Experiences and happiness

Factor	DESCRIPTION	LEVELS
A	Good governance and welfare system	1 2 3
B	Buoyant Economy	1 2 3
C	Responsive law and order	1 2 3
D	Responsive justice system	1 2 3
E	low inflation	1 2 3
F	Responsive Political Leadership	1 2 3
G	Pride in Nationhood	1 2 3
H	Global Linkage	1 2 3

Table IX: Mean Response of various parameters under study of global experiences and happiness

Level	Good governance and welfare system	Buoyant economy	Responsive law and order	Pride in nationhood
1	426.9	442.7	462.7	445.2
2	511.8	521.4	484.7	46.3
3	590.0	564.6	581.3	597.1
Delta	163.1	121.9	118.7	151.9
Rank	4	6	7	5

Table IX Continues...

Level	Responsive justice system	Low inflation	Responsive political leadership	Global linkage
1	484.8	436.0	418.2	430.7
2	471.0	452.3	487.1	498.4
3	572.9	640.3	623.3	599.6
Delta	101.9	204.3	205.1	168.9
Rank	8	2	1	3

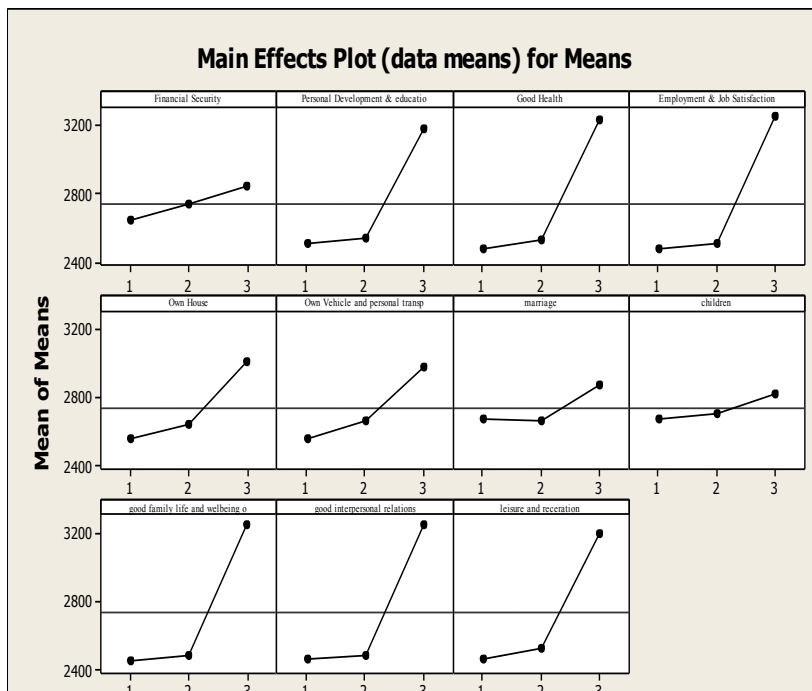
VI. Discussion and Conclusion

Main effect plots in Figure 1, 2, and 3 summarizes for each individual sources for all three facets of happiness viz domain, lifetime and global happiness respectively. The sharp upward turn from one level to other level is indicative of the fact that a marginal change in the source factor results into a big change in happiness and therefore the source factor under consideration is very important. The horizontal line indicates the mean of means and the levels are low, medium and high in a three level graph while from low to high in a five level graph.

Among the domain satisfaction sources, a good sharp turn from medium to high can be found in case of good family life & wellbeing of family, good inter-personal relationship, good employment & job satisfaction, leisure & recreation. Personal development & education and good health too have a sharp upturn from level two to three. A marginal change in all these sources would tend to increase happiness sharply. They are good sources of domain satisfaction. As far as marriage and children are concerned, the results demonstrate the urban compulsion and mentality towards them. Marriage is a source of happiness but people do not seem to weigh children as high as marriage. This is urban compulsion as the demand for children in urban city is constraint by space, congestion, quest for high standard of living, lack of time etc. This is also the reason why living together becoming an urban concept. Not surprising that own house and own vehicle as mode of transportation are held high and people seem to derive more happiness once these are met with. The result also confirms that introduction of metro in Delhi has

increased happiness in general wherein with road congestion increasing day-by-day; people have got solace of comfortable and secure means of transportation. Financial security has been taken as a neutral source of happiness. A marginal change in earnings may not bring about a big change in happiness. In a way, Delhi urban data clearly points out that money is not a major source of happiness for them.

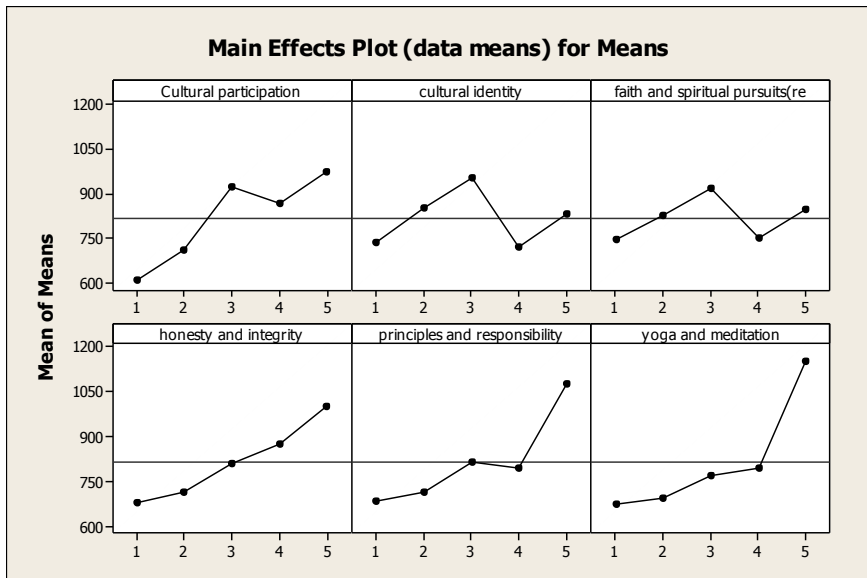
Figure 1: Main Effect Plots of Domain Happiness Sources



The lifetime pursuits in a busy urban city take a luxury form wherein a lot of time which will have huge opportunity cost needs to be invested. The results suggest that New Delhi is no exception. Therefore, it is not surprising that people have weighed yoga & meditation as the best source of happiness in the pursuit of better lifetime satisfaction. Figure 2 clearly points out that as yoga & meditation moves up the scale from level four to five, there is a huge

change in happiness. Similar weightage seems to have been assigned to principles and responsibility. People also finds a lot of happiness in cultural participation, but surprisingly not so much in cultural identity. In a cosmopolitan make up of New Delhi, people's perception about cultural identity and mobilization is absolutely clear that culture is a source of happiness but not the cultural hegemony. Honesty and integrity is more important for happiness than cultural identity and mobilization.

Figure 2: Main Effect Plots of Lifetime Pursuits Sources of Happiness



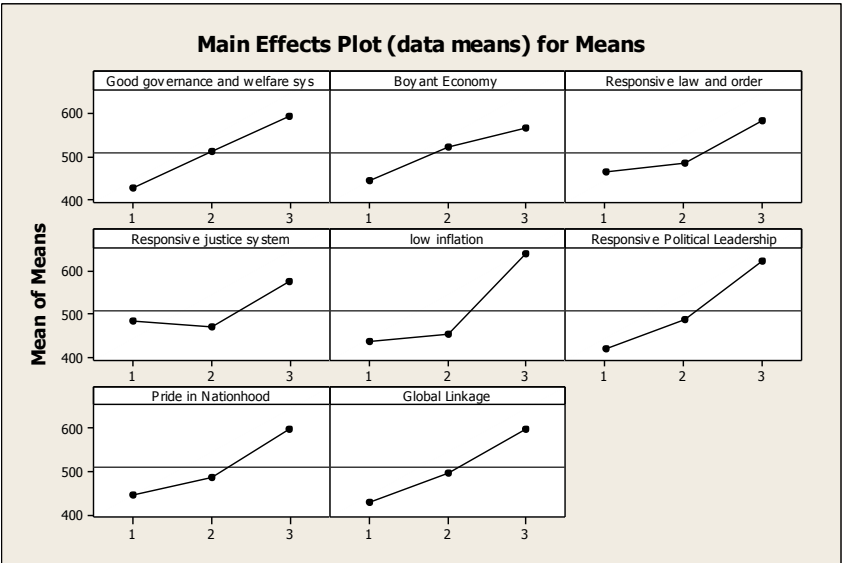
Global experiences are macro factors related to society, economy and global system. Prima face, these macro factors do not seem to be related to individual happiness. However, the global experiences are most likely to be accounted for when lifetime based happiness response is obtained. Among all global experiences, people of New Delhi could immediately relate low inflation and responsible political system as the most important experiences affecting happiness. Figure 3 clearly provides a sharp upturn in these two cases when we move from level two to three. Next level of

important global experiences is good governance, and good law & order situation.

About responsible justice system, Figure 3 reports that when we move from level one to two it actually goes down and from two to three it takes upturn. This indicates that people’s choice about justice system is absolutely clear in favour of a proactive and high deliverable system. In fact, a prolonged and low deliverable system is justice is a source of unhappiness.

A buoyant economy is a source of happiness where people do not like economic slump or recession. In fact the expressed choice for global linkage is extremely positive. Therefore, a healthy and buoyant economy with better global linkage creates good global experiences and leads to enhancement in happiness.

Figure 3: Main Effect Plots of Global Experience Sources of Happiness



It is evident from the results and discussion that a good combination of domain satisfaction sources, lifetime pursuits and global experiences would constitute an optimal scale of happiness. A wide

based survey for whole nation can provide comprehensive optimal scaling. Such scaling will have possibility for public policy formulation. An informed public policy formulation may incorporate and address sources of happiness obtained through the process of such optimal scaling. This will go a long way in increasing happy life days of a nation and making of a happy nation.

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GNH - The Way Forward

The Future of Gross National Happiness

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I have been working on issues relating to happiness for a number of years now and I first attended a meeting on GNH in early 2004 here in Thimphu, at which I presented a paper which had a double purpose. First of all, I wanted to summarise what we know from the western empirical literature about the relationship between happiness and economic growth, the broad conclusion of this being that the two concerns are becoming increasingly de-coupled. Thus, as individuals and nations increase their volumes of consumption, levels of felt happiness do not seem to correspondingly increase, at least in those wealthy societies we deem to be economically 'advanced'. I think this is now a generally accepted conclusion with many studies validating this basic claim in the interim. The second purpose of my original contribution, and the one I wish to return to today, was an encouragement to look at happiness from the perspective of ethics and to see any policy of increasing national happiness as necessarily involving a deeper commitment to expanding our ethical skilfulness and maturity. At root then, I have long argued that a focus on facilitating happiness must seek to actualise our broader human potential to become more inclusive in our thinking about how we might constructively approach that goal.

Unfortunately in much of western culture, this agenda has only a faint resonance. In consumer societies the twin ideals of happiness and inclusion have become increasingly separated as we have moved from seeing happiness as simultaneously involving being good and feeling good towards a conception that emphasises good feeling alone. In this cultural reinterpretation happiness has been separated from notions of justice, compassion and responsibility.

The end result is an overwhelmingly individualistic culture in which ethical initiatives like GNH are prone to compromising misinterpretation as they enter into foreign frameworks in which happiness is deemed to be a merely quantitative and emotional variable. The nuances involved in aspiring to a more skilful mode of securing a more accomplished happiness are likely to be missed under the imperatives dominant in contemporary western societies, particularly in those that are most completely captured by market philosophies. In these settings, the collapse of a qualitative and subtly complex approach to happiness into a simplistic and merely quantitative modality invokes a search only for *more* as opposed to *better* forms of fulfilment and this constraint is likely to collapse GNH's considerable potential to mitigate a range of current global crises – particularly the ethical challenges of improving social justice and enhancing ecological sustainability.

In the many circles I work within, GNH is received very positively indeed and the ideal almost never fails to raise an affirming smile. The general consensus seems to be that pursuing happiness as opposed to economic growth would be a very good idea. However, here and in the generally populist accounts of GNH commonly found in the western media, the concept is not probed into in any depth. Rather it is instead accepted only superficially and as a kind of exotic curiosity - something unusual and pleasant to behold, but ultimately a foreign idea that is almost impossible to relate to our current imperatives and modes of social structuring. The failure to take on its complex and profound implications is due in large part to its ascendant ideals being unwittingly collapsed to fit into what some writers refer to as the 'moral flatland of modernity.' This refers to a predominating cultural plane in which there are no overarching imperatives towards a qualitative human improvement, but only a range of sovereign individual choices that are deemed to be equally legitimate and rightfully free of normative evaluation. To illustrate this mundanely, if one chooses to drive a heavily polluting car in the name of individual happiness this is a free choice and as such no better or worse (in terms of the happiness produced) than purchasing a minimally polluting equivalent. Thus, the way one

decides to seek felicity in consumer cultures is seen as being an issue of individual choice, and this, so we are told, is a sacrosanct space that cannot be impinged upon in a culture dominated by ideals of freedom from institutional guidance and control. As such, the modality through which one secures happiness in modern secular culture is viewed as being largely irrelevant to the value of happiness as an ultimate outcome. If GNH is to fulfil the potential that many invest it with, we need to engage a much more rigorous analysis of what a rightful happiness actually involves. Such an analysis quickly takes us well beyond the limitations of a simple amoral quantification to engage a qualitative view in which happiness exists as only one facet of a more complex human development.

With this in mind we can constructively begin to explore what exactly we might properly conceive of happiness to be. I have become aware from long contact with many indigenous officials, scholars and commentators that in the Bhutanese view, the concept represents an increasing skilfulness in developing our multifaceted capacities for deep improvement and this of course emanates primarily from a Buddhist sensibility in which a full happiness comes only as wisdom, compassion and self-restraint are brought together in harmonious arrangement. It is apt then to view happiness as being symbolically equivalent to a gemstone – a beautiful entity that finds its shape by virtue of the various facets that constitute its form. Happiness then has many faces, including not least a deep wisdom and insight, a profound appreciation of beauty, a broad attitude of loving-kindness towards others and a spontaneous self-restraint that frees us from constant grasping and greed. All of these aspects shape the quality of our happiness and none can be meaningfully separated from the qualitative fulfilment that GNH ultimately seeks.

In the west by contrast, happiness has lost this multi-faceted richness as it has come to be seen as a simple and separable emotion devoid of such qualitative complexity. The concept has been inexorably isolated from notions of maturity, compassion, wisdom

and an enhanced capacity to reflect deeply upon the meaning and purpose of life. Although it is true that through the methodical efforts of empirical science, happiness is being ploddingly reconnected to these variables, the hypothesised relationships remain tenuous and are viewed as existing between fundamentally independent variables. What this observable fact demonstrates is a profound failure to insightfully appreciate the deeper aspects of happiness and their mutual involvement in any personal and social transformation. Thus when we assess happiness from a western viewpoint, it is very easy to completely miss the deeper synergies implied by GNH thinking and to completely miss the fact that we miss this. To fully grasp the meaning of Bhutan's message then, it is essential that we recall that the happiness aimed for is a complex state of accomplishment that improves in quality as the skilfulness of our engagement with the world grows.

To more fully understand this it is important that we appreciate the essential end points of the qualitative continuum that defines our potential in any Buddhist discussion of happiness. In its poorest and least developed form, happiness is seen to exist in a complex known as *dukkha*. *Dukkha* refers to an unskilful conscious modality that includes happiness, but a happiness that is hampered by an equal tendency towards suffering – hence the constant use of the term to denote suffering as well as happiness. This reflects the basic insecurity of *dukkha* as an incomplete fulfilment and the ease with which it moves from a state of joy into one of despondency. To seek *dukkha* is ultimately to seek mere pleasure and the temporary happiness that is derived from this tends to be unstable, superficial, self-centred and short sighted. As such it tends us towards endless conflict as it demands constant re-stimulation if it is not to fade and fail. This incompetent form of happiness seeking is dominated by what Hinduism would call '*avidya*' (ignorance) or '*maya*' (illusion) but the poverty it incorporates, and the problems that it generates can be transformed as the individual matures and realises a greater potential and as a result of this begins to open to *sukkhā* which is a far more accomplished and skilful form of happiness. *Sukkhā* as a term represents a qualitatively richer fulfilment in which the

superficiality and insatiability of *dukkha* metamorphose into profound forms of stable fulfilment that are freed from the grasping demands for constant and enervating input. *Sukkhā* then is a qualitatively different and vastly superior form of happiness not only because it is experienced personally as a secure and pervasive joy but equally because its expression spreads outwards to benefit those who contact it in the broader environment.

This qualitative movement from *dukkha* to *sukkhā* can be most clearly conveyed by reference to the concept of attachment. The Achilles Heel of an unskilful pursuit of happiness is that it is derived from a psychological complex in which we become dependent on sources of happiness that lie beyond our control. In other words, *dukkha* depends upon deriving pleasure from externally located objects, persons and processes. There is nothing wrong in this per se - we all derive pleasure from good company, beautiful things and the affection of loved ones and these are all valuable contributors to our feelings of self-worth and place in the world. The problems of *dukkha* stem from becoming dependent on such sources for our feelings of happiness. When such dependency is formed, we begin to engage a process in which frustration, disappointment and conflict are ever-present shadow states. Thus, again to use a mundane example, if a person buys a new cell-phone, it may produce a sudden burst of pleasure as one feels included at the cutting edge of consumerism. It may help us draw admiring glances from others and the quality of the new services now available may allow us to feel more free and empowered. But if one becomes unskilfully dependent upon such an object, then when it breaks down, gets stolen, is lost or super-ceded by a new, more fashionable model, we can be easily plunged into despair. We can see then how in making happiness depend upon external sources, we put ourselves in positions of great vulnerability, for the simple reason that we have little control over the dynamics of the world that lies beyond our own personal boundaries and hence little control over our own happiness.

A further illustration of this important point can be gained by considering one of the most prone sources of felt happiness, our relationships, where we can clearly see the same dynamics at work. In any situation where a partner becomes dependent upon another for their felt happiness, conflict and suffering become equally constant potentials. Should the other person decide that they wish to break the relationship then our happiness is put under threat. Where there is a high level of felt dependence there will be an immediate transformation of happiness into suffering, as love turns into hate and fulfilment fades into emptiness. The conflict this often prompts commonly expresses itself in a spreading misery through which spurned husbands, wives and lovers become angry, abusive, and violent as they attempt to hold on to what they believe they depend on for their on-going happiness.

The movement out of *dukkha* and towards *sukkhā* demands an undoing of this unskillful dependence on an external world to deliver our happiness and a transformative shift such that we come to rely on the deeper and more stable fulfilments that can be derived from the cultivation of our own internal resources. This is not imply that the pleasures derived from externally located goods or relationships lose their legitimacy, but rather that we can move beyond a clinging dependence on these for our primary sense of wellbeing. Thus, as we mature we come to realise more of our own developmental potential in the psychological, social and spiritual realms. As we move towards actualising these inherent resources, we move away from dependency, short-sightedness, superficiality, conflict, insatiability and the other tyrannies inherent in a less mature striving. In the realm of our relationships this allows us to extend non-controlling respect towards others as equanimity, compassion and a greater wisdom come to confer a deeper, more stable and less dependent joy that is relatively immune to the vagaries of external change. Similarly, material goods can be appreciated without causing upset when they are denied, destroyed or fall out of fashion. The happiness that *sukkhā* represents comes as an inherent facet of a broader maturity that recognises the

inevitability of change and the futility and violence of externally-directed dependency.

If we compare this qualitative appreciation of an improving happiness, that ranges from an unskilful, vulnerable and destructive form into a skilful, invulnerable and generative form, the contrast between this and the simple quantitative model of western conception reveals the extent of the latter's limitation. We are of course, now witnessing a rapid outpouring of books, courses and studies of happiness as it moves into a western secular consciousness and in this we can see that happiness is indeed being viewed largely as a simple and non-complex quantitative variable. Individuals are encouraged to find more happiness, nation states to look for policies that will increase the amount of happiness but it is very rare to find any corresponding call to find a better happiness. The extent to which this is true is revealed in the basic epistemology and methodology employed in the western framework. In the mounting number of studies in which happiness is the variable of primary interest it is invariably assessed on a simple numerical scale. Witness for example the plethora of studies in which people are asked to report on how much happiness they feel given the conditions of their own lives. On one side this is a purely quantitative exercise, demanding a response on a scale of say 1 to 7 or 1 to 10 where there is no orthogonal assessment made as to the quality of that happiness. But it is important to note further how completely this is locked into a narrow assessment only of the self and its outcomes. We do not find studies in the main academic literature addressing the question of how happy we might be with the broad conditions of others lives. People are not asked about how satisfied they are with the opportunities their children may grow up to experience. This individualistic mode of analysis sets us up to view happiness in a very narrow and compromised light, as a variable devoid of social or moral referents. Through such an approach, we unwittingly validate the most unskilful modes of finding only a constrained happiness and undo the corrective pull away from *dukkha* towards developing a fuller humanity. As we collapse happiness into this cultural flatland we obviate its

transformative potential, and with it the potential of GNH to prompt a deeper rethinking of our global priorities.

My fear in this regard is that the necessary movement towards seeking *sukkhā* will be bastardised by the prevailing non-aspirational mode of western culture and that a renewed pursuit of happiness will do little but reinforce this destructive dynamic. In part this comes from the realisation that the search for happiness has already been corrupted in this way. Thus, when Bhutan proposes that GNH would be a better outcome to seek than GNP, it is not in fact introducing a wholly new consideration into the western mind as many seem to think, because western society in its present capitalist mode is already all about seeking happiness, albeit a narrowly bounded one. If one looks at the philosophical substructure of consumer capitalism, its processes are clearly justified in terms of maximising individual and collective 'utility' or pleasure. The terminology itself reveals not only the centrality of happiness to modern economic doctrines but also the extent to which it is implicitly tied to a *dukkhā* mode and the characteristic dependency this invokes in relation to the external world. The cultural problems generated by western individualism exist then not due to an absence of happiness in western strategic thinking, but rather because of a redirection of a fundamental search for fulfilment into the marketplace and its promises of a narrowly conceived and externally derived set of material pleasures. In its present form western material culture suggests that our ability to find happiness is largely, if not wholly dependent upon our ability to secure pleasure in the external marketplace. Essentially then, our spreading global dilemmas come not from a disregard of happiness as such, but from disregarding the qualitative complexity of happiness and the immaterial means by which it might be more reasonably secured.

Central to all the preceding discussion is the fundamental problem of selfishness and the tendency this creates towards separation from others and a fundamental disregarding of their interests. In the basic blueprint for forging a market economy, the motivational complex

that is to encouraged above all is one of narrow individualism and intense competitiveness. At the level of the individual, Adam Smith's famous philosophising (along with more recent purists like Hayek and Friedman) provides the most articulate and influential summary of this basic belief. At the level of the nation state, David Ricardo's theorising is equally illustrative of the tendency in its focus on the competitive advantage of nations. The theme that ought to be taken from these and other formative works is that the search for happiness, should be operationalised by employing strictly narrowed boundaries of consideration. The end result is an encouragement towards a form of self-centredness in which individual persons or nation states can legitimately seek their own fulfilment without taking into account the corresponding interests of others - a dynamic that clearly violates the basic grounding of ethical maturity. In employing such narrow modalities everybody and everything that lies beyond the enclosing boundary of the self or the nation may be disregarded, or indeed exploited, as a means to securing 'my' or 'our' exclusive happiness.

That this is the case is I think obvious if we look at the present arrangement of a world shaped by these non-aspirational perspectives. The globalising dynamics that are driven by these narrow modes of finding happiness cause endless suffering and conflict. Over a billion people in the poor world are currently unable to secure enough food for normal daily activity while another billion in the wealthy world are clinically obese from an excess of calories. A woman in Sierra Leone has a one in eight chance of dying in childbirth, while one in Sweden has only a one in eighteen thousand chance of suffering a similar fate. So the boundarying of individual or national interests is no trifling matter as it inflicts very real suffering on the swathes of vulnerable others who are sidelined, ignored and literally left to die. This is of course a profound ethical problem and it comes in large part from the cultural dynamics through which happiness is 'legitimately' freed from ethical maturity. Such an ethically oblivious mode of seeking consumptive gains can only be supported when some other grand abstraction (like a god or a perfect market mechanism) is proposed as a

compensating counterforce to the obvious problems that are likely to emerge. Such abstractions allow us to continue our narrow indulgences and to believe that a qualitative maturation is unnecessary.

If we are to lessen the lamentable consequences that follow from a failing responsibility then mystifying diversions of the form just mentioned must be challenged and replaced by a more clear-headed vision that reunites our simultaneous searches for improving justice and improving happiness. In saying that we have come to adopt a narrow and competitive view of happiness seeking in which conflict is inherent, I am not implying that suffering and polarisation are actively condoned within a western model of culture and economy, but rather that they are ignored in the cultivated faith that our own outcomes can be sought by our own efforts while those of others can be provided by forces larger than ourselves and over which we have no influence. This doctrine can now only be sustained by profound ignorance and inattention as to the real consequences of hyper-competitiveness on a global level.

At the roots of the free market model of happiness the dim remnants of an ethical consciousness remain. In utilitarianism, the doctrine that provides the fundamental ethical underpinning of contemporary consumer society, the search for individual happiness is always to be balanced with a conscious consideration of others legitimate interests. But the need to actively employ an ethical calculus in achieving personal happiness has largely fallen into practical desuetude as markets have claimed for themselves super-ordinate abilities to deliver a general thriving regardless of the ethical quality of individual motivations. In western consumer culture there remains only a faint echo of an integrated maturity. Yet in contemporary western culture there are many ways in which we could resuscitate a reconnection such that happiness and ethics might once again become complimentary facets of a genuinely progressive human improvement. This is essential if we are to embrace the deeper spirit of GNH thinking and have it play a synergistic role in reconstructing our wayward tendencies. I would

like to demonstrate this if I may by taking a brief detour into the psychological understanding of moral development as it is commonly conceived in the west - and in particular by reference to the ways in which individuals have been found to qualitatively improve their understanding of what is just and unjust as they mature into more accomplished modes of being.

In this literature in general, and particularly in the specific theories of writers like Lawrence Kohlberg and his protégé James Rest we can see a very strong alignment between the qualitative model of happiness dominant in Buddhism and a similarly qualitative ideal of moral improvement. Lawrence Kohlberg, an American psychologist spent an enormous amount of his professional life interviewing hundreds of people in an attempt to uncover how our understanding of ethics changes as we mature. Just as with a Buddhist model of qualitatively improving happiness, in Kohlberg's scheme there is a parallel process of improvement in the ways in which we perceive justice and this unfolds as a function of maturation. As a result of his extensive researches into how we resolve moral conflicts Kohlberg identified three basic stages of moral reasoning. He argued that we begin looking at ethics in a constrained and unskilful way known as pre-conventional reasoning. During pre-conventional reasoning the individual defines justice and injustice by primary reference to the consequences that accrue to the self and only to the self. Thus, a pre-conventional individual will see someone stealing from them as being unethical - the self loses. But if the individual herself can steal from another and gain in the process that action can be defined as perfectly just as a function of the personal gain that results. In pre-conventional reasoning then, the boundary of consideration is drawn tightly around the self. In its crudest form this veers towards a clinical sociopathy in which the individual is willing to assault, kill or rape others for their own pleasure and shows little if any ability to relate to the sufferings they inflict on others. Fortunately most people develop well beyond these limitations, as the boundaries of inclusion expand. As we mature then, we begin to take into account the interests of those with whom we are most familiar, typically

those we have face to face relationships with. Friends, family and neighbours become worthy of consideration as their interests are included in our calculations of what constitutes fair conduct. As we move further through the pre-conventional stage we come to include the interests of the broader communities of which we are a part, or with which we identify. This may a village, a tribe, an occupational group, a religions brotherhood or any other community. As a result these constituency interests are balanced with our own personal outcomes allowing for the possibility of self-restraint in order that fairness be maintained.

This process of expanding inclusiveness works throughout the stage of pre-conventional reasoning but still by its end, one witnesses a continuing boundarying of interests as 'our' outcomes continue to be defined to the exclusion of 'their' interests - setting the pre-conventionalist up for constant conflict and friction. But Kohlberg argued that we do not need to stay entrapped in these poorly accomplished realms and that we can and should move beyond them to attain a greater maturity in the form of conventional reasoning. In Kohlberg's studies conventional reasoning is revealed in (among other things) an increased capacity for balancing personal and group interests with the larger national interest. Thus in conventional reasoning sub-groupings are willing to contribute to the general well-being in the form of taxation for example, or through adherence to the laws of the land in order to ensure collective stability - even in instances where personal gains are sacrificed in the process. Medical care, social support, universal education and respect for human rights are all derived from this broadly considerate mentality, but again this generosity remains constrained as the interests of those with out the nation state are ignored or actively violated in the name of the national interest. If national income can be increased by exploiting others resources or labour then 'fair enough'. Kohlberg referred to this level of socially-inclusive thinking as conventional because he believed it represented the most common mode in western society, yet not the peak of our potential unfolding. Beyond conventional reasoning lies

another much less common realm of truly skilful and accomplished ethical sensibility, this being post-conventional reasoning.

In post-conventional reasoning, the ethical limits of the national interest are transcended as we come to realise the importance of more universalised principles – ones that extend the right to inclusive consideration beyond the self, the family, the community and the nation state to cover all humanity regardless of location, faith or race. Thus for instance, the basic rights not to be tortured or abused by authority is seen to apply regardless of location or leaning. If workers are being exploited to produce cheap goods this is as unacceptable if it is happening in Bangladesh as it would be in Birmingham and as a result self-gain or even national gain can be tempered in the name of distant others. Issues of inter-generational sustainability also come into play as the interests of not only the present generation but also of future generations come to demand recognition as do the interests of other communities of living things.

Kohlberg's model of improving ethical reasoning is not presented here as the be all and end all of ethical perspectives in the western academy but only as a useful perspective that more easily aligns the essential dynamics of qualitative improvement in both our ethics and our happiness. It suggests to us that we can move from very narrow and conflict-ridden modes of consciousness towards more accomplished and harmonious modes of considering the general interest. Put simply, this scheme is about how we can overcome the problematic selfishness that underlies all interpersonal, international, inter-generational and inter-species conflicts to adopt a qualitatively better mode of conscious engagement. But what you may ask has this got to do with the preceding discussion of the qualitative dimensions of happiness. Well, it has everything to do with these and the linkage is simple

If it is true as GNH and a host of other perspectives suggest, that the primary outcome we seek in life is happiness, the additional consideration of ethics in this context introduces the question of whose happiness we should be concerning ourselves with? If we are to say that everyone values happiness to an equal extent then the

issue of improving morality is one of an increasing appreciation of the importance of others happiness to our considerations. As we become more mature, we can come to see a broad harmonious happiness as the outcome of ultimate importance, one which like the happiness to which it connects, is qualitatively different and superior to a more self-enclosed and oblivious form of happiness seeking. Here then we have a clear parallel to the ideals of qualitative improvements in happiness in the Buddhist tradition and the movement out of an unskilful, superficial and dependent mode that derives its pleasures from exploiting the external world. In the qualitative improvement of moral reasoning we see another dimension of this broad human development as appropriate conduct increasingly comes to be defined by the ability to skilfully overcome the limitations of selfishness. When these twin facets of a proper development are brought together they imply a very important understanding – that as we move from the pursuit of a purely personal happiness towards a more skilful pursuit of a considerate and inclusive happiness, the quality of the happiness experienced is an improving one.

This bringing together of the ethics and the psychology of happiness is profoundly important and essential to realising the potential of GNH as a transformative force in the modern world. The current mode that drives us towards systemic injustice and unsustainability comes from a biased pursuit of a purely personal happiness that denies the needs of the whole. As I previously mentioned the movement of happiness into the western mind has overwhelmingly been directed at achieving results of value to a pre-conventional mentality that continues to emphasise the importance of feeling good and not of being good. Inherent in this is a continuation of the idea that the individual's happiness is the overwhelmingly important focus of interest and this will continue to be the case unless the tendency is directly challenged. In the absence of this, a shift from seeking more material wealth to seeking more happiness will fail to ameliorate the profound structural problems secular-economic culture continues to spawn. Rather, it will in fact continue them as an underlying individualism retains its legitimacy and

shifts only to change the object of its attentions while leaving the means by which it seeks them in an unimproved state.

The only practical solution to our current and very profound malaise is to realise that the happiness that we seek within competitive and individualistic frameworks is inherently a lesser happiness, and that our own wellbeing and that of others are not in necessary conflict as the contemporary structuring of consumer culture would suggest. This is a deeply unskilful view, one related to the stunted miseries of *dukkha* and pre-conventional reasoning and it must be transcended if we are to truly progress as a species. We must come to realise that the interests of ourselves and others are in fact completely harmonious when viewed from a mature perspective. Thus, the more we include the interests of others the more we gain in terms of the strength of our relationships, the security of our communities, the vibrancy of our environment and the profundity of the happiness we experience.

If we are to take these arguments seriously then, GNH needs urgently to be placed in an explicit framework that moves it beyond the compromising rationalisations that western consciousness makes possible and one constructive option is to align it more directly to the seeking of an ultimate harmony. It is the harmonisation of our own interests with those of other nations, species and generations that offers us the best hope of a spreading and deepening wellbeing and it exists as an ethical imperative at this point in our collective history. The pursuit of a narrow, superficial and fleeting happiness guarantees continuing conflict and misery and to fail to explicitly state this in the context of GNH is, I believe, to feed into the contemporary destructiveness by leaving its fundamental roots undisturbed. I would like to suggest then that if we are really to facilitate the constructive movement of GNH outwards into a world prone to misperceiving it, we need to more firmly integrate it in a multi-faceted appreciation of its necessary connection to improving respect for others and their search for fulfilment.

Finding harmony is the only corrective for a world rife with conflict. Harmonious resolutions to the worlds parlous state will as a matter of course, provide for an increasing happiness, but an uncritical focus on happiness alone will not be sufficient in and of itself to ensure a positive shift in our attention. I have made mention in the preceding discussion of the positive movement from *dukkha* to *sukkhā* and of the interpersonal conflicts which become inevitable as the interests of one or some are posed against the interests of others in a competitive and controlling sense. But disharmony is equally evident in two additional thematic arenas that deserve mention. The first of these relates to the intra-personal realm in which the pursuit of a pre-conventional and dependent happiness creates conflict with our own deeply set needs to unfold our potential and realise our full maturity if thriving is to be genuinely experienced. In many of the advanced material economies this is closely connected to the deliberate deceiving of mass populations as to where their interests genuinely lie, a profound problem that I have raised in the context of advertising on a number of occasions. I noted above that the fundamental problem of commercialised societies is that the search for happiness has been so effectively diverted into the marketplace. This diversion, through which we are encouraged to lock ourselves into an ignorant and harmful immaturity, builds an essential conflict within ourselves as our immaterial needs for personal growth are ignored and the internal resources we have available to us are left to atrophy. As this occurs, we lock ourselves into continuing dissatisfaction. The consequences of this are evident in the growing discrepancies we observe between our levels of material consumption and our levels of experienced happiness. They also reveal themselves in the insatiability of our resource use as we consume more and more of the planets resources in a futile attempt to compensate for our own lack of inner fulfilment. Furthermore, the inherent emptiness of a consumptive approach to finding happiness is ignored only by employing increasingly distracting evasions that move us even further away from the potential for a genuinely conscious resolution of these basic disharmonies. Indeed this is apparent at the heart of those societies in which levels of consumption and happiness are separating most egregiously. Thus

in those societies where commercial intrusion is most complete we can readily observe the relentless rise of increasingly potent means of distraction - in the form of ever more sensational media, commercialised experiences, intensified work schedules and cocktails of mind-altering drugs of both the legal and illegal form. The end result is a poverty of time and attention which denies us access to the inner resources that would direct us towards the internal transformation necessary for securing a better and more considerate form of happiness.

This intra-personal conflict leads into a profound and troubling conflict with the needs of future generations whose interests are ignored even by the vast majority of conventional thinkers. A superficial material happiness demands constant feeding and as the encouragement to consume expands in intensity and reach, more and more of our collective resources are being consumed in the here and now, leaving potentially disastrous shortfalls for our children and grandchildren. Our present happiness is pitched against their future happiness, and once again we find that a divisive and competitive perception as to how happiness might be best secured lies at the root of this problematic dynamic. And inherent in this is the growing conflict between ourselves and the natural systems upon whose regenerativity all life-forms depend. Humanity is now clearly over-exploiting natural resources in a misguided search for fulfilment leaving the needs of other species - for space, soil, water and food - in critical shortfall. We are over-fishing our seas, chain-sawing our forests, over-farming our land, draining our aquifers and actively killing off fellow creatures in a fit of consumptive greed that demonstrates our failing humanity. We have mounting evidence as to the profundity of this destruction and if we add to this the potentially catastrophic impacts we are having on the earth's climactic system we can readily see how our failure to realise a harmonious happiness is threatening a great unravelling in which suffering will spread and deepen across the whole living system.

In light of all of these problems, many are turning to happiness as a solution. Clearly the spreading conflicts that immiserate the world

are exacerbated by a runaway economic system, but to realise this is only to realise the most superficial aspects of the problems at hand. The deeper dynamics are driven by an insatiable greed and a narrow selfishness that seeks satisfaction in reckless and violent ways. At the deepest level it is driven by the ignorant belief that happiness can be legitimately secured in the absence of responsibility and maturity. As we look to resolving these problems it is imperative that we realise that a focus on producing merely more happiness offers no corrective to these problems. The declining state of much of the worlds living systems demands that we seek out a qualitatively better form of happiness in qualitatively better ways. GNH properly understood offers a tremendous opportunity for us to begin such a reformation but it will demand a wholesale transformation of our political, social and economic structures and this can only begin with the transformation of the psychological and cultural structures that underlie them. In conclusion then, I believe it is imperative that we urgently come to appreciate that what Bhutan offers us is not a simple opportunity to gain more superficial satisfaction in the short-term, but an opportunity to seek our fulfilment through the actualisation of our deepest potentials for compassion, self-restraint and wisdom. In the end, it is these and only these that will save us from the momentous misery that now stalks our global future.

Critical Holism: A New Development Paradigm Inspired by Gross National Happiness?

Hans van Willenswaard

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 movement'-workshop series a group of stakeholders in 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.¹ Subsequent recommendations for capacity building and policy development including all 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 through the so-called 'four pillars'. The 'Four Pillars' of Gross National Happiness are (1) cultural preservation and promotion, (2) good governance, (3) equitable social and economic development, and (4) environmental conservation. The Centre for Bhutan Studies has developed nine research domains (psychological wellbeing, health, time use and balance, 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 concerted 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 (driving force)	Experience in here and now	Happiness as Result (reward)
Inner Happiness	Dependent from outer conditions	
Spiritual Criteria (<i>genuine happiness</i>)	Self Evaluation ("overall positive quality of my life")	Social Criteria (the costs of happiness)
Collective Happiness	Individual Happiness	Happiness as a Public Good
Scientific Reflection and Research <i>"Lessons from a new science"</i>		

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 neo-liberal 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

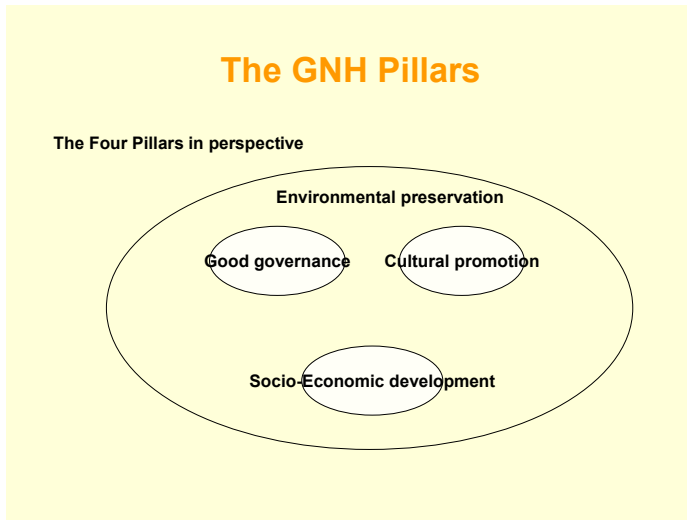
This tentative definition implies that happiness is related to "meaning" as supported by collective world views.

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 re-think 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 re-interpret 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.

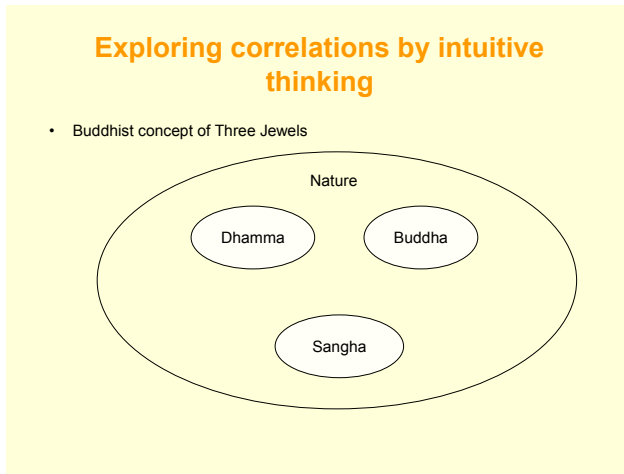
The principle of interconnectedness in social life implies that it is (no longer) possible to escape responsibility by declaring limits to individual, group or corporate liability. We are now bound, in the words of Satish Kumar, founder of Schumacher College in U.K., to a universal 'Declaration of Interdependence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

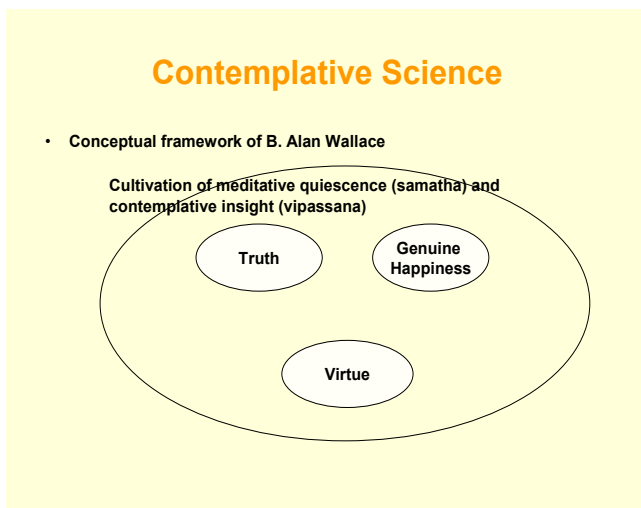
For a full understanding of the potential towards social innovation of Gross National Happiness, we are invited to include this contemplative dimension in our scientific and professional explorations. In the words of Dasho Karma Ura: we need a *Third Eye* to fully understand Gross National Happiness.¹⁷

Matthieu Ricard, a French physicist 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 re-invigorated.

Buddhism and the French Revolution: Dr. Ambedkar

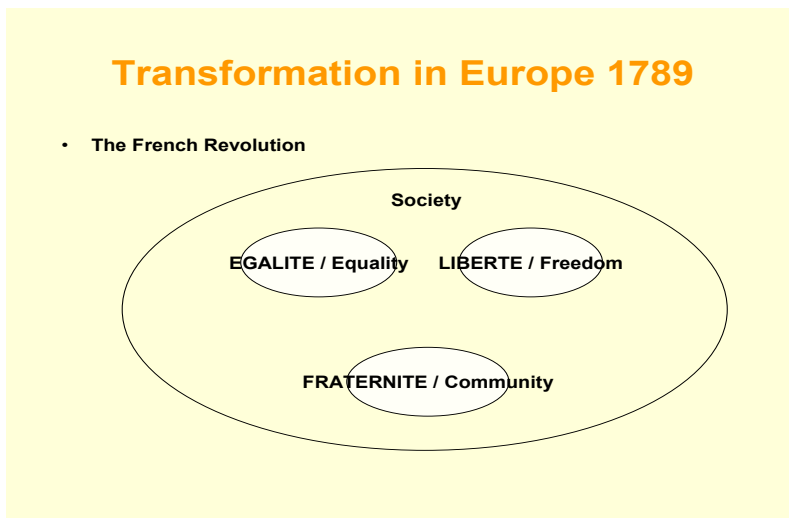
The challenge of interpreting the Four Pillars towards a creative synthesis universally inspiring social transformation as needed in response to radically unsustainable economies may have to lead us to another creative thought experiment.

In order to find new correlations, unusual catalyzing ideas have to be discovered. Starting from our initial intention to engage in inter-cultural 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

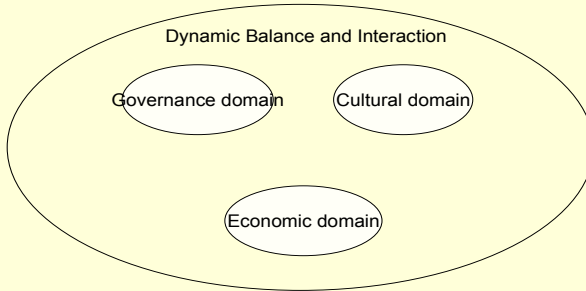
Three folding

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.

Threefolding: underlying structure to enable transformation towards Peace

- Rudolf Steiner 1912



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.

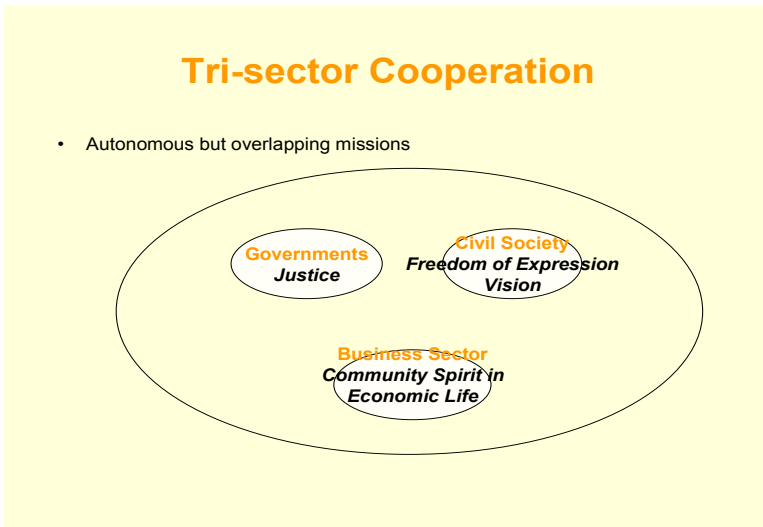
While business should be performed as mutual service to each other in a cooperative setting, in a spirit of *fraternity*. Culture, Government and Business should be self-governing but interconnected ‘sectors’ guided by distinct values, principles and ‘missions’.

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 multi-stakeholder 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 multi-stakeholder communication, critical negotiations and innovative co-operation.

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. Jan Nederveen Pieterse in his book *Development Theory. Deconstructions/Reconstructions* describes: Modernization, Dependency theory, Neo-liberalist economic development, Alternative Development, Human Development and Anti-development (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:

Bodhisattva 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 well-

being 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.

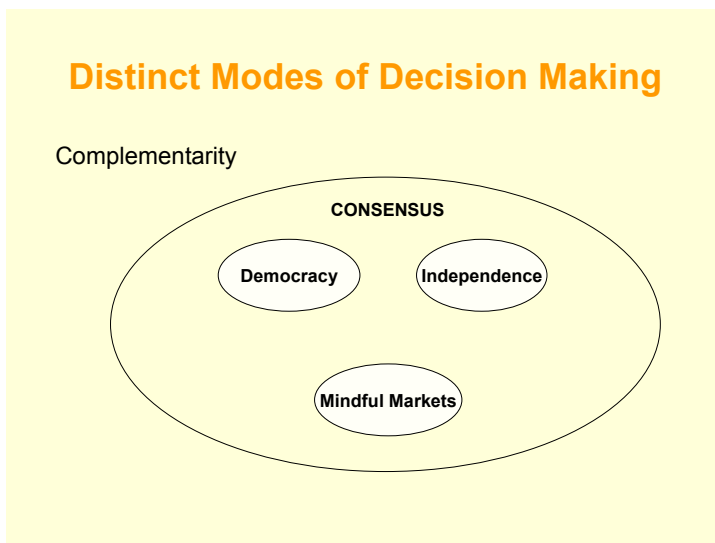
Within these limits economic development becomes a reliable ally for civil society and enlightened governments. David C. Korten characterizes a Mindful Market Economy as follows:

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 multi-stakeholder 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

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 in 2006.

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; Greenet.

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 developmentalist 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.

Gross National Happiness: A Label for Quality Information

Nille Van Hellemont

Abstract

The experience of happiness depends on both the individual management of the human mind and the external conditions that influence our lives. Capacity building for management of the human mind through educational mind training schemes should be accompanied by the introduction of a quality (GNH-)label on commercial information, publicity and advertisement, diminishing the creation of false needs. This label would guarantee both the need for the promoted product and the quality of the non-misleading message in the information. Through the introduction of a GNH label based on existing ethical codes and the principles of a sustainable economy, the existing ideology of the systematic creation of artificial needs, a multiple source of unhappiness, can be brought to an end.

Introduction

The previous GNH conference in Bangkok finished with a question and comment round.

Some of the proposals and thoughts expressed brought me to the idea that the experience of happiness depends on both the individual management of the human mind and the external conditions that influence our lives.

I engaged in non-exhaustive exploratory research of the why and wherefrom of an historic derailment that led humankind to the present state of unbalanced welfare, life threatening usage of the

limited resources of the earth, and growing discomfort and unhappiness in the lives of millions of people. How did it get to this stage and how can we possibly redirect evolution on to the right track?

Three examples

I would like to start this exploratory paper with three true stories. They will be followed by a historical bird flight of the relation between human needs and a specific tool used by society to influence their fulfilment. Finally I will present a proposal for the creation of a practical tool to evaluate the quality of information that invades daily the lives of millions of people.

My first story comes from Australia where I am currently living. Tim, the son of my Australian friend Michael, is an excellent student, aged eleven, and as so many kids addicted to computer games, tends to eat nothing but junk food.

Scientific research has shown that hidden seducers have been introduced into computer play games for children and youngsters by junk food multinationals. These entice players to consume junk food.

Tim belongs to the 25% of Australians suffering from obesity. Health research has indicated that for the first time in human history the younger generation may not have the life expectancy of its parents (Hellmich, 2005).

Obesity is threatening the future societies of the US and Australia in the near and long term. This problem is just starting in Europe. The human and economic cost in the long term is immense.

The second story I would like to tell happened to a good friend of mine in Belgium. Her daughter Anne, 14 years old, is suffering from anorexia nervosa.

Anne, who is genuinely interested in the arts and driven by a deep wish to become a fashion designer, is indoctrinated by the idea of an

ideal female body; a concept brought to her by the available publicity channels of fashion design, women's magazines and clothing advertisements, presenting female bodies in a state of physical starvation as ideal attractive models. It is statistically proven that this is linked with the increase of anorexia nervosa cases in young girls and the psychotic obsession with being overweight amongst women (Uechi, J. (2008).

I was confronted with the third story when living in India.

Gita lives with her four children and husband in a small village in India. The villagers are very poor and depend on the erratic harvest of crops from small fields. When the monsoon fails to occur, many small farmers in the region commit suicide.

Gita's village has not one latrine. Hygiene is below all standards and illnesses reign proportionally in accordance. Some of the reasons for women to hide are the possibility of sexual exposure which can lead to loss of dignity and becoming unmarriageable. This is an overall stress factor.

At the same time, in Gita's village many villagers have a TV; at every crossroad is a small shop selling Nescafé, Coca Cola and other brands produced by multinational food companies. Every second year Gita's husband buys a new mobile phone on credit. Publicity for providers, mobile suppliers and special credit schemes at extraordinary interest rates is presented via 30 TV channels and advertising billboards scattered in the small fields. Farmers commonly rent out their fields to allow the placement of big billboards, as this represents a welcome source of income needed to survive (NewInternationalist, 2008).

These stories clearly indicate that something is wrong. The knowledge that the lifestyle of people is intentionally influenced by externally provided incentives is not new, but it is time to take a closer look at it and to deal with it.

A step back in history

I'd like to take us on a walk back into history to have a look at the relationship between human needs and the experience of happiness.

A subjective feeling

Happiness is a concept that we have been taught to conceive as being the equivalent of material welfare.

But is it all that simple?

The experience of well-being is linked to as well as mental as physical fulfilment of needs.

The experience of a need that is not a basic survival need (let us call it for a moment a subjective feeling) is part of the realm of the mind.

Via the channels of the human senses the human mind is constantly bombarded by internal and external incentives. These incentives can be regulated by the mind.

Buddhist meditation practise proves that the experience of desire, need or craving can be managed in the long term.

Scientific research via MRI of the mind in meditation of long term Buddhist practitioners resulted in the observation of an astonishing capacity of the human mind to transform destructive incentives into a peaceful and joyful state of equanimity.

As a result, experts in Buddhist mind science have been working with neuroscientists to design research that will document the neural impact of these varieties of mental training. ... This research has yielded stunning results, which if replicated will alter forever certain basic scientific assumptions – for example, that systematic training in meditation, when sustained steadily over years, can enhance the human capacity for positive changes in brain activity to an extent undreamed of in modern cognitive neuroscience.... (Mingyur & Swanson, 2007).

It is my belief that the Buddhist emphasis on training the mind by managing thoughts, emotions, and concepts deserves collective endorsement and support from society. This could involve educational schemes which would include specialised mind training meditation methods to increase skills in mind management.

It would provide the individual with an effective tool to increase personal well-being.

A material need

It is essential to provide the individual with the mental tools to increase personal well-being, but also society is involved in the fulfilment of needs.

Let us come back for a moment to the fulfilment of basic survival needs and the technical solution that humankind invented for this.

The fulfilment of basic survival needs was eased by the invention of a symbolic icon of value (money) that made the exchange of the material satisfaction of needs possible. First the exchange of goods led to barter. The mechanism facilitating exchanges for the fulfilment of needs based on money led to trade capitalism, industrial capitalism, imperialism, financial capitalism and the globalised capitalist economic world system that we live today.

This human collective economic organisation to fulfil the basic material needs proved in need of regulation. Humankind created a system that provides only part of the world population with enormous material welfare, while for others basic needs are still not satisfied.

The system itself started to lead a life of its own to the extent that it became an end instead of a means. Out of fear that the functioning of the mechanism would slow down, the system, including its featuring parts and mechanisms of action, is worshipped as a god who may not be questioned but on the contrary whose wishes and requirements all have to be satisfied.

The name of this god is “economic growth”.

A breathtaking fear of an eventual standstill of the global economy made those responsible blind to the limits of a competitive growth economical system.

To avoid a slowdown and eventual standstill of the growth economy, *the creation of artificial needs* was invented and started, as a servant of economic growth, to lead a life of its own, with in its wake the following paradigm: the more symbols of value I possess, the more my needs are satisfied and as a consequence the happier I am. Or: the more symbols of value I possess (money or property), the happier I am.

The uncontrolled publicity and advertisements promoting products that are cynically generalised as “goods” operates as an effective tool to create these artificial needs.

The invention and *image*-ination of artificial needs

Originally, products were advertised through a simple announcement of where goods were available.

Later, following the expansion of trade capitalism, production and competition increased.

The take-off of the industrial revolution in the 19th century was accompanied by acceleration in the technical revolution of the arts and the reproduction of images.

In the 20th century, a second acceleration caused by the automation of production and mass supply was accompanied by the development of mass reproductive design and printing techniques (Benjamin, 1936).

Studies and research in western art history have detected that contemporary ways of seeing (and as a consequence the experience of reality) incorporated in contemporary publicity and advertisement find their origins in the historic tradition of oil

painting later transmitted via graphic and photographic techniques (Berger, 1972).

This tradition of ways of seeing (including the image-ination of the ideal female body) continued in the third acceleration of the information age and its infinite possibilities of publicity in search engines of the worldwide web, in online play and video games, in pop-ups and text messages.

The infinite increase in production and competition has led to an ideology of how to create and promote artificial needs (Ries, Al & Laura, 2004), through advertising new products, often totally unnecessary or even harmful.

Beyond the fulfillment of basic survival needs, both the material life conditions and the human mind are subject to a comfort zone that is open for the endless creation of surplus and artificial needs. It is this zone that is discovered and skillfully played on by the ideology of the promotion of false needs.

Advertising has invaded all channels of information and communication.

It is entrenched in all existing media. Publicity is, to paraphrase Buddhist language, “the Big Vehicle” of economic growth. Publicity is the fuel to the growth economy and the cause of consumerism.

As a consequence of narrowly focused economic organization and of a continuing specific tradition of ways of seeing that is incorporated in publicity, populations worldwide are flooded with one-sided views on wealth, welfare and happiness.

The derailment

Due to a lack of regulation, the balance between needs and sufficient supply is derailed.

The aberrant consequences of this derailment are multiple in size, sort and variety. They appear in all kind of societies, different

cultures, rich and poor. They have in common that any controls over the instruments for the creation of false needs are lacking.

In the *richer parts* of the world people's minds are continuously stressed by the confrontation with new so-called indispensable products.

Due to publicity, people consume for the sake of consuming, caused by production for the sake of production, permanently and indestructible polluting the earth.

The mental fixation on the endless collection of more property or money, permanently polluting in its turn the human mind often leads to extreme depression and unhappiness.

In the *poor countries* of the world, the promotion of unnecessary goods hinders or replaces the fulfilment of basic survival needs.

To keep it simple: televisions and coca cola are available in regions where people die of starvation.

How to remedy the derailment?

Capacity building for management of the human mind to judge and resist false needs via the introduction of specific methods of mind training in education programs is but one remedial instrument for the derailment.

The creation of a quality label

This analysis of the economy and publicity in relation to the experience of needs and a related feeling of happiness or unhappiness brought me to the idea of another instrument to remedy the problem: *the introduction of a quality label on information* (I call it easily the GNH-label), with a focus on commercial information, publicity and advertisement.

This label should guarantee both the need for the promoted product and the quality of the non-misleading message in the information.

The visibility of the GNH-label will inform consumers about the indisputable need for a product and the quality of the message.

The application of a GNH-label on information aims to restore the balance between needs and specific types of supply on a national and local basis, taking into account the human and eco-maintenance needs of the human population and the earth.

The development of a protocol

The creation of a GNH-label guaranteeing quality information, applicable in the sector of advertisement and publicity, should be based on *the development of a protocol* that defines the criteria for application of the label.

Focusing on the sector of commercial publicity in the first place, the protocol for the development of a label has to take into account at least the following elements:

- For the GNH-label to be recognized as the premier award for quality information which is a genuinely better choice for human well-being, fulfilment of basic survival needs, mental welfare capacity building, and the environment.
- To help information and services providers, manufacturers, retailers, to get recognition for good standards, and purchasers to make reliable choices.

Criteria for the GNH label

This label could be based on a set of criteria as defined and controlled by competent international, national, regional and local authorities.

To define these criteria existing ethical codes such as those protecting human rights, international antiracism, antislavery, or legislation such as labour standards etc. can be used as corner stones.

Existing quality labels such as the Eco-label and criteria for well-being as GNH Indicators or NEF's Happy Planet Index or National Accounts of Well-being (www.neweconomics.org/gen) could become defining components of the protocol.

Key aims

- *To achieve significant human well-being improvements* developing, publishing and promoting criteria that push the production and publicity market forward, in order to minimise the mental and material polluting impacts of a wide range of information products and services over their whole life-cycle;
- *To ensure the credibility of the award* – by efficient administration and through *criteria* which:
 - are ethically strong;
 - are based on good science, including the
 - precautionary principle of the real need of the product;
 - take account of consumer mental and material
 - health;
 - require good product performance;
 - are developed transparently and cost-effectively;
 - are reasonably attainable;
 - are environmentally strong;
 - are up to date.
- *To encourage information and services providers, manufacturers, retailers to apply for the award*, to publicize their own participation in the scheme, and to promote the availability of GNH-labelled products and information about them;
- *To encourage purchasers* to buy products and services with the award;
- *To improve consumer awareness and behaviour* regarding the ethical optimal use of information products and services in accordance with human well-being criteria.

The introduction of the label

The creation and application of a GNH-label on quality information on a broad scale can only succeed if it is introduced at all competent governmental and legal levels.

A strategy to reach the policy levels should take into account at least:

- existing schemes that are part of a global concern... (see ecolabel, fair trade, paradiso...) (www.eco-label.com; www.fairtrade.net; www.paradiso-fp7.eu)
- existing bodies, governmental and non-governmental, on multinational, national, regional and local levels;
- awareness campaigns for competent authorities, organisations and the public;
- the joining of existing programs with the same vision that are already active in the field and that have the resources to support financially the project of a GNH label.

The joining of existing structures, such as the EU's Integrated Product Policy, could facilitate and prevent the re-invention of implementation structures and prevent double spending of costs, labour and material.

Other governments with an existing framework or with sensitivity to a similar awareness policy should be approached.

It is obvious that our Bhutanese host is the best example.

A successful introduction of a quality label on commercial information would profit from an essentially positive approach.

The usage of a quality award, materialised in a label, could be uplifted with government information campaigns concerning for example guidelines in health conduct, educational items, environmental awareness, sustainability courses, sufficient supply, etc., carrying the label.

Basic but repetitive government information, labelled with the GNH quality award, about first line services for citizens via specialized publicity or advertisement channels could create in the long term a competitive incentive for the commercial sector to obtain the label as an award for the dispatching of quality information concerning services and products.

A proposal and a thought

The application of a quality label on publicity and advertisement might seem at a first sight a huge and complex project.

But could it not be appropriate to act now? Now that we have, due to an ongoing financial and economic global crisis, a high awareness of the need to review and regulate a major part of the global economy?

People ask for labels. People seek assurance that their lives are not threatened by food and consumer products.

Why not start to use the strong tools available as a side effect of a sane instrument such as a regulated sustainable economy?

Why not start to use the enormous effectiveness of publicity to inform the public of real needs in accordance with their environmental conditions?

Why not use a controlled advertisement system to educate populations about healthy priorities for the development of the society, community, family and the individual?

In other words: would it not be a great result if a latrine became the real status symbol in the village of Gita?

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