

Eubios Journal of Asian and International Bioethics

EJAIB Vol 18(5) September 2008 ISSN 1173-2571

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Eubios Ethics Institute World Wide Web: www.eubios.info/index.htm

Official Journal of the Asian Bioethics Association (ABA)

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Deadline for the November 2008 issue is 31 October, 2008.

Editorial: Harmony and Ethics

This issue of *EJAIB* (Number 107 if still counting), starts with a proposal for creation of a harmonized society. Kayo Uejima in her article describes the work of her NGO Lablink which has this ambitious goal, and her attempt to integrate different spheres of thought into practical reality. The topic of what is a harmonious society is one that has often arisen in philosophy and social policy, but is not defined nor achieved in reality. It is a worthy and critical goal, and consistent with the goal of eubios (“good-life”).

The term “harmony” has been used to describe the Asian ethos, although as we can see from the articles in this issue there are many sources of disharmony currently. Medical tourism in Thailand is typical of efforts also being repeated in other countries to attract patients to a country that offers private medicine to the rich, but has significant gaps with its public medicine. Although Thailand does offer some form of universal free health care to all citizens, there are many illegal immigrants and poor who do not have access to this. The situation is worse in some other countries also selling medical care to the rich, while not providing care to most in their country. We also see migration of skilled medical staff to rich countries, affecting the accessibility to personnel in the countries they came from – although the remittances they send back home can be considerable sources of income.

This issue of *EJAIB* also includes a suggestion of euthanasia for Nigeria, which awaits a response from readers in the spirit of dialogue. Global warming and energy are the topic of other articles.

There are reports of two of the recent UNESCO Conferences on Ethics of Energy Technologies: Energy Flow, Environment and Ethical Implications for Meat Production (Working Group 13) from Yokohama, Japan; and Ethical Views of Nature (Working Group 2), held in Seoul, Korea. More are on the UNESCO Bangkok website. Obviously we need to seek greater harmony with each other and with the other living beings that we inhabit this oasis, our planet. As reports evolve we hope that many readers will join the over 200 persons now members of working groups to contribute your wisdom to cross-cultural scholarship.

-Darryl Macer

The creation of a harmonized society by the holistic approach:

Lab Link suggests free think tank for the integration of all science and thought as challenges of modern philosophy

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1. How advanced modern philosophy faces the challenges of modern technology

All problems including challenges of modern technology suggest that the origin of our ideas is a limiting factor in their resolution. While we repeat looking for only the reasons for problems, it may be difficult that we look for keys to the solution of modern problems.

The frontiers of psychology and quantum theory are trying to reach the proper position of integration and unification. They contribute to suggesting a direction of integration and unification of science by viewpoints of consciousness and quantum theory. However, most frontiers of psychology and quantum theory are not interested in design of social systems and concrete business solutions. Most of them don't consider various social systems including the economic system and various global modern problems and challenges of modern technology. Unfortunately, philosophy exists only in the domain of humanity and social science at present. Fundamentally, philosophers should be in a proper position of integration and unification.

2. Need for a modern philosophy that can unify modern paradigms

Dr. Ervin László insists that all social systems start to enter to a chaos point from chaos in his analysis of various data. He says that this condition is a "macro shift" concerning our evolution. We should look for the direction of evolution to create a sustainable society as suggested by László. For the direction of sustainable evolution, the frontiers of science and thought suggest a direction to integrate all science and traditional thought. Some example references in each domain of study are given in Table 1. Modern philosophers also can look for direction to create modern philosophy by integration from analysis of advanced paradigm as illustrated in Table 2.

At present, every system becomes limited by factors such as the energy problem, food problem, collapse of community and culture by globalization, expanse of rich and poor, educational problem, and so on. Many scientists and philosophers continue to analyze about modern problems as illustrated in Table 3. As a result, we are obsessed by a gloomy image of our future

because nobody can suggest concrete social systems to a more hopeful sustainable society.

Our gloomy image affects every phenomenon and realistic fact of society. Everybody wishes to have a happy image of the future. Therefore, modern philosophy should suggest a happy image to modern humans for sustainable evolution. Of course, as modern humans with reductionism and rationalism we can accept the suggestion for sustainable evolution, that modern philosophy must suggest a mind-set of ideas including reductionism and rationalism. It needs to be done however through a holistic approach. After modern philosophy and ethics can integrate all science and thought by holistic approach, modern philosophy can contribute to transcend limits of modern social systems and help the world. Then, modern technology also can contribute to create a sustainable society for evolution. I have created a holistic harmony theory that uses nesting hierarchy of self as a matrix (Figure 1).

3. Proposal for changing the direction of modern science and technology by modern philosophy including ethics

The design of Lab Link plans various policies based on love and power of life by modern philosophy including ethics. When people listen to design of Lab Link, most people think that the idea that human beings are natural creatures that live in modern society is natural. Everybody thinks that it is important that modern humans recognize the power of life by experience with nature.

However, most modern humans are not aware that they themselves are one of the natural creatures. If most modern humans were aware that they are also one of the natural creature, we may have created a harmonized modern society with nature

Would you please look around your room where you are reading this? You stay in here surrounded by objective goods and stimulus. We need a lot of artificial goods and energy to maintain modern lifestyle. While a lot of problems concerning energy problem, food problem and environmental problems occurs, we cannot reject material desire by my ego. Therefore, we keep on losing the power of self-healing and awareness concerning love and power of life.

As a result, our modern social system enters boundaries before collapse. Most thinkers mention changing of lifestyle and consciousness of modern humans. It is very important. They also mention economize our energy use and recourse. It is more important. Though we recognize the importance of the stoic option, our ego rejects this stoic option in daily lifestyle. How can we solve this dilemma?

The desire of my mind aims to development and creation by a material civilization. If we hope to solve various dilemmas, we focus on physical desire. When the physical value is harmonized with value of mind, modern humans can feel happiness. As we keep on losing the power of life as a natural creature, it is

necessary that we consume process and experience to recover the power of life. If we can experience physical pleasure to recover health, we can get new economic system for sustainable growth. If the direction of main economic system changes the demand and supply of physical pleasure to recover health, it will change the direction of modern technology and science will also change to maintain and recover the power of life.

4. The importance of body awareness as a direction of science and technology

Case study of school children

Let us consider the daily situation of primary schoolchildren and parents of Japanese elementary school as a case study. Japanese teachers check the health of children on every day. Usually 10 primary schoolchildren among a class of 30 members mention a little illness. As soon as they suffer a little scratch, they go to the therapy room in school in order to wish for a lot of care. If a primary schoolchild bleeds at the nose by a little excitement, a few parents will even ask the teacher to call the ambulance. Of course, the teacher explains parent care and safety of primary school children. However some types of parents will call the ambulance or go to hospital with a primary schoolchild. While the student rides on the ambulance, their bleeding nose stops. At present, primary schoolchildren and parents cannot believe the power of self-healing of their body in spite of belief in the power of medicine. Many modern humans in Japan may forget the process of self-healing concerning power of life.

New problems of Japanese school include attempted suicide by self-injury. One survey by a parents and teachers association (PTA) showed 10% of girls and 5.3% of boys among 5755 second graders (age 7 years) in Japanese high school has experienced self-injury from 2003 to 2006 (1). This problem becomes serious in adults. The survey of suicide rate by WHO shows suicide was committed by 24 persons in 100,000 persons in Japan at 2004. Japan is has one of the world's highest suicide rates. Depression may also be linked to self-mutilation. Most of teachers recognize Self-Mutilation as a normal serious problem in Japanese schools (2). Japanese teachers directly face the problems of family as their daily task. Especially, teachers of Japanese elementary school and junior high school face problems concerning collapse of community. As a result, Japanese schools become a mirror that expresses integration of Japanese modern problems.

Most students and adults that attempt suicide hope to recognize a life and to feel a purpose to living now, they repeat attempting suicide. They accept their self after feeling life by feeling death. Of course, lack of love by parents, community and society affects the phenomenon. They attempt various self-mutilation as emotional conflict or impulse phenomenon concerning interpersonal problem (3). As our adults and society

also feel lack of love, adults cannot supply a lot of love to children.

Even if teachers and politicians explain morality to students and adults, they will not be able to accept self living now. Even if modern science and technology supply advanced information technology, they will not be able to accept self living now (4). Even if therapists guide stability of consciousness by medicine and psychotherapy, they will not be able to keep on accepting self. Therefore I think that they repeat self-mutilation.

Needs of Ethical Education

How can people accept self living now? Love is a fundamental of life. Therefore love of life becomes the fundamental of ethics. Ethics is different from morality. Teachers and parents hands on children's moral by education to maintain various social systems. All humans have a sense of ethics. Because ethics is linked to love of life (Macer, 1998). Therefore all humans can notice voluntarily ethics. As we close the power of feeling life, we voluntarily cannot notice a sense of ethics in modern society. For recovering a feeling of life, we should experience self-healing as a natural creature.

Essentially, ethical education should base their experience concerning power and love of life. The process of awareness by experience links to self-acceptance of modern humans. Most modern humans need the educational curriculum by experience and process of awareness. Therefore, most modern humans should be able to experience the educational curriculum as a service by a lot of business. When a lot of businesses supply services that base ethics as high quality lifestyle, a lot of modern humans will change their lifestyle and consciousness.

Lab Link supplies experiences including ethical educational curriculum as sustainable tourism to all consumers. The name of this tour is natural tour (please write if you are interested in these).

The needs of health maintenance industry

Feeling love of life and the power of life guides voluntarily self-acceptance. One way is that modern humans recover body awareness. Modern humans may "need" many artificial goods for living. While we live with much artificial stimulus, our nerves are in an exciting condition. Therefore we always keep fast moving for searching new artificial stimulus. If we experience in order to do nothing in calm wild area, how can our sense change? The natural tour supplies experience of feeling the power of life as self-healing in wild area. Modern humans need daily experience for recovering body awareness. Modern humans need high quality self-healing service as consumption of new value.

Table 1: References

Position	Paradigm	Authority	Treatise	Publisher
Philosophy	Holistic	Darryl R.J. Macer,	<i>A Cross-Cultural Introduction to Bioethics</i>	Eubios Ethics Institute, 2006
			<i>Bioethics is Love of Life: An alternative textbook</i>	Eubios Ethics Institute, 1998
	System	Ervin László	<i>Quantum Shift in the Global Brain</i>	Hampton Roads Publishing Company, 2008
			<i>The Chaos Point: The World at the Crossroads</i>	Hampton Roads Publishing Company, 2006
		<i>Macro shift</i>	Berrett-Koehler, 2001	
Psychology	Process	Arnold Mindell	<i>Dreaming while awake: techniques for 24-hour lucid dreaming. Charlottesville, VA</i>	Hampton Roads, 2000
	Integral	Ken Wilber	<i>Integral Psychology: Consciousness, Spirit, Psychology, Therapy,</i>	Shambhala, 2000
Natural Science	Network	Barabási Albert-László	<i>Linked: How Everything Is Connected to Everything Else</i>	Perseus, Cambridge, MA, 2002
	Complex	Stuart Kauffman	<i>Investigations</i>	Oxford University Press, 2000
	Quantum Gravity Theory	Roger Penrose	<i>The Large, the Small, and the Human Mind,</i>	Cambridge University Press, 1997

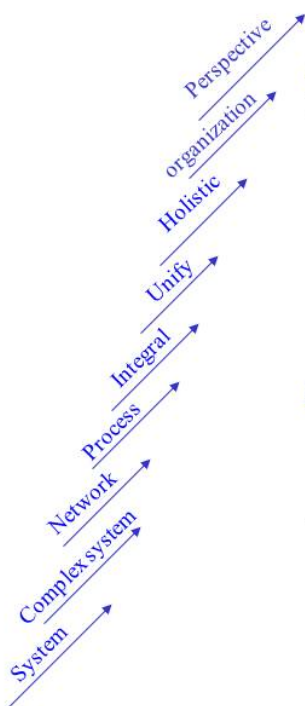
Table 2: The outlooks of selected fields of study

Position	Paradigm	Conscious Outlook	Scientific Outlook	Social Outlook	Ethical Outlook	Economic Outlook
Philosophy	Modern Philosophy	++	++	++	++	++
	Holistic	++	+	++	++	+
	System	+	++	++	+	++
Psychology	Process	++	++	+	++	-
	Integral	++	++	++	++	-
Natural Science	Network	-	++	++	-	+
	Complex	-	++	+	-	+
	Quantum Gravity Theory	++	++	-	-	-

Table 3: Discussion of problems in different fields of study

Position	Paradigm	Linkage of technology	Development of education method	Design of Social system for evolution	Development of business model for sustainable society
Philosophy	Modern Philosophy	++	++	++	++
	Holistic	+	++	++	-
	System	+	+	++	-
Psychology	Process	-	++	-	-
	Integral	-	++	-	-
Natural Science	Network	+	++	+	-
	Complex	+	++	+	-
	Quantum Gravity Theory	++	-	-	-

Conceptual Summary of Holistic Harmony Theory as advanced modern philosophy - Design of Lab Link by integrative principle



Achieved purpose: For construction of sustainable society

Purpose of holistic harmony theory:

Creation of advanced modern philosophy

Creation of universal system theory

including frontier paradigms for transcendence of boundary and limits in material civilization

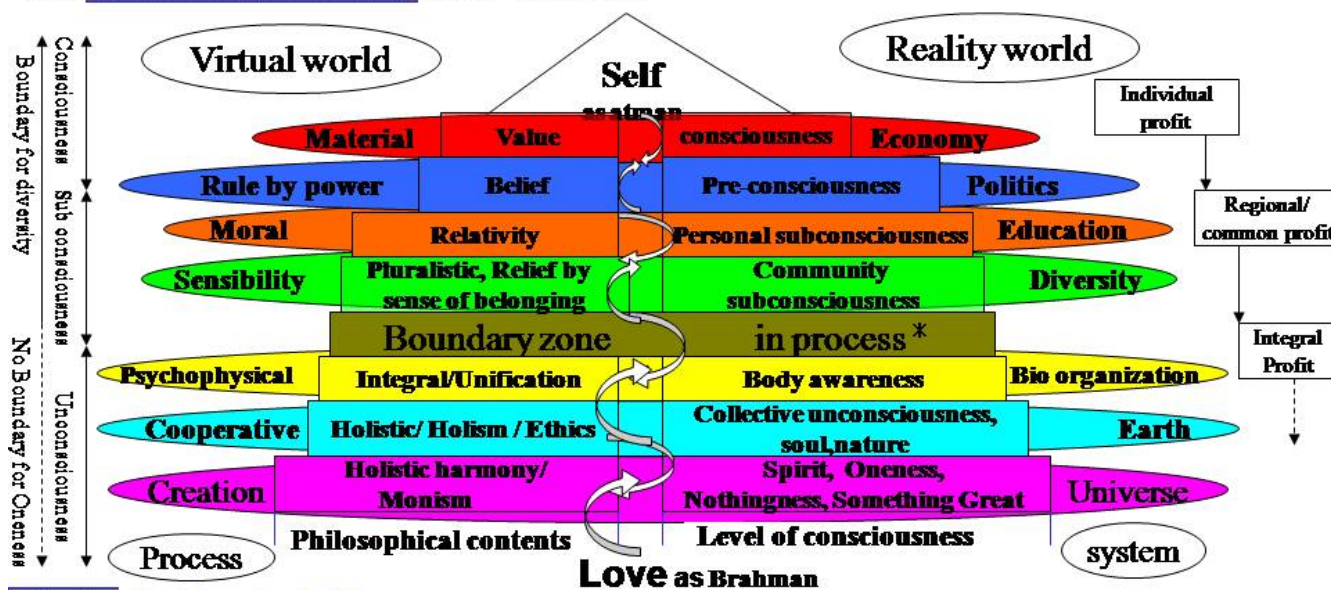
Purpose of design of Lab Link :

Creation of harmonized social system

Integration of knowledge and wisdom by social network

based on Love

Figure 1: Nesting hierarchy of self as matrix



About nesting hierarchy of self

Self means process from Brahman to atman. Upper self expresses me as atman. Lower self means love as Brahman. The nesting hierarchy of self is matrix of holistic harmony theory and design of Lab Link. This can express everything and every phenomenon concerning modern humans. Essentially, everything and every phenomenon are Oneness or Nothingness. Oneness or Nothingness means that is non-boundary or borderedless. Nesting hierarchy can express boundary of itself that modern humans keep on creating. Holons are organized as holarchy. Nesting hierarchy means holarchy. This also means the process of separating each whole from Oneness as natural hierarchy. Flat level that expresses each color means system and function as a whole in same color.

On the other hand, the each level describes process separating each part from whole. When nesting hierarchy is stability and harmony as a whole of nesting hierarchy, upper level does not overrun lower level. Though lower level can include upper levels, an upper level cannot include lower level.

* Boundary zone in process means less of boundary between boundary and no boundary. Boundary zone express instinct of species.

Explanation from integral thought

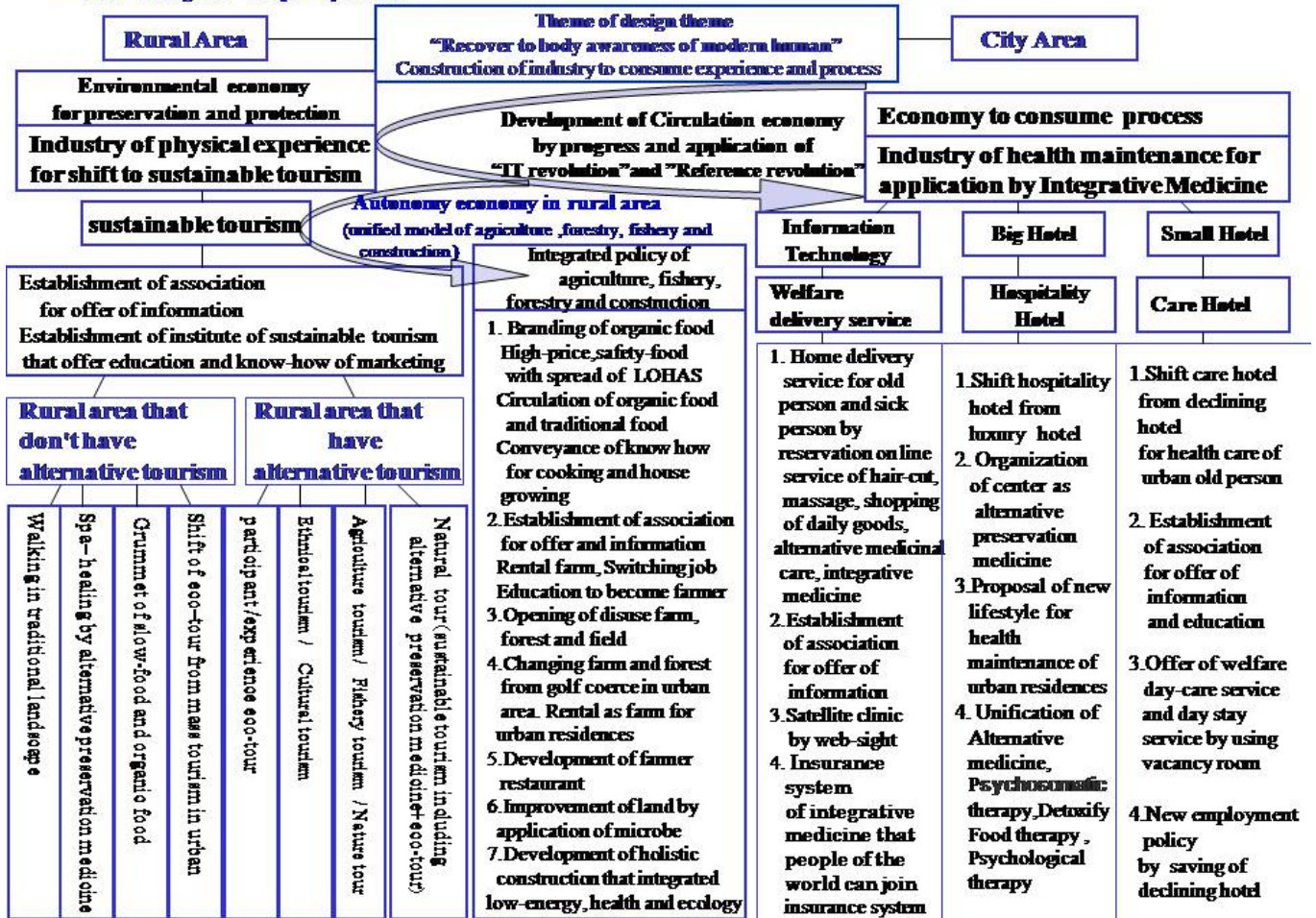
Ken Wilber proposes Holon in integral thought. Holon is a whole as itself. At the same time, Holon is a part of whole. If we consider holon by eco system, a whole bio organization is a part of earth and a whole of earth is a part of cosmos.

For stability of ecosystem, it is important that each holon maintains sustainable identity and harmony with other holons (Ken Wilber "One Taste",

Shambhala, 2000)

Figure 2: Harmonized social system that Lab Link proposes for construction of sustainable society

~ Grand Design of "Hospitality Resort" ~



The supply of high quality self-healing can link to creation of new industries concerning health maintenance. The construction of new industry that is harmonized with nature is important. Since modern humans live with serious environmental problems, to create an industry for body awareness by advanced science and technology is important for construction of sustainable society.

For supply of safe health maintenance, Lab Link proposes needs of integrative medicine and integration of science and ethic for construction of health maintenance industry by planning of hospitality resorts (Figure 2).

Needs of ethical education and certification organization

At present, there are a lot of small organizations and experts to supply love of life and power of life in Japan. When consumers hope to feel power of life and love of life, they can't choose safe options for daily sustenance of body and mind. On the other, as branding of safety and belief needs a long term in order to persuade customers, suppliers face economic insecurity if they invest in higher standards. In order to spread ethical sense by ethical experience, a linkage between consumers and supplier needs branding for safety and

belief. Therefore maintenance and creation of international ethical guidelines and labels (like ecolabels) are necessary.

An ethical organization needs to follow ethical guidelines and ethical training needs to be given by suppliers to providers and others in safety and belief. The supplier can master voluntarily ethical sense for branding. By using ethical education and certification, the certification organization for ethics can spread a fundamental ethical sense and value toward challenges of modern science and technology. Lab Link designs construction of the ethical education and certification organization for construction of health maintenance industry in the future.

5. Lab Link proposes social network system as a direction of science and technology

Needs of linkage

At present, various social systems have reached their boundary towards collapse or breakdown. The high price of energy accelerates us toward collapse of social systems. For example, the medical social system and welfare system face crisis of collapse in Japan. On the other hand, business by recovering body awareness and supply of experience for feeling power and love of life is beginning to develop in rural areas in Japan.

However, the former is a problem concerning a whole system, the latter is element concerning only part of the total system in society.

If we hope to construct a sustainable society, modern philosophy should show direction to accelerate potential power. When potential power develops the large power, element evolves to whole system from part system. For acceleration of potential power, linkages of elements are important. Lab Link has designed a social network for linkage of people that have various social positions.

Needs of linkage for creation new social system

I have gotten involved in an organization for solution of various environmental problems. The different of successful case and failure case is quality of linkage and information disclosure suitable to consciousness of various humans. Quality of linkage means the numbers of person that become a hub, and the diversity of organization that hub persons have and their communication ability. If various hubs act in information disclosure to persons that links to hub by marketing, a network can spread rapidly. Lab Link designs various mechanisms that links the hub of network for rapidly spreading.

Needs of integrative science

For effective information disclosures concerning modern problems including environmental problem, integration of all science is very important. Sciences keep on segmenting fields of science into elements, but segmented science cannot solve modern problems. Because modern problems include problems concerning long term processes and linkage from whole to element. Therefore solution of modern problems needs integrative science. Integrative science is one of the new direction that modern science and technology should aim for (Figure 3).

Needs of organization to supply scientific information by integrative science

When victims hope for a solution of problems, they go to an enterprise and public organization for information disclosure. However, they cannot get information disclosure from enterprise and public organization. Therefore, they go to scientist and doctor for scientific information to get a way for solution of problems. Since scientists and doctors give segmented scientific information to victims, the victims must integrate scientific information by themselves. Since integrative science is the most difficult way, most of victims abandon solution or adopt a court solution with much cost.

On the other hand, if public organization or enterprise needs a solution to modern problems, they need scientific information by integrative science because many modern problems have become serious. Lab Link has designed and constructed a free think tank

on the web site in order to create linkage of various scientists for creation of integrative science. Lab Link designs social network system in order to link between free think tank and various persons for supply of scientifically information (Figure 4).

6. Process to transcend limits of modern civilization by social network

A person is the base for all phenomenon including all modern problems and social systems. The developments of each person and self-determination of each person are the most important for evolution of society as a whole. If modern philosophy hopes to solve modern task, modern philosophy should focus on development of each persons by individual self-determination (Figure 5). This should include factors including:

1) Information disclosure

The assessment of modern problems that affect a whole system is important. For transcendence of modern science and technology, integrative science is necessary.

2) Promotion of individual self-determination that transcend belonged social position.

Everybody acts for self-determination by logic of social position in the social organization to which they belong. On the other hand, everybody has individual self-determination as transcendence of social position. Individual self-determination is accelerated by information disclosure.

3) Construction of organization to link and protect individual self-determination

If there are not organizations that protect individual self-determination, persons are isolated from their organization or community. The linkage to transcend their individual organization is important. Transcended organizations can aim to harmonize with various social system and nature for solution as a whole in long term.

4) Integration between globalization and localization

At present, bureaucratic institutions that control a whole don't have daily networks that link directly to each person. This is big task. Because all phenomenon begin from a person. If bureaucratic institutions hope to solve a modern task, they should know daily lifestyles and consciousness of each person that belongs to each social system. Individual lifestyle and consciousness are included in modern task as a whole. Since all phenomenon include in Holon structure, interactive communication of individual and whole system is importance. Of course there are a lot of individual complaints from many people. However, holistic analysis of individual complaint guides task and way of solution as a whole. Therefore linkage between each

person, linkage between person and part system and linkage person and whole is necessary.

Figure 3: Integration of science and thought by nesting hierarchy of self

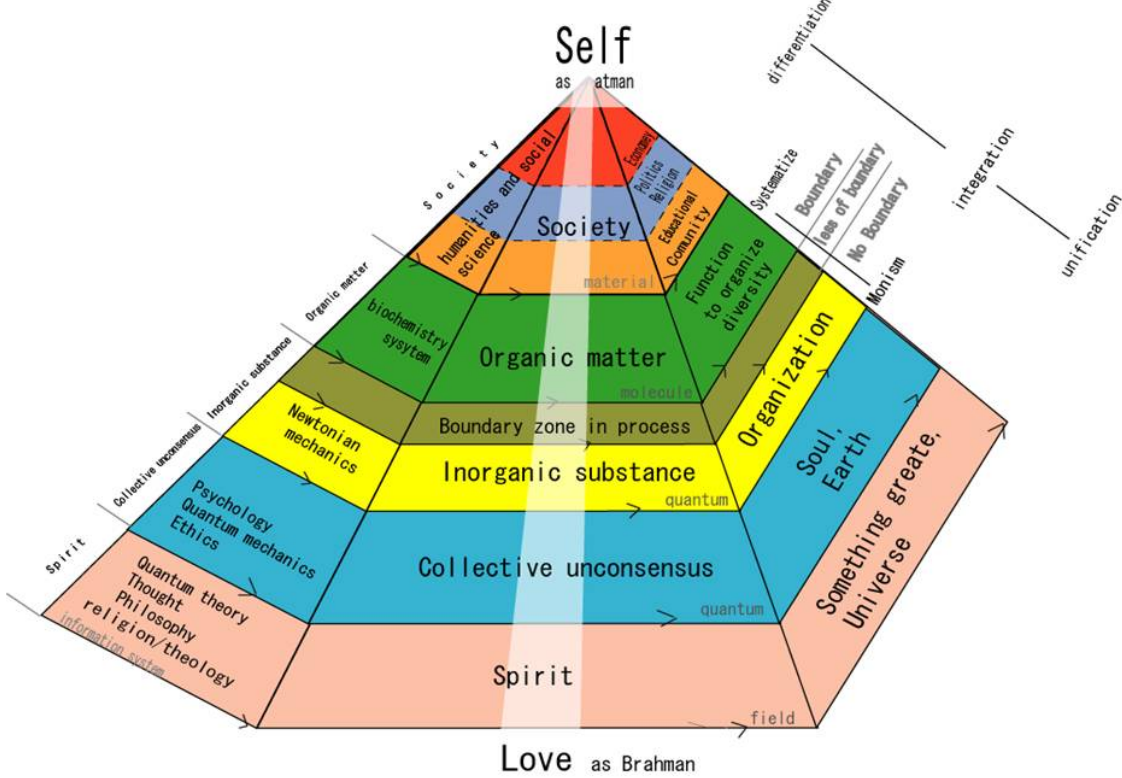


Figure 4: Sub consciousness marketing

Lab Link creates linkage to real system from virtual system by nesting hierarchy

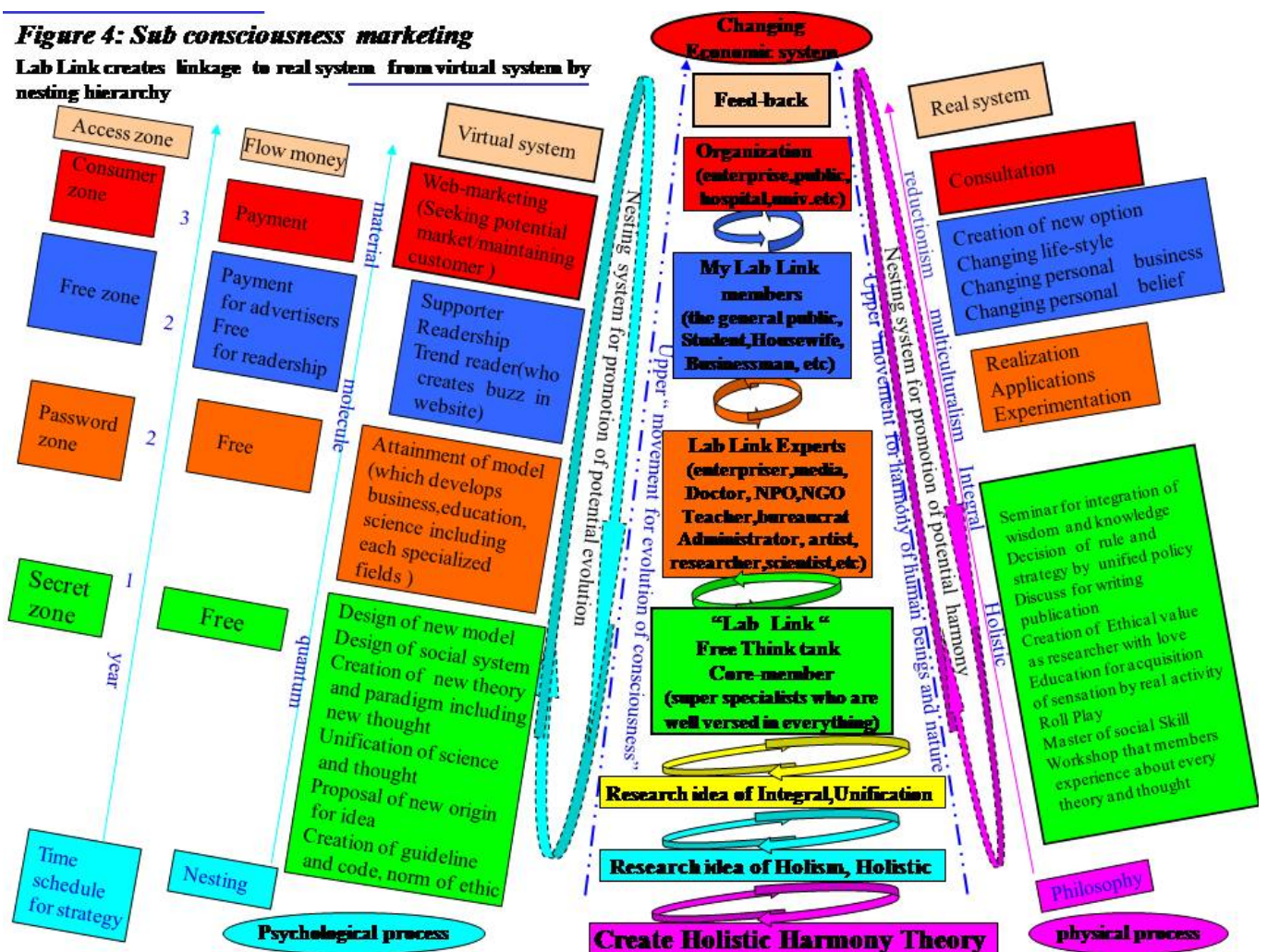
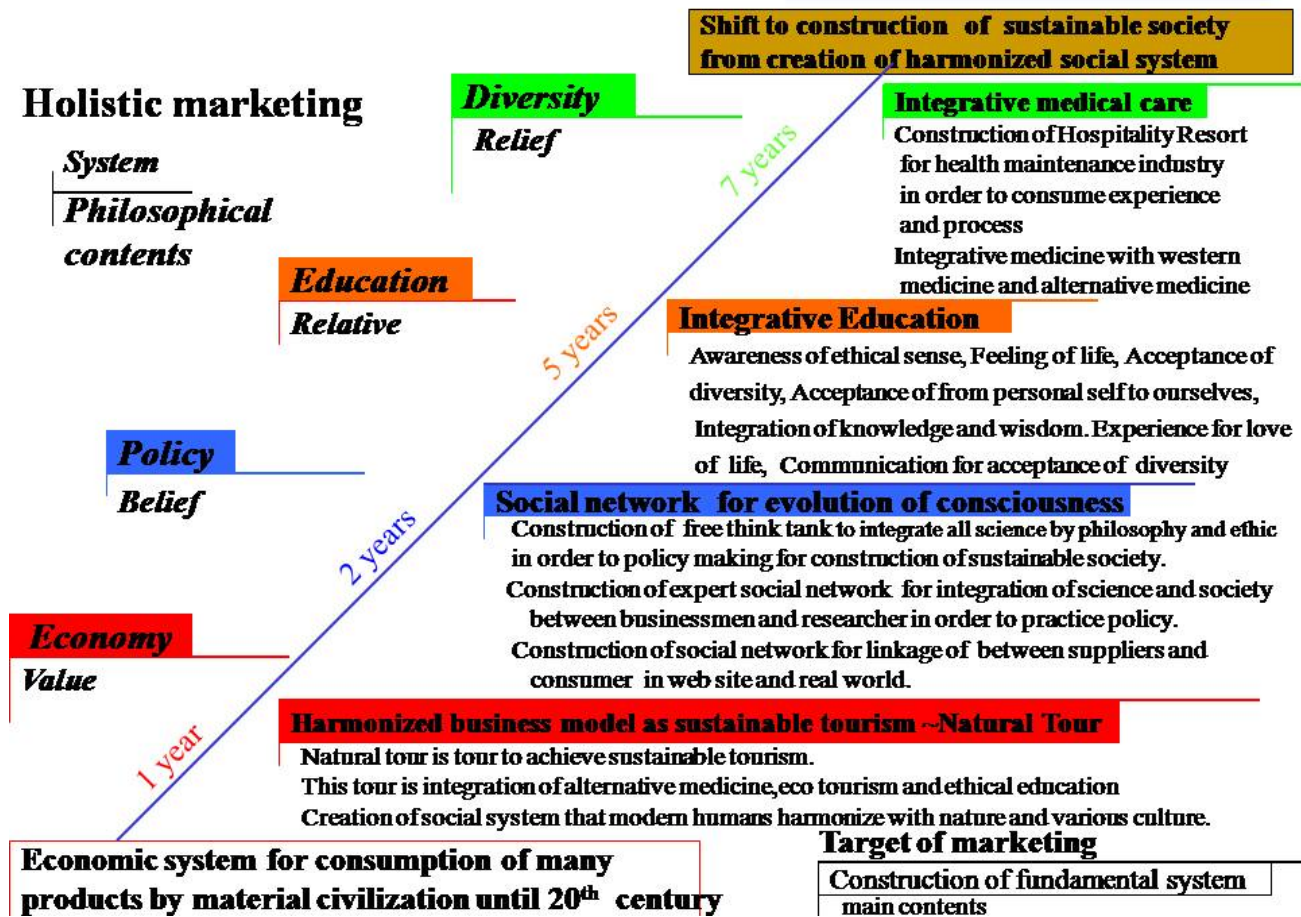


Figure 5: Middle Project that Lab Link proposes for construction of sustainable society



5) Needs of integrative policy concerning regional policy for solution of modern problem

Integrative policy is necessary for solution to modern problems. Because modern tasks emerge from problems that relate to the whole system a long process is a result. Integrative policy doesn't aim on totalism. Integrative policy aims to integrate various policies for solution of modern task in long term by panoramic and holistic outlook including reductionism

Integrative science and integrative policy for solution of modern problem should evolve with modern science and technology. This is because modern humans can live in modern society depending on the contribution of science and technology. Therefore, the direction of modern science and technology affects the construction of a sustainable society. Lab Link designs various social networks for solution of modern tasks step by step for the long term as a strategy (Figure 6).

7. Conclusion – as first step of Lab Link design for integration by modern philosophy with holistic approach

As science and thought segment detail, we cannot catch the contents in different fields of science. Therefore most scientists and thinker cannot discover fractals and attractors as a whole, in spite of understanding the crisis of the social system that links

to modern problem. It is the most important that mutual understanding and mutual acceptance is the first step.

Lab Link proposes construction of free think tank on the web site. Lab Link proposes that all scientists and thinkers can announce research and ideas on a web site. Lab Link supplies positions of announcement to all scientists and thinkers on the web site. We look forward to your comments and feedback.

References

References to some of the ideas are given in Table 1. In addition cited articles include:

1. Masako Kihara of Kyoto University, "Fulfilling business of home training to bring up health of mind and body of high school student", 2007.
2. Takeru Inoue of Kanseigakuin University, "Views of Suicide and Self-Mutilation in University Students", *Journal of Clinical and Educational Psychology*, 31, pp.69-76, 3.25.2005, Kanseigakuin University
3. Ayumi Tsunomaru of Kanseigakuin University, "A Psychological Study of Self-Mutilation in the University students, *Journal of Clinical and Educational Psychology*", 30(1), pp.89-105, 3.25.2004, Kanseigakuin University
4. Takeru Inoue of Kanseigakuin University, "The View of Death and Premorbid Personality in Depressed Patients with Suicide Attempts" *Journal of Clinical and Educational Psychology* Vol. 32.No.1 pp.15-28, 3.25.2006, Kanseigakuin University.

Report of the UNESCO Conference on Ethical Worldviews of Nature (Ethics of Energy Technologies in Asia and the Pacific Working Group 2)

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The meeting was held on 3rd August 2008 at Seoul National University, Seoul, Korea

Background

This conference was held in the context of Working Group 2: Ethical Worldviews of Nature, in the Ethics of Energy Technologies in Asia and the Pacific (EETAP) project. It was held at the time of the 22nd World Congress of Philosophy, in Seoul, to take advantage of the large number of philosophers present, and to gather wider diversity of views and feedback on the range of worldviews there are of nature.

The working group is attempting to answer a range of questions, including: Are there worldviews inherent in philosophical and religious traditions of the Asia Pacific that shape ethical relationships with the natural world? Are these anthropocentric, biocentric, ecocentric or cosmocentric worldviews? How do our worldviews allocate value and meaning to people, plants, animals and the biosphere? What are the relationships between such worldviews and actual decisions made by policymakers or the daily lives of the people they represent?

The EETAP project is coordinated by the Regional Unit in Social and Human Sciences in Asia and the Pacific (RUSHSAP) at UNESCO Bangkok, and is linked to several key activities of UNESCO Social and Human Sciences sector, including the Ethics of Science and Technology, Environmental Ethics, Philosophical Dialogues, Linking Research with Policy-making and Promoting the Culture of Peace. The work will also feed into considerations of the Ethics of Climate Change that are being made by the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST).

Summary

There were thirty-three participants of evenly balanced gender including persons from Australia, Canada, China, France, India, Japan, Korea, Mongolia, Morocco, New Zealand, the Philippines, Russia, Senegal, United States, and several other states. Participants attended in their individual capacity and came from diverse backgrounds, including engineering, government, civil society organizations (CSOs), energy-related industries, education, and academia. The

disciplines amongst academics ranged from bioethics, engineering, philosophy, ethics, energy science, religious studies, education, to development studies.

Presenters were asked to give 15 minute talks, followed by questions and discussion. The presentations will be made available on the EETAP website (<http://www.unescobkk.org/index.php?id=energyethics>). The working group session was jointly chaired by the Chair of EETAP working group 2, Professor D. Nesy, University of Kerala, India and Dr. Darryl Macer, UNESCO, EETAP Project Coordinator. The papers presented will be used to shape the outline of the report of the working group, and feed into the body of knowledge produced by the EETAP project.

Meeting Report

In the **opening session**, Prof. Darryl Macer, the Regional Advisor for Social and Human Sciences in Asia and the Pacific, UNESCO Bangkok outlined the UNESCO EETAP project rationale. He discussed the background to UNESCO's work in bioethics through the creation of the Bioethics Programme in 1993 and the establishment of external advisory bodies including the International Bioethics Committee (IBC), the Intergovernmental Bioethics Committee (IGBC), and the World Commission on Ethics of Scientific Knowledge and Technology (COMEST). He explained the reasons behind the creation of the EETAP project, and expressed hope that the project would provide a forum for reflection and open dialogue on these issues.

He confirmed the commitment of UNESCO to this theme, which is consistent with the expressed desires of many people in all countries. There has been prior discussion of some aspects of the ethics of energy in a previous UNESCO report from a COMEST Sub-Committee on 'The Ethics of Energy', in 2000. There are also various activities related to energy being conducted in different United Nations agencies. UNESCO is the only UN agency, however, that has ethics as one of its overarching priority areas. This project will develop these multidisciplinary and cross-cultural discussions in a context that is relevant to the Asia and Pacific region. As the global region with the fastest annual growth in energy demand, countries face increasing pressure to articulate their energy policies. As the international focus on climate change intensifies, the environmental and social ethics of all energy choices need be considered holistically. This meeting and project is not intended to duplicate the numerous meetings being held on energy and environment, but to open up ethical and value questions that have often been neglected, and to focus discussions on environmental ethics to produce substantive cross-cultural outputs that will be relevant for long-term policy making within each nation.

UNESCO is committed to working with regional Ministries of Science and Technology in implementing the Ministerial 'Bangkok Declaration on Ethics in Science and Technology' issued at the conclusion of

the 4th Session of the COMEST on 25 March 2005. In closing he also requested that participants consider a variety of options for project involvement, to provide a substantive, science-based answer that can help identify environmental values and worldviews.

A series of **presentations** followed. The first was "Virtuality: Our Last Alienation" by Dr Abdessamad Tamouro, Professor of l'AMP Rabat in Rabat, Morocco. Dr Tamouro began by tracing the historical development of alienation theories by important philosophers, including Hegel and Marx. Alienation was first developed by Hegel, who stated that a person's "spirit" progressed from ignorance once a person realizes that everything objective is in fact subjective reality. That is, the spirit at first thinks the world is external or alienated from reality, and then it gradually realizes that the world is not external or alien to it. Marx further developed the concept, and he stated that alienation refers to a separation between things that are supposed to be in harmony. Dr Tamouro argued that virtual reality, or virtuality, was the last source of alienation. Virtuality is the product of humankind's advancements in communication technology, such as the development of computer graphics. This requires a high level of imagination and revelation. However, this is also a source of a new, or "last", alienation, because it results in "loss of thinking". Reality is replaced with virtuality in our minds, which results in this loss of thinking. He provided an example where we view hotel rooms which are booked in advance through the internet (virtuality) and then see them in actuality (reality). This is especially true, he points out, in a world of "fast" everything, including fast food and fast thinking. This virtuality, however, can be the source of alienation which can cause misunderstanding between people and nations. For instance, bombs being dropped during wars and battles from afar can be viewed on television screens, but the vast majority of viewers never actually see them in reality.

In the ensuing discussion, Dr Jeong Ro Yoon, Professor of Sociology at KAIST, Republic of Korea, asked how alienation could be reduced in an age of virtuality. What techniques exist to reduce such alienation? Is alienation an intrinsic part of being or do we have to come up with a way to decrease alienation in a time of high technology? She noted that it may be impossible to entirely rid humanity of such alienation-inducing technology. Dr Tamouro replied that we should use technology in a way that is cognizant of such alienation effects. He also said that we should not use technology merely because it is successful.

Dr Sirajul Islam, a Reader at the Department of Philosophy and Religion at the University of Visva-Bharati, India, expressed his opinion that the power of the state should be minimized and that alienation, as a part of ethics, can be related to practical areas such as the environment and education. This alienation is to

come out as a global citizen, and for all of humankind. Dr Tamouro agreed that if political power exists behind virtuality, undesirable effects may be seen, such as colonization.

Dr Daniel Nesy asked what the concept of virtuality as a last frontier of alienation implies for nature. Dr Tamouro replied that technological change should be governed and progressed in a way that is cognizant of such alienation and its possibly undesirable effects.

The next presentation was "Ethical Views of Nature: Vedanta and the Global Society" by Dr Daniel Nesy, Professor and Head of the Department of Philosophy, University of Kerala, India. Dr Nesy explained that Indian philosophy has a 'way' and 'attitude' towards nature, which needs to be highlighted in the global context. She introduced the concept of Vedanta, or the philosophy of non-duality or monism. In Vedanta, there is only one 'thing' that is true, Brahman, which is the one 'entity' or 'reality'. Everything else merges with Brahman, the one concept of reality. She stated that there are four ideas to be kept in mind to imbibe the idea Vedanta: (1) one must remove the barriers that come in the way of reality and unity (2) one must remove the idea of differences (3) one must give up the idea of looking at things as not being connected; that is, one is to recognize that all things are connected; and (4) look at things as part of a single whole. In other words, it stresses fundamental connections and unity, and any differences are only apparent and unreal. The Vedanta concept is embedded into Indian civilization, which is one reason why it can stay united despite vast differences in religions, geography, etc. In other words, there is a clear recognition of differences, but fundamental unity is preserved. Although unity is enshrined in the Indian constitution and its laws, unity is also latent because it lies at a more fundamental level in Indian civilization through the unifying concept of Vedanta. Dr Nesy then began to discuss how the process of globalization has brought both desirable and undesirable changes. The former include increased cooperation between nations, such as in the areas of climate change and fight international crime, while the latter includes increased inequality. She divided globalization into four elements: (1) physical (plants, machinery, etc.); (2) financial capital; (3) technology; and (4) labor that move across national borders very fast. The relevance of Vedanta to globalization are twofold: (1) the theme of a broader perspective which permeates Indian philosophy – values, such as social responsibility, may be a unifying force; and (2) lateral thinking, or searching for solutions in one area by thinking about subjects *prima facie* not related with that under consideration- understanding the issues and prospects of global society by taking advantage of the rich tradition of Indian philosophy.

Ms Kayo Uejima, director of the Lablink NGO in Kumamoto, Japan, asked how the mantra of Vedanta can unify diversity. Dr Nesy replied that the mantra is used as a formula, namely, unity in diversity, which has been interpreted as unity *through* diversity.

The next presentation was "The Order of the Universe: Two Cosmological Points of View" by Dr Ali Benmakhlouf, Professor at the University of Nice in Nice, France. He explained that the question of protection of nature and the environment is one that can be emphasized by studying philosophies that have refused any bifurcation between nature and mind. Dr Benmakhlouf provided two examples of such philosophies, one medieval Arabic (based on the commentaries of Aristotle) and the other contemporary Western (based on a new non-Cartesian scheme by Alfred North Whitehead). In the first, the Arabic philosopher Al Farabi, commenting on Aristotle's *Categories*, describes substances as physical bodies rather than man, and the mind is derivative of such substances. Al Farabi describes the universe as existing before the divine act of forming them, based on Koranic interpretation. In other words, God is an Artisan, not a Creator. Similarly, in the second philosophy, Whitehead refuses the Cartesian scheme which considers subjectivity as a primary source and the world as being derivative of that subjective experience. On the contrary, Whitehead says that there is no entity "which requires nothing but itself in order to exist" so that even God is needs the universe. Whitehead does not deny the necessity of mind and matter, but he does not consider them as individual substances, rather, they are a result of routes, and of the process of the world which produced them. Dr Benmakhlouf emphasized that by introducing and juxtaposing these cosmological perspectives and philosophies, priority is given to the order of the universe rather than to the human order, and it then inspires a cosmic humility which is an ethical attitude.

In the ensuing discussion, Dr Sivanandam Panneerselvam asked two questions. First, the difference between the right interpretation and misinterpretation is a thin one, so how does Dr Benmakhlouf know which interpretation is "correct"? Second, if God did *not* create the world, then is there a superior power? Regarding the first question, Dr Benmakhlouf replied that there are indeed possibilities of plural interpretation, but that there are "univocal" interpretations, such as Aristotle, Al Farabi, and Whitehead, who act as guides for interpretation and "paradigm of knowledge". Regarding the second question, Dr Benmakhlouf replied that, at least for the philosophers mentioned in the presentation, there is no transcendental reality to God. There is only undifferentiated matter, which God "shapes".

Dr Sirajul Islam stated that if God did not create the world, it goes against Koranic interpretation. Dr

Benmakhlouf said this is an interpretation by an Arabic philosopher.

Ms Uejima asked whether the universe is the same as the self, and what the linkage was between the universe and self. Dr Benmakhlouf replied that Whitehead opposed the Cartesian scheme which begins with self-reflection. The universe exists first and then the self is derived from the universe.

The next presentation was "Ethical Perspectives Involved in Viewing Nature" by Dr Sivanandam Panneerselvam, Professor of Philosophy at the University of Madras in Chennai, India. Dr Panneerselvam stated that solutions to our current environmental crises lie through global understanding and a "global ethic", which embraces other organisms, is required to live in harmony with nature. While there are many different political groups with different ethical perspectives, Dr Panneerselvam argued that there should only be one underlying set of ethical maxims and principles as obligatory for all human beings. Thus many contemporary thinkers have been contemplating the concept of such a set of global ethics, because without it, there are certain crises, such as the environmental, that threaten mankind. Dr Panneerselvam introduced support for such a set of ethics, drawing upon philosophers such as Kant, Weber, Jonas, Habermas, Hare, and Rawls. He also introduced support for such a philosophy from the Indian context, drawing upon Hindu, Buddhist, and other Sanskrit literature. He also introduced support from the field of esthetics, briefly arguing that such a philosophical concept can be also be used to help defend a set of global ethics which can be used to resolve our environmental crises. Dr Panneerselvam introduced two case studies from India, before concluding that contemporary thinkers, such as Leopold and Naess, have introduced their theories of global ethics concerning nature and the environment.

In the ensuing discussion, Dr Rubin Appresyan, a member of COMEST from Russia, expressed skepticism towards traditional philosophical support for present environmental issues. Dr Panneerselvam replied that there is a continuity between tradition and modernity. For instance, Gandhi adopted an ethical perspective of nature that emphasized trusteeship over the environment, rather than exploration of it, from older Indian philosophies. Dr Panneerselvam also mentioned that one can always apply traditional thinking directly to modern issues.

The next presentation was "Filipino Language Perspectives on Nature and the Environment" by Dr Rainier Ibana, Professor of Philosophy at Ateneo de Manila University in Manila, the Philippines. Dr Ibana provided philosophical interpretation of a linguistic analysis of the Filipino words for "nature" (*kalikasan*) and "environment" (*kapaligiran*). He divided each of the words into several components before analyzing

them from a combined philosophical and linguistic perspective. In the case of *kalikasan* (nature), Dr Ibana analyzed it as a combination of “you” (but in a sense of sharing between “you and I”), capacity or what can be carried by ecological niches, and a suffix for “local context”. In the case of *kapaligiran* (environment), it is a combination of “you” (in the same sense as before), an expression of deference, the surrounding horizon of the universe (which contracts and expands depending on one’s perspective), and a “local context”. Dr Ibana explained that the combinations of these elements into the Filipino words for nature and environment reveals a shared understanding in Filipino language and culture for nature and the environment which is a composition of these independent elements, and that it can also be used to achieve mutual understanding that nature and environment are limited and that we should respect the power of nature.

Ms Uejima asked whether there is a system of consciousness which evolves from such words. Dr Ibana replied that consciousness is expressed in, but not formed from, language. Dr Rae Blumberg commented that there is less sense of responsibility in Spanish terms than in Tagalog. There was a discussion on whether the greater sense of responsibility in Tagalog flows from this linguistic understanding.

The next presentation was “Biocosmology: A Substantive Origin for the Ethics of Energy Technologies” by Dr Konstantin Khroutski, Professor at Novgorod State University in Russia. Dr Khroutski noted that Russian philosophy and science can be reduced to several fundamental principles, which are corroborated by natural science, and these principles can be used to discuss the ethics of energy technologies. However, he noted that there is still no unifying set of ethics globally. He clarified this by comparatively analyzing three types of global ethics – eastern, western, and Russian. A practical question that he raised was whether at this point, we need a set of universal ethical decisions or ethical ‘specialists’ in specific areas to deal with ethical decisions. Dr Khroutski has come to the conclusion that biopolitics (which helps us resolve current global conflicts without harm to nature and the environment), bioethics (to protect the rights of persons and society), and biocosmology (to generate new and universal resolutions to energy generation, distribution, and consumption) are required in dealing with this question.

Ms Uejima suggested Dr Khroutski should include quantum theory and frontier theory in discussing global ethics. Dr Khroutski replied that such theories are basic theories which are subsumed by biopolitics, bioethics, and biocosmology. Dr Rubin Appresyan suggested there was more diversity among Russian perspectives than the biocosmological one presented in the paper.

The next presentation was “Towards a Natural Foundation of Community” by Dr Werner Krieglstein, Professor at the College of DuPage in the United States. He argued that there is an innate sense in humans which drives us to work together. He introduced the concept of transcendental perspectivism, where transcendental truths can be valid for a group of beings if they are able to agree on the truth. This is a view which is different from moral relativism yet is more practical as a foundation for building communities. Transcendental perspectivism is also different from moral absolutism as it is less authoritarian and more cooperative. Dr Krieglstein then argued that community-building and cooperation is not just valid for humans, but also other species and even non-organisms. In the latter case, he provided examples of photonic resonance in lasers and other phenomena that exhibit collective organization. He argued that there may exist a “natural” foundation for communities and collective work.

The next presentation was “Gender and Environment: Exploring the Critical Role of Economic Power in Thailand, Ecuador, and Malawi” by Dr Rae Blumberg, Professor at the University of Virginia in the United States. In the presentation, Dr Blumberg related two theories, the general theory of gender stratification and the theory of gender and development, to environmental ethics. She saw that there were two main threats to sustainable ecosystems. The first involved high fertility, which can undermine conservation plans, and the other was over-mining of the ecosystem’s resources. She argued that if pro-sustainability groups included women, high fertility would be undermined. Worldwide evidence shows that in such cases, women opt for fewer children, spaced further apart, and have children at older ages. With lower fertility rates, there is less over-mining of ecosystem resources. Beyond this, in many rural areas, women are engaged in hard labor, and if they have less children, they take better care of children, and since women work in the environment (for instance, carrying firewood and water), they take better care of the environment. Dr Blumberg argued that therefore women should be given greater economic power, which also reduces poverty and promotes gender equality. Dr Blumberg illustrated examples of this theory in action in selected hilltribe populations in Malawi, Ecuador, and Thailand, where increased conservation measures were thought causally related to greater political and economic power for women.

Dr Benmakhoulouf provided examples from Morocco which supported Dr Blumberg’s argument, and supplemented the case studies she had made. Dr Blumberg noted that Dr Benmakhoulouf’s examples were also examples of virtuous cycles, instead of vicious cycles, and provided more examples of such virtuous cycles. One example provided involved poachers in a community. Women’s lives in the community had been controlled by the men, but once they managed to obtain

enough political power, they guarded their food resources, increased their self-confidence, and improved the community's and their own health.

Dr Panneerselvam noted that economic empowerment helps both women and men, but that problems still existed. For instance, while women are now able to *de facto* obtain more employment (and therefore obtain greater economic power), instances of abuse still exist. There are, however, signs of improvement – for instance, in Indian villages, self-help groups for women now exist. Dr Panneerselvam also noted that education for women was also important, because such education improves the lives of those in her family, and the community by extension.

The next presentation was “Strategies and Challenges Towards the Global Energy Problem” by Dr Harakazu Iguchi, Researcher at the National Institute of Natural Sciences in Nagoya, Japan. He has been engaged in nuclear fusion research for over 30 years, and he has discussed possible resolutions to the energy crises elsewhere. Dr Iguchi provided a wealth of scientific information involving statistics and information, which culminates in our present energy crisis. Some of the key figures he included were that the world energy supply increases exponentially, and that we still obtain about 80% of our energy from fossil fuels. Dr Iguchi also discussed the situation regarding competition among developed nations for renewable energy sources, including wind and solar power. Due to the energy crisis, he argued that a new quality of life was required, which involved elements such as far greater energy conservation measures in addition to technological development.

Dr Islam asked whether nuclear energy use is safe. Dr Iguchi replied that in Japan, more than 30% of electricity is taken from nuclear power. Disposal of waste is a problem, and it is not environmentally friendly in his opinion. New technology for fission energy can process the waste and reduce it, but it is not necessarily promising. Energy generated from nuclear fusion is safer and cleaner, but the technology is still in the research phase, and it could be another 30-40 years before nuclear fusion is a source of widespread electricity generation.

Dr Masakazu Kitano, Professor of economics at Hyogo University, Japan, pointed out that Dr Iguchi's information on alternative energy use, such as solar and wind power, needed to be updated, as solar and wind power have become more profitable in recent years. The policy of the German government to force its electricity companies to buy renewable energy at three times the price it used to, led to reforms that now make renewable power plants profitable.

The final presentation for the meeting was “DU (Depleted Uranium) Weapons as a challenge for environment and philosophers” by Dr Nobuo Kazashi, Professor at Kobe University in Kobe, Japan. Dr Kazashi argued that depleted uranium weapons were

the result of a nuclear “shadow” or footprint because they are derived from used nuclear fuel in reactors. Because of their high density, depleted uranium has been cast into weapons, such as the tips of ammunition rounds, to make them more effective in armour-piercing. However, the aftermath of using such weapons can lead to extremely toxic effects on humans. The depleted uranium when impacting on a target creates micro-particles in the air, which will if they enter the lungs cause radiointoxication. He said there have been many denials of danger from various governments, and from the WHO. There has also been high support for banning such weapons at the United Nations General Assembly, with only a handful of countries, including the United States, voting against such a 2007 resolution. Dr Kazashi noted that currently, the banning of DU weapons is receiving low priority in disarmament because of the Oslo process of banning cluster munitions has been more prominent, and the indirect scientific evidence to show that DU weapons are causing radiointoxication.

Dr Charles Courtney asked Dr Kazashi to clarify the definition of DU: is it weapons made from uranium waste? Dr Kazashi answered that because of the enormous amount of uranium waste, scientists thought they needed a way to deal with it. The waste can be sent to other countries as weapons. Scientists eventually realized the potential role of DU weapons once they discovered its properties. In addition, DU is almost free and therefore economical as a weapon material.

Dr Rae Blumberg asked whether the danger from DU weapons are the weapons themselves, or aftereffects. Dr Kazashi answered that when the DU weapons hit their targets, the DU gets absorbed into the air as radioactive particles, which are blown around. The dust eventually settles, and they are inhaled. The inhalation of radioactive particles was the danger he was referring to in the presentation.

Dr Kitano noted that since few nuclear weapons are being built, there is less DU to be taken from such a source. Thus, were powerplants now providing the nuclear fuel output for DU weapons? If so, this may be another argument against nuclear energy use. Both Drs Iguchi and Kazashi were not sure of the answer to this question.

After presentations were finished, an **EET Working Group 2 Discussion** ensued, co-chaired by Dr Darryl Macer of UNESCO Bangkok and Dr Daniel Nesy of the University of Kerala. Dr Nesy summarized the presentations, noting their individual contributions to the working group. First, Dr Tamouro discussed alienation, and Dr Nesy noted that this was meaningful to nature because the issue over the environment comes as a result of alienation from nature. Second, Dr Nesy's own presentation explained the relation of global society (man) and nature through Vedanta, the Indian tradition. Third, Dr Benmakhlof's presentation provided cosmological viewpoints helps analyze the

environmental crisis. Fourth, Dr Panneerselvam presented ethical perspectives in viewing nature from an Indian perspective, with some references to western ones. Fifth, Dr Ibana presented a linguistic approach to viewing nature. Sixth, Dr Khroutski provided ethical perspectives on nature from the eastern, western, and Russian perspectives. Seventh, Dr Krieglstein presented a perspective on natural foundations of communities, arguing that all systems and bodies can organize themselves. Eighth, Dr Blumberg argued for the role of gender when dealing with nature and the environment. Ninth, Dr Iguchi provided a scientific perspective, and scientific information and statistics, dealing with the current energy and environmental problems. Tenth, Dr Kazashi provided information about depleted uranium weapons and their effect on the environment.

Dr Macer stated that one way of dividing ethical viewpoints was to look at them from cosmological, anthropocentric, ecocentric, and other perspectives. Are we a part of nature or separate from nature? Dr Panneerselvam noted that one approach is to involve intercultural philosophizing to understand the environmental problem from different viewpoints. A discussion of different perspectives, both descriptive and normative, need to be incorporated into the EET WG2 report. Dr Courtney agreed with including descriptive analyses from different cultures, but he said that they should be integrated. This might be accomplished by starting with smaller “centrics” (for instance, with anthropocentric) and then progressing to larger or different “centrics” (for instance, cosmocentric or ecocentric). Dr Blumberg suggested that an analysis could occur in the opposite direction, namely, from the larger “centrics” which are over-arching, to different cultures, and then to the most specific views of nature (e.g. ecocentric). Once policy analyses were constructed, they could be applied to communities, whose traditions and skills we can use.

Dr Benamakhlof agreed with integrating different cultural perspectives, noting the presentations showed that the discussion of nature and the environment, and care for it could be used to bridge cultural divides because it acts as a common ground and source of ethics. Dr Macer noted that there was consensus on integrating different cultural viewpoints on nature and the environment. He also said that the group should summarize the state of scholarly output on these perspectives first, rather than reinventing the wheel. Dr Nesy noted that there are celebrations regarding nature in all cultures, and she suggested that the group collect these and include the description of such celebrations and their implications for viewing nature. Dr Benmakhlof noted that in many cultures, there are rhythmic celebrations for seasons, and this is an organic link of society because people are seen to be working together.

Ms Uejima noted that the final destination for society is the creation of a sustainable society, and therefore philosophy should be unified and integrated with science. There was a discussion that the primary target was to find gaps in our knowledge and common ground as an alternative to the current short-term market view. To do this, the group can describe where commonalities of culture exist, and find a long-term commonality where the direction of alternatives is a worldview more consistent with people’s worldviews. A summary and integration of alternatives to describe accurately our state of knowledge should be developed.

Dr Kitano commented that the environment and agriculture are connected, and that agriculture is one of the main problems in the environmental crises today. Dr Macer replied that UNESCO EETAP project wants to fill in the gaps for policy-makers, and FAO was working on food and bioenergy. There are also linkages to the other working groups. Dr Macer also thanked the Korean National Commission for UNESCO for their cooperation in providing drink breaks and Seoul National University for providing the room for the meeting.

Report of the UNESCO Conference on Ethics of Energy Technologies: Energy Flow, Environment and Ethical Implications for Meat Production

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The meeting was held on 24 July 2008 at United Nations University Institute of Advanced Studies (UNU-IAS) in Yokohama, Japan.

Background

This conference was held in the context of Working Group 13: Energy Flow, Environment and Ethical Implications for Meat Production, in the Ethics of Energy Technologies in Asia and the Pacific (EETAP) project. This was the first meeting of Working Group 13. Working Group 13 was formed after the launch conference of UNESCO's Regional Unit for Social and Human Science in the Asia-Pacific (RUSHSAP) ‘Ethics of Energy Technologies in Asia and the Pacific’ Conference held in Bangkok, 26 to 28 September 2007.

The EETAP project is coordinated by the Regional Unit in Social and Human Sciences in Asia and the Pacific (RUSHSAP) at UNESCO Bangkok, and is linked to several key activities of UNESCO Social and Human Sciences sector, including the ethics of science and technology, environmental ethics, philosophical dialogues, linking research with policy-making and promoting the culture of peace. The work will also feed into considerations of the ethics of climate change that are being made by the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST).

The objectives of the Conference were to discuss the topic from a holistic perspective, and to set the agenda for the Working Group. There were a series of background presentations followed by detailed discussion of the areas for further focus in the working group sessions. Meat, as a food, is a form of energy for humans, however in order to produce enough meat to satisfy global demand huge reserves of energy are required in the form of feed, fertilizers, pharmaceutical production, transport and refrigeration.

The objectives of the conference included:

- Providing a forum for exchanging views on diverse perspectives on ethical issues;
- Framing the debate in an ethical framework by identifying and clarifying the values at stake and providing ethical reasons for alternative choices; and
- Identifying areas for further research and consideration and different policy options.

The Working Group agreed to focus on industrialized meat production, and the report will examine issues including:

1. Energy requirements in agriculture, with a focus on energy requirements for industrialized meat production and consumption by sector.
2. The economics of meat production
3. The materials used in the feeds for land-based, sea-based, and lagoon-based industrialized meat production.
4. The oversight infrastructure for industrialized meat production by country, by sector.
5. Water over-consumption and water pollution through industrialized meat production (input to Working Group 14 on water ethics).
6. Land degradation and deforestation, and biodiversity loss.
7. Production and release of multi-antibiotic-resistant bacteria.
8. The use and release of synthetic and natural hormones.
9. The accumulation of heavy metals and persistent organic pollutants in the food chain and in soil and sediments.
10. The direct effects on climate change by meat production and meat consumption.
11. The changes caused in local communities by industrialized meat production.
12. The potential for causing regional and global

infectious disease pandemics through industrialized meat production.

Summary

There were thirty participants of balanced gender including persons from Australia, Brazil, China, France, India, Iraq, Japan, Jordan, the Netherlands, New Zealand, the Philippines, Romania, United States, and several other states. Participants attended in their individual capacity and came from diverse backgrounds, including engineering, government, civil society organizations (CSOs), energy-related industries, diplomatic offices, education, and academia. The disciplines amongst academics included agriculture, bioethics, biology, engineering, philosophy, ethics, energy science, education, and development studies.

Presenters were asked to give 15 minute talks, followed by questions and discussion. The presentations will be made available on the EETAP website (<http://www.unescobkk.org/index.php?id=energyethics>). The working group session was jointly chaired by the Chair of EETAP working group 13, Dr. Robert A. Kanaly, Yokohama City University, Yokohama, Japan and Darryl Macer, UNESCO, EETAP project coordinator. The papers presented will be used to shape the outline of the report of the working group, and feed into the body of knowledge produced by the EETAP project.

Meeting Report

Following welcoming remarks and self-introductions, Dr. Darryl Macer, Regional Advisor in Social and Human Sciences for Asia and the Pacific, UNESCO, Bangkok, and meeting co-chair, discussed "Food Production and Ethics of Energy Technologies". In his presentation Dr. Macer introduced the concepts of ethics and bioethics and provided a framework in regard to the origins of ethics and the international standards for bioethics.

Emphasis was placed on the fact that the 2005 Universal Declaration on Bioethics and Human Rights (UDBHR) includes issues of food security and issues related to food that are inclusive of bioethics. A large challenge is how to make ethics relevant to people that are living under very different circumstances. Points from article 14 of the Universal Declaration on Bioethics and Human Rights were raised, including that article 14 addresses access to quality health care, nutrition and water, and improvement of living conditions in the environment. The ethics of the conservation, management and utilization of natural resources for present and future generations were stressed including the fact that there are currently controversies in regard to the use of energy and agriculture, especially in regard to biofuels. He reported on his meeting with FAO who is examining bioenergy and food.

He went on to explain the background of the UNESCO Ethics of Energy Technologies in Asia-

Pacific (EETAP) Project including how the 14 working groups were formed and that the aims of the working groups are to develop dialogues around the issues of each working group with a focus on environmental ethics and human security. A final aim is to produce a report that may be used by policy makers, scientists and researchers to consider the ethical dimensions of energy policy. It was explained that there would be overlap between working groups, including that Energy Flow, Environment and Ethical Implications for Meat Production will share some common elements with other working groups such as Working Group 14, Water Ethics and Water Resource Management.

Among the conference documents, the co-chairs also noted the FAO documents, background papers, which had been provided as background materials to the meeting: David Fraser, *Animal welfare and the intensification of animal production: An alternative interpretation* (Rome: FAO 2005) and FAO ETHICS SERIES 3, *The ethics of sustainable agricultural intensification* (Rome: FAO 2004); Henning Steinfeld, et al., *Livestock's Long Shadow, Environmental Issues and Options* (Rome: FAO 2006).

Meeting co-chair and Working Group 13 Chairperson, Dr. Robert Kanaly, Associate Professor from Yokohama City University provided the background of Working Group 13 and gave a brief introduction to industrialized meat production and how it is related to agriculture and fossil fuels. Dr. Kanaly explained that FAO projections indicate large increases in meat demand in Asia through 2050 and that this was occurring in large part due to increases in urbanization and per capita income. Projections for China included that per capita consumption of animal products were expected by 2020 to almost double compared to 1993 but that throughout the world, even in the developed countries, per capita consumption was projected to increase.

The aims of the working group were presented and included assessing the energy requirements and the economics of meat production with focus on the negative externalities of the process including environmental degradation, production of multiple antibiotic resistant bacteria, impacts on community health and the potential for causing regional and global disease pandemics and their ethical implications. Emphasis was placed on energy flow whereby the production of cereal grains for animal feeds require large amounts of fertilizer and that production of fertilizer, especially nitrogen fertilizer, requires large amounts of fossil fuels such as natural gas and coal, and therefore, industrialized meat production requires relatively large inputs from the fossil fuel sectors.

Dr. Atsushi Tajima, School of Agriculture, Tsukuba University, Tsukuba, Japan gave a presentation titled "Implications of Animal Production on the

Environment". Dr. Tajima explained that in Japan, the Meiji era government provided more protein to Japanese citizens by adding meat and meat products to their diets and this was accomplished by promoting the animal production industry after the opening of Japan. Increases in average height and weight for Japanese males and females were some of the effects of this program. Dr. Tajima also explained that there has been a large trade imbalance in Japan whereby agricultural imports (food and animal feeds but excluding fish products) far exceed exports and explained the results of this scenario on nitrogen and virtual water mass balance whereby total nitrogen is accumulating and has impacts on groundwater and the surrounding sea in Japan and also that Japan is a net importer of virtual water. In terms of agricultural trade, excess unidirectional trade results in eutrophication for importing countries and results in soil erosion and salt accumulation for exporting countries for example. Dr. Tajima emphasized that agricultural trade results in both economical merits and environmental demerits and that a balance must be made in the form of sustainable agriculture including that some kind of sustainability index or indicator may be necessary.

In discussion, Dr. Ayoub Abu-Dayyeh, Jordan asked about the necessity of the Japanese government's investment in protein from animals considering that they may receive adequate amounts of protein from seafood. Dr. Tajima explained that protein levels were not adequate because the total amount of essential amino acids in the Japanese diet were lacking but also went on to explain that there were political purposes for the plan as well in that the Japanese government felt that the perception of "meat-eating" was considered to be a symbol of a culturally advanced society. Dr. Masahira Anesaki, The Asiatic Society of Japan, explained that the book of Genesis in the Bible promotes a materialistic view because God created living things for the purpose of man and that factory meat production may be a typical example of this view. Based on biological evidence for example, humans and animals are not so different and it seems that we should change the way that we perceive our relationships with animals.

Dr. Sivanandam Panneerselvam, University of Madras, Chennai, India discussed the subject of respect for animals from the context of the Indian tradition and argued how this issue could be approached in his paper, "Respect for Animals: An Examination of the Replaceability Argument in the Context of Meat Production". Dr. Panneerselvam explained that there are various philosophical viewpoints including anthropocentric views and in contrast, there was a need for environmental protection and "responsibility ethics". Dr. Panneerselvam asked if it was true that meat eating was necessary and that industrialized meat production was an efficient way of producing food

because there is no medical evidence which suggests that meat is necessary for human survival and that industrialized meat production requires the use of cereal grains to feed the animals that could otherwise be used to feed humans directly. By consideration of the ethics of the use of animal flesh, relatively speaking, the lives of humans must be balanced versus the lives of animals.

The following ethical issues were raised: (1) animals are led to live a miserable life so that their flesh can be eaten by humans at the lowest possible cost and that due to this, the animals do not receive proper treatment [e.g. living conditions], (2) modern forms of intensive farming are part of a system that implies that animals are objects for humans to “use” and society tolerates this system because it provides cheap meat even though sentient beings live their entire life in unsuitable, cramped conditions – i.e. animals are treated as machines that convert grain into flesh and includes animal crowding and cage confinement and that humans have failed to act responsibly or ethically by adopting these systems; (3) caging of animals, castration, breaking of the bond between mother and young, breaking of herds, transportation and slaughter all involve suffering and do not take into account the interests of the animals. Killing also does not take place painlessly.

The counterarguments include: (1) how do we know that animals feel pain? (2) why should we not eat them and although the counterarguments can be made, the ethical issues are not taken into account. The environmental repercussions of factory farming were listed and Dr. Panneerselvam closed his discussion by stating that his main consideration was that if we start with the presupposition that meat-eating is inevitable, then we must treat animals guided by ethical principles.

In discussion, Dr. Abu-Dayyeh asked how one would enforce an ethical system over a capitalist system [i.e. industrialized meat production] and also how one could justify one’s anguish over slaughtering animals in a world where slaughtering of people occurs without enough ethical consideration. Dr. Panneerselvam explained that even though the world is run on a capitalist system, ethical values cannot be ignored and that social values must find a place within the system. Dr. Kanaly posited that although the design of the slaughterhouse is of course important, that the death of the animal may be the best part of its life because it represents the end of the animal’s lifetime of suffering and that industrialized meat production allows for a disconnection between the consumer and the animal that leads to a kind of convenient ignorance in regard to the suffering of that animal. Dr. Panneerselvam explained that humans must be custodians of the biosphere and that a methodology must be involved.

In her paper, “Ethical Implications of Poverty and the Environment”, Dr. Daniel Nesy, Department of

Philosophy, University of Kerala, Kerala, India discussed three points (1) a definition of poverty, (2) the relationship between poverty and the environment, and (3) the ethical aspects of the relationship between poverty and the environment. Environmental crisis can be understood as the failure of humans to understand the relationship between humans and the environment and the result of this misunderstanding includes millions of people throughout the world that are missing the basic needs such as food, clothing and shelter, natural resource depletion, loss of soil fertility, overuse of nonrenewable resources, and overconsumption. Dr. Nesy explained that we need to correct our understanding of the relationship between humans and the environment. Although science has provided many benefits to humans, especially in the areas of energy and power use, progress in growth and development have come to be measured by the amount of energy possessed and the amount of consumption. In India for example progress has been made in terms of development but that both quantitative and qualitative points of view are necessary. Twenty percent of Indians live without electricity and millions do not have shelter and although development is clearly occurring, an uneven growth whereby 10 to 15% of the population is benefiting leaving 85 to 90% of the population behind. For example, 40% of the Indian farmers that contribute to the 2% of agricultural growth in the agriculture sector are landless. Poverty has many dimensions including powerlessness and a lack of representation and freedom. Food is of prime importance and global climate change is a major threat to food production and poverty. The magnitude of the problem is apparent and conservation is required rather than the notion of exploiting nature.

Mr. Keisuke Tachiyama, Graduate School of Global Environmental Studies, Kyoto University, Kyoto, Japan presented a paper “Inefficiencies in Aquaculture”. He began by explaining that aquaculture is becoming more linked to industrialized meat production on land because fishmeal is used in the pig (hog) and chicken sectors. Until the mid-1960s seafood was eaten primarily in the developing countries and the flow of seafood was oriented from the northern countries to the southern countries but afterwards the Japanese economic bubble transformed the flow of seafood. Beginning with a discussion of the natural fish stocks, Mr. Tachiyama described the collapse of the Canadian North Atlantic fisheries by 1992. Although the fisheries were thought to be “infinite” they collapsed in merely three decades and this prompted investment in aquaculture in the developing countries. However, more specifically, it prompted development of “high-value” aquaculture, that is, aquaculture that is geared toward the production of fish targeted for markets in the developed world, such as shrimp and salmon. Complete (shrimp and salmon) versus partial (tuna) aquaculture

was discussed and the global flow of aquaculture products was presented.

Mr. Tachiyama pointed out that the feed for aquaculture are primarily obtained from other small fish and on average 2.4 pounds of fishmeal are required to produce 1 pound of salmon or shrimp. This continues because now only 25% of global seafood comes from aquaculture, however, this scenario is expected to change rapidly in the future. Additionally, there are various environmental costs to aquaculture, including destruction of mangroves, pollution of adjacent coastal waters, the forcing of local villagers to transform rice paddies into aquaculture sites, large-scale epidemic outbreaks and other issues. The risks of engaging in partial aquaculture of migratory species such as blue fin tuna and the need to revisit past ancient ways of aquaculture were also discussed.

The presentation titled, "Transfer of Energy Technologies" was given by Dr. Ayoub Abu-Dayyeh, Society of Energy Conservation and Sustainable Environment, Amman, Jordan. Dr. Abu-Dayyeh began his presentation by discussing global warming and the industrial revolution and referred to the fast pace by which technology is advancing and asked whether it was possible for humanity to also keep pace. Solar thermal technology was discussed from the point of view that it is indeed a renewable energy source but that a high degree of technology and money are required. Similarly it was shown that only those countries with large enough capital are currently using wind energy and this excludes the African and Latin American countries. In terms of energy consumption, the countries of the north such as the United States and Australia are using the most energy per capita and the need for more energy by the developed countries is also related to wars in the Middle East for example. Investment in technologically-advanced but relatively small scale energy production technologies may be an appropriate method for developing countries to obtain and use energy efficiently and examples include solar cookers, thermal insulation and photovoltaic cells. In regard to technology transfer, Dr. Abu-Dayyeh concluded his presentation by considering the following points: control of privatization, debt relief restructuring, expansion of educational and cultural interactions and UN involvement.

Dr. Tatiana Gadda, UNU-IAS, Yokohama, Japan, presented "Multiple Scale Environmental Impacts of Tokyo's Meat Consumption". The research focus of Dr. Gadda, originally from Brazil but working in Japan, included how consumption of ecosystem services by cities affects the environment and how changing consumption patterns are associated with changes in income and globalization. Consumption trends in Japan were explained in that Japan has been emphasizing a return to a traditional diet based on rice and fish, but

more recently there has been an emphasis on food self sufficiency. In Tokyo in the late 1990s the consumption of meat overtook the consumption of seafood for the first time and since that time comparisons of consumption in Tokyo compared to the countryside indicate that both areas are now consuming similar amounts of meat. The greatest increases occurred in the pork sector but not in the horse and goat sectors. Additionally, mad cow disease issues have affected beef consumption at various points. Consolidation of the beef and pork industries in Japan was shown but also through imports, virtual water imports were greater than the water used for agricultural purposes. Overall, meat consumption in Tokyo and greater Japan has increased significantly and the consequences of this increase have yet to be determined.

There was a discussion of why Japanese persons were returning to meat consumption, with the suggestion by Dr. Mihaela Serbulea, Romania, that government policy incentives could also influence food type and consumption patterns. If the government insists on returning to traditional diets there may be a way to promote the health food industry. The prices of meat in health food stores, with more ethical treatment of animals, are higher. If fish is better for health then incentives could be given to consumers. There was also debate, as above, on the energy issues related to fish production. Although Tokyo has a very diverse fish stock, consumers are eating further down the trophic level than in the past. The irony of the dichotomy, fish or meat, and absence of plants was discussed. Dr. Tajima noted that the point has not been raised in Japanese society. There is a basic rule of economy, that we start with egg and milk, then chicken and pork, and then beef. As a child he reflected on the fact that school meals were mostly pork and whale and consisted of a small portion that was mainly fat with some meat attached. Eggs used to be expensive at 18 yen per egg in the 1960s. A new salaryman's salary was 18,000 yen per month and milk was luxury. 1991 was the turning point to open the Japanese beef market and until that time 60% of the Japanese beef market was dairy cattle. As a student in university he remembers beef was 1000yen for 100g. Pork was affordable. However, as Dr. Kanaly observed, nowadays we see 100yen hamburgers. There was a discussion of the influence of marketing on food consumption. Dr. Miyako Okada-Takagi noted that after World War II the US strategy was to make Japanese persons convert to eating bread and meat sandwiches to create a demand for imports of these products in Japan, and an export market. Mrs. Yoko Hoshino discussed advertisements for healthy food, for example to say that fish contains DHA that may be beneficial for one's brain.

In Session II, participants continued the active discussion of the end of the morning session, discussing various topics related to the objectives of the working

group. The session began with emphasis on the importance of the interaction of cultures as raised by Dr. Nesy in reference to Dr. Abu-Dayyeh's morning presentation. Dr. Abu-Dayyeh agreed that cultural interactions were the most important issue for the purpose of people to understand each other and that the invention of a "contemporary culture" or "contemporary literature" may facilitate better communication among the people of the world. Mr. Arthur Wolf, Netherlands joined the discussion by offering that education on ethics may be the most important way to increase intercultural communication and yet allow people to retain their cultural identity or religion and that encouragement of critical thinking was essential. Dr. Kanaly expressed his agreement and offered that an educated, empowered citizenry is most important.

There was a discussion among all participants on why animals need to be raised in factory farms, and the balance of ethics and efficiency and economy. Marketing was also related to the consumption patterns, and the values of wealthy consumers who valued presentation and cleanliness of food over the cost was different in different cultures. There was also a discussion of cage size and animal rights, and antibiotic consumption.

Dr. Macer reminded the participants that the purpose of the working group is to (1) identify the values at stake in meat production and to identify them for a range of cultures, (2) to offer alternatives to the energy systems linked to industrialized meat production, and (3) to determine areas for future research and identify gaps that require future study. A draft report outline linked to the agreed upon meeting objectives would be developed.

Dr Macer also thanked the United Nations University, Institute of Advanced Studies for their cooperation in providing the room for the meeting, and for arranging the logistics for web casting the meeting.

Global warming: not a myth

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During 1990s global warming alarms were often taken lightly, and were regarded as misinterpretation of year-to-year climatic fluctuations. In 1996 Dr. Gowarikar of the New India Meteorological Department said, in the context of warming up climate,

"Frankly, climate change seems an issue blown up to larger than its size..." (PTI News, March 1, 1996). Dr Krishna Rao, Deputy Director General of the Meteorological Office, New Delhi, opined, "As for global warming...over the past 100 years a rise of just 0.4° C. has been recorded... Not that one should not take heed of this temperature rise but it (is) too insignificant to affect the country's climate" (PTI News, July 18, 1997).

But now evidences of the earth getting warmer are such as cannot be ignored. Himalayan glaciers are melting fast. Ice, floating on the Arctic Sea is shrinking both in area and in thickness, reaching all time low in 2007 (Reuters News, May 1, 2008, citing statements of the climate researcher Sheldon Dorbot of the University of Colorado at Boulder).

The Lake Baikal in Siberia (spelt as 'Baykal' in Oxford Atlas) is the world's largest and deepest fresh water lake. It is gradually warming up. Its average water temperature has increased by 1.21° C. since 1946, chlorophyll content has gone up 300% since 1979, and zooplankton grazers have also increased (Hampton et al., 2008). Cladocerans among the zooplankton feeders have increased in number 335% since 1946.

Reuter's News, May 1, 2008, citing a prepublished paper by Moore et al., points out that warming up of the lake Baikal is threatening existence of the only fresh water seal living in the lake. The female of this seal raises its young ones on the ice in the lake; this is safe, as on shores there are many predators waiting to attack the seal pups. With gradual loss of ice cover of the lake and with increasing mortality of the pups there is obvious possibility of the only fresh water seal going extinct. The diatoms, flourishing beneath the ice cover in the lake, die and become food for the biota in the lake. Hence the loss of ice cover will affect survival of a number of species in the huge water body.

McClintock, Ducklow, and Fraser (2008) have spent a total of 36 seasons in the Antarctic Peninsula. The Peninsula is a claw-like extension of the continent of Antarctica, extending westward, towards the Cape Horn of South America. The authors point out that the Antarctica locks about 2/3rd of the planet's fresh water as ice. But then it is warming up at a fast pace. Since 1960 the average mid-winter temperature has gone up by 6° C., which is "the highest rate of warming anywhere on the planet, five times the global average". Further they say that in the last 25 years ice-cover in the western part of the Antarctic Peninsula has declined by 40%. These environmental changes are having obvious effects on the biota of the region. Krills, which are shrimp-like crustaceans, are an important component of the zooplankton of the region. They are dependent on the ice-cover to complete their life-cycle. Juvenile krills live under ice to escape predators. They feed on algae growing in fissures in the ice-cover. With decline of the ice-cover krill habitat is shrinking. The zooplankton also includes the protochordate salps, which are soft-bodied, and have few predators; hence they are a dead

end of the food web there. With receding ice-cover the krill populations are fast declining, and salps are increasing in number. The authors point out that the replacement of krills by salps has, “potentially grave consequences for an Antarctic food web”, because large predators, like penguins are highly dependent on krills for their nourishment

Another clear change in the Antarctic Peninsula biota, noted by McClintock et al. (2008), is among penguins. There are three species of penguins in the peninsula, Adelie, Gentoo, and Chinstrap. Among them Adelie penguins are truly Antarctic. Females of Adelie lay their eggs under ice shelves. Their chicks feed under ice-cover. Adults of Adelie feed mainly on krills, and for this they have to visit ‘hot spots’, which are places where Antarctic Circumpolar Current, through upwellings, brings warm waters close to the surface with abundance of krills. Receding ice-cover is taking their breeding places farther away from their feeding spots. Adelie penguins feed only during sun light hours, and during winter this duration of these hours is much shortened. On the other hand Gentoo and Chinstrap penguins breed in subantarctic regions; hence they do not suffer from such disadvantages as do Adelies. It has been noted by the authors that among the penguins, active in the Antarctica, Adelies are declining in number, and Chinstraps and Gentoos are increasing.

The great traveler and naturalist Prof. P. Jolivet has put a question (in a personal communication): “Can we expect *Nothofagus* forests and their fauna to reappear (in the Antarctica)?”. *Nothofagus* is a genus of trees, which were flourishing in the Antarctic Peninsula in late Cretaceous (80 million years ago) (Hill, 1992). Then the Antarctica had not migrated to the South Pole, and had a temperate climate.

Woolly mammoths lived in Eurasia and North America 300,000 years back. Surviving through different climatic changes, they eventually became extinct 36,000 years ago. Two different hypothetical explanations have been offered for their extinction, viz. through environmental changes, and through anthropogenic (i.e. produced by humans) effects. Nogues-Bravo et al. (2008) have prepared climate envelope models and population models for woolly mammoths for different time periods. From these models they have inferred that climatic changes (mainly warming) in late Pleistocene drastically reduced populations of the mammoths, so that eventually they became restricted to Arctic Siberia. This drop in population size and distributional range made them more vulnerable to hunting pressure by humans. Thus combined effect of the warming up of climate and anthropogenic impacts led to extinction of the mammoths. This history of extinction may be repeated with other species. Warming up may restrict population size, say through spread of infectious diseases, as in case of the African lions in the extended periods of drought in 1994 and 2001 (National Geographic News,

June 26, 2008), and also their ranges of distribution. Anthropogenic events (such as extension of urbanization, agriculture, road construction, and building of dams) may further affect their survival and may eventually lead to their extinction.

Besides accelerating the rate of extinction of organisms, global warming may have direct undesirable effects on humans. The Bar Association of India, in their 2008 meeting, in which representatives of different local bar associations of the country participated, discussed at length the effects of global warming. In the meet it was inferred that, as the sea level rises with the warming, people in large groups will be leaving coastal areas. This will increase population density in inland areas, and with this law and order situation will worsen (IANS News, May 1, 2008).

With warming of continents disease carrying vectors, like mosquitoes, will develop faster, and the concerned infectious diseases will become more common. It is also feared that with this climatic change incidence of HIV will go up, and may reach epidemic levels, as has been pointed out by Daniel Tarantola and David Cooper of the University of New South Wales (IANS News, May 1, 2008). In developing countries the high incidence of HIV is due to “gender inequality” and to “lack of access to essential services”. These factors are likely to become more intense with increasing population density, which may be foreseen as resulting from earth’s climate warming up.

Majumder (2008), citing World Allergy Report, says, “As temperature increases (with global warming), plant pollination seasons may lengthen, and proportionately, human exposure to allergic pollen will increase”. It is feared, therefore that asthma and rhinitis will become more common.

With these alarm bells ringing, nations should gear up to do their utmost to minimize emission of green house gases without political considerations, as global warming knows no political boundaries.

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Medical Bioethics and Medical Tourism in Thailand

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Abstract

Medical tourism has been growing rapidly in Thailand attracting over one million overseas tourists annually. Medical tourists have been attracted to Thailand due to the high standard of health care, professionalism of physicians and dentists, and cheaper health care prices. Consequently, medical tourism is transforming the nature of health care delivery in Thailand due to the advent of joint hospital collaborations. The high investments associated with medical tourism and its impact on the Thai health care system has various medical bioethics implications. These include follow up care to patients, easy access to post care medications, and the issue of counterfeit drugs. Furthermore, the growth of medical tourism needs to be governed in such a way that it does not compromise the public health care system.

Keywords: medical tourism, medical ethics, health care, protection

Global medical tourism is one of the most rapidly growing industries in the world, generating US\$3 trillion per year worldwide. The increase in global health services is characterised “in cross border delivery of health services” and in joint collaborations of health industries.¹ Thailand has reflected this global trend and is presently leading the Asia-Pacific region for medical tourists. Reports vary as to the amount of tourists coming to Thailand per year. Estimates vary from 400,000 to 1.1 million tourists annually.² Official statistics quote that the “number of foreigners receiving medical treatment in Thailand has risen dramatically in the past several years,” from “630,000 in 2002 and rose to about 1.28 million” in 2005.³

Many medical tourists are expatriates and from Europe, The United States, Australia, the Middle-East

and South-East Asia. According to *The Nation*, overseas patients account for Bt 87 billion which is a “majority share of Thailand’s Bt 100 billion annual revenue.”⁴ TAT (Tourism Authority of Thailand) also claims annual growth rates in medical tourism have risen to 40% in the past few years.⁵ These figures indicate the extent to which Thailand has been working at being the medical hub of the Asia region.

Thailand’s burgeoning medical tourist market has been a product of globalisation and aggressive marketing which now offers medical services to foreign tourists in 26 languages.⁶ Furthermore, the unprecedented growth of medical technology combined with mobile and affluent populations have expedited the medical tourism industry in Thailand.

Medical tourists’ attraction to Thailand is due to the high quality medical care given at comparatively cheaper prices.⁷ Medical tourists are also drawn to Thailand due to the good reputation of physicians and dentists. Thailand boasts more than 450 private hospitals staffed by doctors and specialists who are internationally trained. Key areas of medical specialisation include heart surgery, cosmetic surgery, laser eye surgery and complex dental procedures.⁷ In June 2004, the Thaksin Government proposed a plan for persuading foreigners to use Thailand’s medical services, which promised in many cases as much as 50% cheaper medical rates than medical services “in their countries of origin.” The strategic plan also aimed at providing “medical services to two million foreigners” by 2008.³

A unique feature of the medical tourism industry in Thailand is how it has appropriated itself within the ambit of Thai tourism. This has been a relatively easy exercise due to the popularity of Thailand as a tourist place. At the forefront of the medical tourist drive have been Thai private hospitals. Many Thai private hospitals have become collaborations such as the Bangkok Dusit Medical Services which owns the hospital chain of 14 hospitals of the Bangkok Hospital Group.⁷ At this time, there are four major hospital collaborations, Bumrungrad, Bangkok, Thon Buri, and Phyathai, which are leading the medical tourism industry in Thailand.⁴ The vast amounts of money being spent in medical tourism has consequently

¹ Chanda, Rupa. “Trade in Health Services, Bulletin of the World Health Organization,” *Genebra*. 2002 80 (2). http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S0042-96862002000200012&lng=pt&nrm=iso&tlng=en

² The, Ivy & Calvin Chu “Supplementing Growth with Medical Tourism,” *Special Report*. www.synovate.com/bc/pdf/Supplementing%20Growth%20with%20Medical%20Tourism.pdf

³ Editorial. “Medical-Hub Plan Could Hurt Health,” *The Nation*. February 16 2006. http://www.nationmultimedia.com/2006/02/13/opinion/opinion_20000803.php

⁴ Ongdee, Sasithorn. “Healthcare Competitiveness: The Future is in ‘Hotel-spitals,’” *The Nation*. June 30, 2003. <http://www.nationmultimedia.com/search/page.arcview.php?clid=6&id=81246>

⁵ “Travel and Tourism in Thailand,” *Euromonitor International's Travel and Tourism in Thailand report*

www.euromonitor.com/Travel_and_Tourism_in_Thailand
⁶ “In-depth Healthcare Medical Tourism: Need Surgery, Will Travel,” *CBC News Online*. June 18, 2004. <http://www.cbc.ca/news/background/healthcare/medicaltourism.html>

⁷ “High quality high-tech treatments,” *ASEAN*. February 27 2006. <http://www.unitedworldusa.com/reports/asean/thmedical.asp>

spurred investors in aiming to control “bankrupt hospitals.”⁽⁴⁾ Investors have found that bankrolling joint hospital collaborations is the most lucrative method in accessing the medical tourist dollar.⁴

Due to the highly competitive nature of the medical tourism industry, private hospital chains have incorporated a business model, which is evident in the blurring between healthcare and hotel styles of management. Private hospitals now provide deluxe hotel style amenities to patients. These may include menu lists, gifts and florid (non-regulation) patient gowns. This trend is also illustrated by the allurements of “dental spas” which intend to attract wealthy European and Asian clients. The process entails interested patients making reservations on a dental clinic’s website⁴ Moreover, patients are promised massages before and after dental procedures, as a way of relaxing them.⁵ Similarly, the Thon Buri hospital group has invested Bt 300 million to construct a health care spa unit, and has converted some floors of the hospital to house VIP patients.⁴

However, the Thai medical tourism industry’s sights on attracting wealthier foreign patients has the twofold potential in neglecting the “needs of domestic low-income earners,” and pushing smaller provincial hospitals to close.⁴ From a medical bioethics viewpoint, this is problematic since present indications reveal that the Thai public health system is unable to meet the target of providing “one doctor per 1,800 people” in Thailand.³ This problem is further exacerbated by the shortage of state employed doctors, many of whom have migrated overseas to the more “lucrative private sector.”³ *The Nation* also cites that “25,815 out of 31,039 physicians’ positions” were filled in 2005.³

The challenge here is to ensure that medical services are channeled to poorer Thai sectors without scaling down such services. From a bioethical perspective, the high tech medical tourism industry could be brought down from an affluent position in the global market to “become a partner of smaller scale, local solution.”⁸ The Thai Government’s contribution in funding BT 100 million in combating avian influenza in November 2005,⁹ as well as, the successful AIDS awareness and medical programs in the 1990’s, signifies how political will and medical resources can make a positive benefit. The rise of diabetes in Thailand further necessitates

political and medical resolve in controlling the disease.¹⁰

Establishing a successful medical tourism industry will demand the regulation of drug and healthcare laws. Medical researchers will need assurance in obtaining protection of their research and developmental innovations in technology.¹¹ Without such protection Thailand will prove to be a tenuous arena for “medical companies to transfer technology, know-how, and expertise.”¹¹

A further biomedical concern relates to the ability for medical tourists to access drugs “without unnecessary delays.” Currently, the medical system known as the “Safety Monitoring Period” limits patients from accessing innovative medications.¹¹ Fielding & Madden (2005) assert that “delaying access to new drugs creates a substantial roadblock to Thailand becoming a viable healthcare center.”¹¹ Foreigners seeking medical care in any one of Thailand’s prestigious hospitals may be discouraged if they cannot gain easy access to needed medications.¹¹

Linked to this theme is the apparent “little follow up-care” of medical tourists.⁶ Patients are usually in hospital for a few days, after which they go on vacation before returning to their countries of origin.⁶ Consequently, complications may arise where patients are forced to use the medical care systems of their countries.⁶ Additionally, basic medical insurance is often insufficient in paying for medical procedures, meaning that patients are faced to pay cash.⁶

Finally, there is the issue of counterfeit drugs. The *Bangkok Post* (June 2005) noted that “one-fifth of drugs provided to patients under the administration’s own Baht 30 plan are substandard.”¹¹ Added to this report, the US Food and Drug Agency indicated that “a significant percentage of drugs” in some Asian countries are fake.¹¹ Thailand needs to ensure that pharmaceutical and medical laws are enforced in order to mitigate the occurrence of counterfeit drugs, as well as, having a better capacity to treat overseas patients in advance.¹¹

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Recommending Euthanasia for a Developing Country

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Abstract

Nigeria is developing country where the practice of euthanasia is not legalized. But a look at the socio-economic conditions of Nigeria calls for the need to legalize the practice in this country. This paper examines the features of this country such as poverty, endemic diseases and a low level of investment in healthcare systems (Varmus, H., 1997:1003). It argues for the need to legalize euthanasia by justifying it as a policy and practice and identifying factors which are to be taken into account. They include poor standard of living which reduces the life span of many and limited health care resources which prevents access to health care. The paper justifies legalizing euthanasia in Nigeria by responding to some arguments against euthanasia raised by critics emphasizing at the same time ethical issues such as autonomy, dignity and quality of life for euthanasia debate. It concludes by stressing that in Nigeria, a competent person who is terminally ill and undergoing severe pain (for which no medical treatment is in sight) should be able to determine how and when to end his life; the possibility of this will only depend on the legalization of euthanasia in this country.

Key Words: Euthanasia, developing country, physician assisted death, autonomy, dignity, and quality of life.

Introduction

The need to legalize euthanasia has become imperative in Nigeria when one examines the features of this country. Medical factors, longevity factor and the poor standard of living in this country call for the urgency of legalizing this practice. This paper examines these factors by stressing that due to poverty, endemic diseases and a low level of investment in health care (Varmus, 1997:1003), many Nigerians do not get the required health care and as a result undergo severe pain at the end of their life. This paper recommends the legalization of euthanasia in Nigeria. It emphasizes the significance of ethical issues such as autonomy, dignity and quality of life in the euthanasia debate. It concludes by stressing that if euthanasia is legalized in Nigeria, then a competent person who is terminally ill and undergoing severe pain for which no medical solution is in sight should be able to determine when and how to end his life. For if procedures are part of legalized medical practice, patients can demand them (Foot, F 1977: 104).

The Nigerian Situation

Nigeria is Africa's most populous country, with 140 million people and after South Africa, the continent's second biggest economy. It is also the continent's largest producer of oil and the sixth-biggest oil-exporter in the world (www.economist.com). Much of the microeconomic success is due to the high price of oil but it has made little visible difference in the lives of many Nigerians. Over 70 per cent still live on an equivalent of less than \$1 a day and decaying hospitals, schools and roads tell their own stories (www.economist.com). The new found oil wealth has not been equitably distributed to the health sector. This has made the task of addressing the numerous health – related problems of an ever increasing population like that of Nigeria a daunting one. Among these health problems are: high mortality rate, especially of children below 5yrs old, low life-expectancy rate, terrible dietary orientation and habit, rapid spread of perceived curable and incurable diseases, HIV/AIDS and many more calamitous scenarios and diseases (www.nigeriabusinessinfo.com).

However, Nigeria, a country with an increasing population of 2.1% in 1995 and 2.8% in 2000 has a corresponding increase in life expectancy at birth at 52yrs in 1992 and 54yrs in 2000. Comparing the life expectancy at birth with that of developed countries, Larue explains that dramatic increase in human longevity made during the 20th century, has transformed the expected life span at birth in developed countries from 47 yrs in 1900 to the late 70s today and developing countries to just over 60yrs of age today (Larue, 2007). In developed countries, childhood diseases such as whooping cough, scarlet fever, diphtheria, tuberculosis and poliomyelitis have been almost eliminated resulting in the survival of those who, in earlier times, would have died and in an increase in the number of the aged (Larue, 2007). Emphasis on sanitation, health care and progress in modern medical technology and pharmacology all contribute to the prolongation of life in developed countries.

Nigeria's health sector is in need of investment in many areas, chief among which is good specialist hospitals that can cater for specialized diseases even the available non-specialist hospitals lack the required health infrastructures. The health sector as a whole is in a dismal state in terms of infrastructure and health care workers.

Euthanasia has been defined in Netherlands as "death resulting from medication that is administered by a physician with the explicit intention of hastening death at the explicit request of the patient" (van der Heide, et al.2007). In physician assisted suicide, the physician provides the patient with a lethal dose of medication upon the patients requests, which the patient intends to use to end his/her own life (Braddock and Tonelli, 2007). The patient, not the physician, will ultimately administer the lethal medication. Since both practices

involves the assistance by a physician under the patient's request, for the purpose of my paper, I suggest physician assisted death (henceforth referred to as PAD) to mean both.

Arguments Pro PAD

It is often argued that physician assisted death may be a rational choice for a person who is choosing to escape unbearable suffering and that the physician's duty to alleviate suffering may sometimes justify the act of providing assistance with death (Battin, 2005). This argument provides justification for PAD which is often done by appealing to the conjunction of two fundamental moral principles: self-determination and mercy (Dworkin, 1993). Physicians, patients and observers acknowledge these moral principles as basic because they emphasize the principle of self-determination to control the time, place and nature of one's death, placing quality at the end of life above the sanctity of life. For Margaret Battin, "self determination functions to ensure the desire to preserve dignity and personhood in the dying process by avoiding prolonging life by using sophisticated medical technology especially when it is recognized that care is futile" (Battin, 2005: 20).

Another argument often referred to in justifying PAD is that of autonomy. This principle states that persons should have the right to make their own decisions about the course of their own lives. Making a case for this principle, Margaret Battin (2005) explains that "just as a person has the right to determine as much as possible the course of his or her own life, a person also has the right to determine as much as possible the course of his or her own dying. Therefore if a terminally ill person seeks assistance in death from a physician freely and rationally, the physician ought to be permitted to provide it" (Battin, 2005: 20). This argument appeals to the central values of autonomy, involving both freedom from restriction (liberty), the capacity to act intentionally (agency), and the social principle of respect for person's autonomous choice which they entail (Battin, 2005).

In the context of end-of-life medical care, respecting autonomy for the dying patient not only means honoring as far as possible that person's choices concerning therapeutic and palliative care, including life-prolonging care if it is desired, but could also mean refraining from intervening to prevent that person's informed, voluntary, self-willed choice of suicide in preference to a slow, painful death, or even providing assistance in realizing that choice (Battin, 2005). Patients should not be allowed to endure terminal suffering that is unrelievable, unbearable or prolonged especially when the patient judges that the burdens of life outweigh the benefits in terms of intractable pain, severe psychological suffering and loss of dignity or of quality of life (Battin, 2005). When the patient's condition cannot be remedied, the dying patient should

be able to ask for and should have the possibility of receiving help in assisted death.

Another argument in favor of PAD appeals to mercy. This argument explains why the physician should assist in dying when he is unable to relieve the patient's suffering in other ways acceptable to the patient. In some cases, techniques of pain management developed by Hospice may prove ineffective in treating pain and relieving suffering. If the only available means of avoiding severe suffering is by death, according to this argument, then as a matter of mercy, death may be brought about. This explains the medical argument in support of PAD which has it that competent terminally ill and those undergoing severe pain who wish to choose PAD may feel abandoned by physicians who refuse to assist (Elliot, 2007).

Arguments Contra PAD

PAD has been criticized on many grounds. The most prominent argument often employed against this practice is the argument from the wrongness of 'killing'. This argument has it that the taking of a human life is simply wrong, and since PAD involves taking a human life, this act can be described as 'killing' hence it is wrong. PAD is not killing but a humane and merciful death. This claim is better justified if one examines the experience of intractable pain in the example below:

A patient who is dying of incurable cancer of the throat is in terrible pain, which can no longer be satisfactorily alleviated. He is certain to die within a few days, even if present treatment is continued, but he does not want to go on living for those days since the pain is unbearable. So he asks the doctor for an end to it, and his family joins in the request (Rachels, 1975:227).

In the above example, PAD can be justified as a medical practice. The doctor's justification for providing a lethal injection may be that the patient is in terrible agony for which no medical solution is in sight and since he is going to die anyway, it would be wrong to prolong his suffering needlessly. It may take the patient longer to die if treatment is withheld. Also, the suffering may become highly unbearable in the process and the physician may subject the patient to more severe pain than he would if more direct action were taken and a lethal injection given. Such pain may undermine the patient's dignity and degenerates into what Velleman (1999) describes as undignified life, "a situation where someone falls apart in the face of pain, to disintegrate as a person" (Velleman, 1999:618). If PAD is legalized in Nigeria, such patient should have the possibility of requesting for PAD and consequently making his life shorter in order to make it better for according to Velleman, in cases like this, we ought to defer to the considered judgment about this patient's good. (Velleman, 1999: 607-608).

Again, PAD recognizes and respects the dignity in a person. The cancer patient suffering intractable pain possesses intrinsic worth by virtue of being a human being and the dignity in him should be respected. Pain robs people of their dignity as human beings especially when the whole aspect of their lives is consumed by pain. Dworkin (1993) identified dignity with understanding a person's critical interest and this provides a correct reading of the Kantian principle that people should be treated as ends and never merely as a means. Kant's influential account stems from his suggestion in the *Groundwork of the Metaphysics of Morals* (1964) that all things have either a price or a dignity and when things have a price, this entails there is something for which it would be morally acceptable to trade them. But since human beings have dignity, there is nothing else for which it is morally acceptable to exchange any human being.

Thus, the Kantian idea of human dignity involves and consists of a set of attributes which together confer on persons a certain status. Any justification of the morality of PAD will have to address questions about the rights we have over our own lives and this hinges on the discussion of 'dignity'. In the euthanasia debate, therefore, the term 'dignity' is often employed in the treatment of the terminally ill, those with life-threatening diseases and those in severe pain of which no treatment is in sight.

In the Nigerian context however, the cancer patient may consider the cost of prolonging his life needlessly and that such resources should be diverted to the care of those whose diseases are not terminal and life-threatening. The situation would even be made worse if such a patient were to be on a life sustaining machine. The problem is not only that many patients in Nigeria with life-threatening diseases cannot afford the cost of sustaining their lives by the use of these machines, but the machines are so few that they cannot serve the needs of many patients who may require it considering the various health problems prevalent in this country. For instance there is just one cardiac center in Nigeria, provided by Crownwell hospital, London.

However, even if legalized in Nigeria, PAD is never justified except if a competent patient explicitly requests for it and consents to it. Since the patient in the above example requests for it, he is rational and still competent; his autonomous choice ought to be respected. Having a right of autonomous choice does not imply having a claim right, but it follows that PAD can be justified to a certain extent. The doctor therefore may serve him best if he promotes his critical interest by giving precedence to his well considered values and judgments conceding that this is overall, best for him since he still has a sense of 'a past joined to a future' (Jaworska, 1999).

Many African societies would criticize PAD viewing both the practice and policy as morally unacceptable because life is good and depriving a person of a good life is generally thought to harm him. PAD could be

good for an individual and a caring thing to do on the part of the physician. For instance, a person who has enjoyed a full and vigorous life but for whom as a result of an incurable and painful terminal illness, his life has become an intolerable burden might decide however much he loves life, to put an end to it. In such a situation, PAD might be a blessing and also in his best interest. In fact, if the capacity to control one's actions by reference to the choices one has made is the distinctive source of human dignity, then to deny such a person the opportunity to choose and control his life is to offend his or her dignity. For many patients in African culture who are near death, maintaining the quality of one's life, avoiding great pain and suffering, maintaining one's dignity and ensuring that others remember them as they wish them to should be of paramount importance and this should outweigh merely extending one's painful life endlessly.

Another argument against PAD which issues from the integrity of the profession states that to permit physicians to assist patients in dying would undermine the patient's trust in the physician. Patients will view physicians as failing in their duty to save life under all circumstances, even the treatable cases. PAD requires the bond between the patient and the physician (a kind of communication), it will allow for what is known as 'medical friendship' (van Delden, 2008). This idea is often used to describe the positive feelings doctors need to have towards a patient in order to be able to assist in dying. Though some doctors, due to the conditions under which they work may not get into the medical friendship. This is not to say that they are bad doctors

Again, some critics might want to know why the Nigerian government should put energy into legalizing PAD. For these critics, the issue should not be that of legalizing PAD in Nigeria but rather that of Nigerian government improving the standard of living of many in this country and investing more in health care in order to increase access to health care. Some may attribute legalizing PAD to failure on the part of the government to provide the health care facilities needed by the Nigerian populace. Other critics may say that being an African country, cultural factors which emphasize the roles of the family in end-of-life decision making may prevent patients from making autonomous decisions and seeking PAD.

Be it as it may, one can respond that some few patients, even when provided with excellent palliative care will autonomously choose PAD as their preferred option. Physicians should honor these requests in those cases if there is no other available medical means by which pain or unbearable suffering could be avoided. Choosing PAD may also depend on the patient's conception of quality of life. A person's physical and psychological wellbeing contribute to his quality of life. Hence a situation where pain is more than painful, becomes the sole focus of the person's life, tyrannizes the patient, undermines his rational agency, such patient will have a poor conception of quality of life for if "

pain is truly unbearable he isn't his rational self any longer: he is falling apart in pain" (Velleman, 1999, 618).

If a person's health degenerates to such a level due to unbearable pain, then the whole aspects of his quality of life (physical and functional abilities, psychological well-being, social interactions) become meaningless to him. Most patients decisions against life-sustaining treatment is based on their judgment of the benefits and burdens of such treatment and in some instances patients may give significant weight to other factors such as religious obligations, the emotional burdens and financial costs for their families and so on. Apart from patients who hold a strong conviction that life should or must be sustained at all costs and whatever its quality, the request for PAD by competent patients inevitably involves an assessment of their quality of life (Morreim, 1986).

Since some few patients who experience unbearable suffering will autonomously request PAD, they should have the possibility of having it. The principle of autonomy is often employed as a reaction to critics' argument in order to justify recommending PAD as a policy and practice. Dworkin describes the capacity for autonomy as "the capacity to express one's own character, values, commitments, convictions and critical as well as experiential interests in the life one leads"(Dworkin, 1993:224). Liberty and agency are essential for autonomy. To have the right to be respected as an autonomous person involves the idea that others have to refrain from interfering but one cannot have a claim right that a person should do something as an ideal it can only follow that PAD can be justified to some extent..

This is better explained by Joel Feinberg (1986) who makes a distinction between autonomy as a right, capacity and ideal. For him, autonomy as a right includes the right to self-determination, decision making, and freedom of choice. Also, autonomy as capacity is determined by the ability to make rational choices and those who qualify are competent to govern themselves (Feinberg, 1986: 28). The ideal of an autonomous person is that of "an authentic individual whose self-determination is as complete as is consistent with the requirement that he is, of course, a member of a community"(Feinberg, 1986:47). Autonomy as an ideal indicates the necessary element in any full ideal of human character. But since according to Feinberg "it can coexist so comfortably with striking moral flaws, it cannot be the whole ideal" (Feinberg, 1996: 45).

Respect for autonomy in health care obligates professionals in health care to disclose information, investigate about a patient's illness and ensure understanding in order to foster adequate decision-making. Discharging this obligation requires equipping them to overcome their sense of dependence and achieve as much control as possible and as they desire (Beyleveld and Brownsword 2001). It follows therefore

that respect for autonomy goes beyond respecting a person's choice it extends to respecting the life choices that a person makes which includes respecting a person's choice in favor of death over life. Though this does not imply that physicians should act on them.

Identifying poverty and inequality as features of many developing countries, van Delden and Battin (2008) explain that low levels of education,, poor socioeconomic condition, and low level of political power all combine to limit the autonomy of many in developing countries (van Delden and Battin, 2007:6). But in spite of these limitations, they consider that if PAD is legalized in developing countries, "people who want physician assisted death can get it, those who think they might want it under certain future circumstances may feel reassured that they could get it and there will be less agony caused by irrelievable pain in the terminal phase of a disease" (van Delden and Battin, 2007:6).

It is however important to point out that even if legalized in Nigeria, PAD should not be seen as a right by patients but a possibility like the Netherlands case. This I believe accounts for why Feinberg (1986) distinguished between autonomy as a right and autonomy as an ideal. Intractable pain may threaten a person's autonomy as ideal because it endangers the possibility of shaping the patient's life. It can be recommended that physicians' aid patients in shaping their lives, but the patient does not have a claim right over it.

However, many critics are wary of the abuse that may be associated with legalizing PAD. For these critics, if PAD is legalized in Nigeria, being a developing country, a patient whose condition is not hopeless but suffers temporary pain may opt for PAD for economic reasons and family members may consent if they stand to benefit from the patient's death. This explains the slippery slope criticism which has it that from a few sympathetic cases of suffering we will move to the coercion of dying patients by malevolent family members who harbor long resentments or fragile ones who cannot bear the stress, to the callousness of cost-cutting insurers and health-maintenance organizations, and the greed, arrogance or impatience of physicians who for a variety of reasons do not take adequate care of their dying patients. Finally, we will reach the point where patients with disabilities or chronic illnesses or other conditions requiring extraordinary care are forced into 'choosing' PAD when that would otherwise not have been their choice (Battin, 2005:93).

It is important to point out that even the rich also request for PAD in the face of pain. Also, any policy is vulnerable to abuse but if properly regulated, PAD is not likely to result in slippery slope. Appropriate safeguards and regulations by the government both in form of monitoring and legal checks can provide adequate protection against abuse for the vast majority of cases; physicians are often best placed to apply and

implement those safeguards (Battin, 1992). This is because physicians have a moral obligation to use medical means to relieve their patients suffering. In some cases, excellent palliative care will relieve suffering without hastening death. But in few cases, prolonged life will be incompatible with relief of suffering; and in those few cases physicians might have to use the medical means at their disposal to shorten life directly.

Various programmes should be put in place to educate Nigerian patients and citizens alike about PAD before legalization because one cannot conclusively say that the physician-patient relationship is ready for it. It is such a sad thing that "intractable pain" cannot always be relieved, nor is it always possible to control the psychological and physical trauma that may be associated with this experience. In such circumstances, some patients will ask for PAD. Many doctors would like to assist their patients in such circumstances because they believe that PAD is not only compatible with good medical practice, but actually required by it. Both the patient and the doctor may regard it as a moral act, and view the law that prevents them from carrying out this act as unjust and immoral. These people may view PAD as a more humane death than a more prolonged one in which the patient may be robbed of his or her dignity. This I think is because many people are afraid of the symptoms that threaten personhood, not so much the pain or even physical suffering, but the loss of dignity and selfhood (Thomasma and Kushner 1996:221-222).

In spite of various controversial issues surrounding the practice of PAD, the practice has been legalized in countries such as Netherlands and if legalized in Nigeria, patients may have the possibility of receiving assistance in dying when there is no other available means of reducing unbearable pain. By virtue of doctors' duty of preserving life and relieving suffering, they command technology that can keep people who are near death, horribly crippled, intubated, disfigured by experiential operations, in pain or connected to life-sustaining machines alive for weeks, months or years (Dworkin, R., 1993). But if PAD is not legalized in a country, it becomes unclear what a doctor's duties are to his patients; whether life can be prolonged only at the cost of suffering or suffering relieved only by measures that shorten life (Foot, 1977: 103).

Interestingly, nineteen countries now have one or more right-to-die societies (Larue, 2007) and these societies have argued that in certain circumstances, a strong moral and legal case for PAD can be made on the basis of compassion and recognition of human rights; "(a) when the disease is terminal and the patient is in intractable pain (b) when no other means of relieving intolerable suffering are left, (c) when the reason for ending that suffering if necessary by ending the life of the person, is the reason for the act of PAD.

Thus far, this paper has recommended legalizing PAD in Nigeria. It argued for the need to take certain

features of this country into account in legalizing this policy. It justified the legalization of PAD as a policy and practice by considering the relevance of dignity, autonomy and quality of life for the euthanasia debate and responding to the arguments put forward by critics against PAD. It concluded by stressing that the legalization of PAD in Nigeria can provide the terminally ill, the unconscious and those undergoing pain for which no treatment is in sight with a personal choice regarding how and when they want to end their lives. Such choice enhances autonomy and respects personal values.

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The Human Idea Map: Can the Mind Really be Mapped?

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Abstract

The advent of the human genome has paved the way for other kinds of scientific maps which proffer to further understand human beings. In this vein Darryl Macer has attempted to create a human idea map called the human behaviourome as a cross cultural bioethical tool. According to Macer, such a mental map is needed in order to challenge global problems. This paper provides a critique of the human behaviourome. My aim is give some understanding of the fundamental aims of the human behaviourome and its schematic problems.

Keywords: human behaviourome, novelty, cross-culture, schematic problem

Introduction: The Human Idea Map

In 2002, Darryl Macer created a multidimensional map for measuring human ideas in relation to bioethics. He coined this human idea map the 'human behaviourome'. The central aim of the human behaviourome is to address the universality of ideas as a means of 'biosurvival' (Macer, 2004 p. 6). Macer hypothesises that a universal human idea map is crucial for giving universal guidelines for regulating new biotechnologies and their ensuing social dilemmas. The human behaviourome model proposed by Macer is diagrammatically depicted as a box composed of 1800 grid points and is 90cm x 90cm x 60cm (Akashi 2003). The number of ideas generated by this grid system can range up to 10,000. The human behaviourome model is composed of six categories; "self-love, love of others, loving good, loving life, loving harm, memories and hopes" (Macer, p. 2003 p. 7). These values are viewed as sub-sets and are placed in a hierarchy – each sub-set builds upon the other which it supersedes creating "for

an ethical simulation in a Systems Theory mode" (LaMuth, 2004 p. 60).

The human behaviourome is a novel production which postulates that mental processes may produce a substantial amount of ideas by comparing the mental maps of various cultures to form an integrative mental map (Macer 2004 p. 128). Moreover, an integrative human idea map may act "as a catalyst for adaptive social evolution generating new ideas (Pollard 2004 p. 88). Macer's proposal highlights the flexible nature of the human mind which is a positive biological survival trait. Lying within our biological nature are the pan human traits of justice, love, empathy, and respect for others (I. Pollard 2004). For I. Pollard, nature's design principles foster co-operation, symbiosis, biological feedback, and adaptation (2004 p. 88). In *Homo sapiens* its evolutionary characteristics are aesthetic expression, "ethical consciousness" and technological insight (Pollard 2004 p. 88).

The human behaviourome conforms with Popper's notion of "evolutionary emergentism" – the production of novel, cognitive and behavioural actions of problem solving in various situations (Khroutski, 2004 p. 77). This relates to the adaptational capacities of Homo Sapiens in dealing with the social world.

The human idea map has been created at the advent of the human genome and the possibilities proffered by gene mapping. Mapping allows some semblance of control over uncertainty. The rapid change of human societies is a source of uncertainty which necessitates more efficient methods of information. For Iturra, a human idea map is a possible solution since he equates greater social complexity as needing more information in order to reduce indeterminacy (2004 p. 109). According to M. Pollard current over specialisation of knowledge and "entrenched paradigmatic models" has had a disabling effect in providing solutions to global problems (2004 p. 122). Many of these problems stem from a loss of ethical intelligence. The potential of a universal human idea map as Pollard suggests may be understood via memetics (2004 p. 124). In this sense, memes accord with "Lamarckian inheritance" in that they are produced and copied (2004 p. 124). On this note, I. Pollard (2004 p. 90), points out: "Essentially, the biodiversity of ideas is integrated into various levels or hierarchies of organization embedded in the organic. These are the genetic or molecular, the biological or organizational and the habitat or ecological levels of order and complexity." Recent developments in biotechnologies is assisting in the generation of new ideas for understanding life.

From a Batesonian viewpoint the human behaviourome's many subsystems and multidimensional grid points offer massive flexibility for generating new ideas. As many social sub-systems are regenerative this enhances the possibility for novel ideas. In other words, it can be suggested that the architecture of human behaviourome fosters flexibility and the ecology

of ideas (Bateson, 1973 p. 478). As Bateson states, the overall flexibility of a system depends on the ability of its variables to work in an ecological way. In mental evolution this means that the brain sorts out certain ideas which are repeated until they become habitual. The frequency of ideas, therefore, becomes an intrinsic part of the human survival mental kit which Bateson refers to as Mind (Bateson, 1973 p. 477). Furthermore, habitual ideas are linked to meta-patterns of ideas which create new links, thereby, ensuring flexibility in the mental system.

Kohler (1969), on his account on novel problem solving stipulates that problem solving “involves awareness of new relations among problem components” (Dominowski 1995 p. 74). This may be because the brain processes assume new forms which foreground new relations (Dominowski 1995 p. 89). The relationship between problem solving and new ideas in the human behaviourome may suggest a novel heuristic device.

Schematic Problems

While the human behaviourome posits the virtues of the human idea map Sleeborn deems it as being reductionist and disregards the complexity of “human expression and history (2004, p. 146). The human idea map presupposes that human beings “can find common guidelines” to solve cross cultural bioethical problems (Sleeborn, 2004 p. 147). The problem here as Sleeborn contends is that ideas must be viewed in their historic contexts. For instance, rather than mapping ideas in order to understand the architecture of social conflict an understanding of social inequality and its tie with social power relations would be a more feasible analytical tool (Sleeborn, 2004 p. 147). The driving ambition of the human idea map, Sleeborn argues is not in how we can be bioethically better informed but rather in how we can control knowledge. Here, the human idea map borrows heavily from biology in relation to the survival of ideas. The belief that some ideas have a certain survival value which are passed down has been discussed at length by meme theory. The more input of ideas the greater capacity for the human idea map to solve bioethical dilemmas. Such a belief overlooks the fact that there are cross cultural differences in the way people cogitate and embody their life-worlds as anthropologists are keen to point out. In addition, some cultures seem to survive well with comparatively few ideas without bothering to reflect upon the ethical veracity of these ideas (Gardner, 2004 p. 362). Bateson is helpful here. Bateson claims that certain ideas if left uncorrected become apart of habitual thinking – a process which leads to internal incoherence (1973 p. 479). For instance, Colin Turnbull’s study of the Ik people of the former Belgium Congo portrays them as socially dysfunctional and lacking civil codes. Then there is the story of a crippled Ik girl who was left unaided by her kinspeople. The Ik way of dealing with the girl was to sequester her so that she would starve to

death (Lemmon 1989; Saniotis 2007). The point is that any human idea map must first deal with habituated ways of thinking within cultures which are often expressed in uncritical and ‘parroting’ behaviours. This is depicted by Keynesian macro economics which has for decades been unchallenged thereby contributing to worldwide ecological degradation. Any future human idea map must inevitably be confronted by the sheer force of cultural myopia and its devastating consequences.

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UNESCO International Bioethics Journal Club

As announced in the January 2008 issue of *EJAIB*, the UNESCO Asia-Pacific School of Ethics and Aristotle University have joined efforts to create an online international journal club known as the **UNESCO International Bioethics Journal Club** (UNESCO IBJC). Dr. Thomas A. Gionis, President of Aristotle University, serve as Chairman of the UNESCO IBJC; Dr. Darryl Macer, Regional Advisor, Regional Unit Social and Human Sciences for Asia and the Pacific, UNESCO Bangkok, and Dr. Leonardo D. de Castro, Former Vice Chair, UNESCO International Bioethics Committee, serve as Vice-Chairmen of the UNESCO IBJC.

The portal of entry for the UNESCO IBJC is located on the Aristotle University home page (www.AristotleLaw.com). The first abstract has been posted from the journal club in Japan and is **open to comment**. To read the abstract and make a comment go to www.AristotleU.com; Highlight the Bioethics icon; then Highlight the Flashing "Enter" icon. There are no passwords required! It is user-friendly and open! To quote the abstract here:

*We are proud to present our first **Inaugural Bioethics Abstract** which has been submitted by Dr. Noritoshi Tanida, Professor and Chairperson, Department of Medical Humanities, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan, and the UNESCO International Bioethics Journal Club - Japan. They have provided an opportunity to explore some important bioethical issues.*

Inaugural Bioethics Abstract – 27 August 2008

As populations increase in age and healthcare costs escalate, nations throughout the world confront the issue of "medical futility." However, the impact of the "futility" concept on decision-making is hampered by a lack of a clear definition of medical futility itself. The current debate is mostly driven by theoretical and limited personal assumptions which exist without empirical data to document expert and public attitudes towards medical futility. Some of the over-riding issues which must be addressed in considering medical futility include the appropriate use of technology at the end of life, quality of life and the marginal benefits of end-of-life medical procedures.

One study (Bagheri A, Asai A, Ida R., Experts' attitudes towards medical futility: an empirical survey from Japan. *BMC Med Ethics* 2006 Jun 10;7:E8 Graduate School of Law, Kyoto University) examines the attitudes of the Japanese experts regarding medical futility through a questionnaire survey conducted among the members of the Japan Association for Bioethics. A total number of 108 questionnaires were returned as complete (response rate 50.9%); both healthcare professionals (HCPs, 62%) and non-healthcare professionals (Non-HCPs, 37%) were included.

The majority of respondents (67.6 %) believed that a physician's refusal to provide or continue a treatment on the ground of futility judgment could never be morally justified, but 22.2% approved such refusal with conditions. In the case of physiologically futile care, three-quarters believed that a physician should inform the patient/family of his futility judgment and it would be the patient who could decide what should be done next, based on his/her value judgment. However more than 10% said that a physician should ask

about a patient's value and goals, but the final decision was left to the doctor not the patient. There was no statistically significant difference between HCPs and Non-HCPs ($p = 0.676$). Of respondents 67.6% believed that practical guidelines set up by the health authority would be helpful in futility judgment. Regarding the important factors in futility judgment, survey respondents included the following factors: "patient/family wishes" (77.8%); "availability of resources" (63.9%) and "patient's age" (45.4%).

The Survey also indicated that there was more support for developing national guidelines on dealing with medical futility rather than guidelines set up by local hospitals. The legislative experience of brain death and organ transplantation in Japan shows that an important issue in policy development on medical futility would be how to include the role of family. However a rational approach to the role of family in Japanese society based on current cultural changes will be the key issue to success or fail of such regulatory attempts.

Discussion Questions:

If a family still wants everything done in a case where the physician's opinion indicates physiologic futility, what is the next step?

How does the UNESCO Universal and Human Declaration on Bioethics and Human Rights assist in addressing the medical futility issue?

News in Bioethics & Biotechnology

<http://eubios.info/NBB.htm>

International Bioethics Education Project News

<<http://groups.yahoo.com/group/Bioethicseducation/>>

IAB Genetics & Bioethics Network: On-line

The complete address list is updated on the Internet. Send all changes to Darryl Macer. There will be a session at the IAB World Congress of Bioethics in Croatia in September 2008, and please send paper topics to Darryl Macer. There will also be a session on Arts, Drama and Bioethics, which papers are also solicited for.

UNESCO Asia-Pacific School of Ethics

<http://www.unescobkk.org/index.php?id=apse>

Conferences

For a list of some ethics meetings in Asia and Pacific: http://www.unescobkk.org/index.php?id=current_and_future_events
For all below please contact: RUSHSAP, Email: rushsap@unescobkk.org
Ninth Asian Bioethics Conference (ABC9): Healthy and Productive Life in Harmony with Nature, 3-7 November, 2008, Jogyakarta, Indonesia. Indonesian National Bioethics Commission.

UNESCO Ethics Education Workshop, 1-2

December, 2008 Vaughan

Park, <http://www.vaughanpark.org.nz/>, countryside north of Auckland, New Zealand Contact: Darryl Macer

The Second Joint UNESCO-University of Kumamoto**Joint Bioethics Roundtable: Value of Life**, 13-14

December, 2008 University of Kumamoto, Japan

Contact: Prof. Takao Takahashi

Asian Bioethics Association (ABA)

The website for ABA also includes the latest draft copy of the program <www.eubios.info/ABA.htm>

The Ninth Asian Bioethics Conference of the Asian Bioethics Association Yogyakarta, Indonesia, 3-7 November 2008

Bioethics in Asia: healthy and productive life in harmony with nature

This event will be organized by the ABA and Indonesian National Bioethics Commission, with the cooperation of UNESCO, WHO, and FAO. The local cooperating bodies and agencies will include industries, universities, and NGOs. There are currently planned to be plenary sessions for 5 days on topics including: Bioethics and Global Policy; Bioethics in Science and Technology Development; Bioethics and inclusion of moral agents; Enhancement and Neuroethics; Descriptive Bioethics Research; Public health ethics; Stored Samples and Patients Informational Self Determination; Health and Bioethics; Protection of Women and Vulnerable Persons; Organ Transplant Ethics; Regulating Organ Transplantation; Ethics, Energy and Environment; Environmental Ethics; Ethics of using animals; Agriculture and Ethics; The Implementation of ELSI Policy in Biobank Development and Ethical Governance of Innovative Medical Research; Ethics and biotechnology; and Disasters; Bioethics Education; Islamic Bioethics; Comparative Religious Ethics on Life and Death; Ethical and Legal Aspects of Xenotransplantation; Ethics Review Committees; Health and Ethics; Medical Ethics Education; Medical Genetics and Ethics; Nurturing Bioethics: Education; Bioethics, Human Rights, Science and Technology, and Alleviation of Poverty in the World. There will also be open meetings of several working groups in the UNESCO Project on Ethics of Energy Technologies. Research findings, discussion papers, and other contributions dealing with topics in bioethics and related disciplines are welcomed.

Registration and ABA membership fee

The registration fee for members of the Asian Bioethics Association USD50; and for non-member USD100.

i.e. those who have paid their membership fee for 2008 and are members of ABA will receive half price registration for ABC9. If you have not been a member in 2008, ABA will offer you the chance to become a member of ABA for both 2008 and 2009 at discount when combining registration for the conference: Instead of USD50 x 3 =USD150 (2008, 2009 fees and reduced registration fee), the package will be charged at USD135 payable by credit card to ABA secretariat. The form is available in the pdf file version of this issue, or as a printed form (please download from the website). Secretary, ABA: Fax +66-2-6643772; Email: asianbioethics@yahoo.co.nz

Venue

The Ninth Asian Bioethics Conference, 3-7 November 2008 ABC9 will be held at Hotel University Sunan Kalijaga, Yogyakarta. This hotel compound, a former Training Center of the University, is strategically located in Yogyakarta, 10 minutes from the International airport Adisucipto, 15 minutes from the railway station and bus terminal.

Accommodation

Hotel University Sunan Kalijaga Yogyakarta offers 3 (three) room types VIP (7 rooms), deluxe (7 rooms) and standard rooms (64 rooms), comfortable and modern. Hotel University Sunan Kalijaga has two meeting rooms with a capacity of 300 people and eight meeting rooms for 20-50 people; Internet service, restaurant, fitness center, and 24-hour service.

The postal address is: Hotel University Sunan Kalijaga, Jalan Anggrek 137 D, Sambilegi Kidul, Maguwoharjo, Sleman, Yogyakarta, Indonesia

The ABC9 Organizers have also negotiated a discounted room rate at a four-star hotel, close to the Venue: Grand Quality Hotel Yogyakarta

<http://www.grandqualityyogya.com>

The room rates, terms and condition apply, are:

- Deluxe Rp 585.000 (USD 64)/night
- Executive Rp 747.000 (USD 82) /night

The current exchange rate is Rp 9.200 per 1 USD.

Reservation for accommodation is to be made early through the Organizer at kbndonesia@gmail.com, at the latest by mid-October 2008.

Transportation to and from the hotel to the venue of the conference will be provided by the Organizer. There are numerous historic sites including world heritage sites in the locality. Tours will be arranged.

All speakers are asked to register and confirm their attendance to the conference as early as possible and revised programs will be developed.

ASIAN BIOETHICS ASSOCIATION MEMBERSHIP 2008/2009<<http://eubios.info/ABA.htm>>**and** ASSOCIATE MEMBERSHIP IN EUBIOS ETHICS INSTITUTE 2008/2009

___ I wish to pay my 2008/2009 annual membership fees of Asian Bioethics Association (ABA), and receive the 2008/2009 issues of *Eubios Journal of Asian and International Bioethics (EJAIB)* (The Official Journal).

___ Regular Price: US\$50 Euro 40 UK£30 NZ\$60 A\$60 C\$60 ¥5000 (=Credit card price NZ\$90)

___ I wish to make a reduced contribution of _____

___ I wish to register as a member of Asian Bioethics Association, but am not in the position to pay a fee. I understand that I should be satisfied with Internet access to *Eubios Journal of Asian and International Bioethics (EJAIB)* <<http://eubios.info/EJAIB.htm>>.

If you have not been a member in 2008, ABA will offer you the chance to become a member of ABA for both 2008 and 2009 at discount when combining registration for the conference: Instead of USD50 x 3 =USD150 (2008, 2009 fees and reduced registration fee), the package will be charged at USD135.

___ Package: I wish to pay my 2008 and 2009 annual membership fees of Asian Bioethics Association (ABA), and receive the 2008 and 2009 issues of *Eubios Journal of Asian and International Bioethics (EJAIB)* (The Official Journal); and register for the Ninth Asian Bioethics Conference in Indonesia at the reduced rate of USD50; total USD135

___ Conference registration 2008: I wish to register for the Ninth Asian Bioethics Conference in Indonesia at the reduced rate of USD50 as a ABA member

Post or Fax or send an Email with your address* (or include current address label) to:

Asian Bioethics Association secretariat, Fax: Int+66-2-664-3772 Email: asianbioethics@yahoo.co.nz

For ABC Conference registrations by cheque please consult with kbnindonesia@gmail.com

For ABA membership and ABC package payment by cheque consult with asianbioethics@yahoo.co.nz (payment through "Eubios Ethics Institute")

Note: Cheques in local currency are accepted from accounts with major banks in Australia, Canada, EU, New Zealand, USA, U.K. (The currency has to be the same as the address of the bank, and the cheque made out to "Eubios Ethics Institute"). Other currencies use a bank or post draft in **NZ\$ for the Overseas price**. In Japan use postal transfer to the "Eubios Ethics Institute" account 00340-9-32465.

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** Other Eubios books / CD may be ordered with 25% discount at the time of renewing the subscription.

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Please use the renewal form enclosed and prices are below: Other currencies (use a bank or post draft) and **credit cards use NZ\$ for the Overseas price.**
In **Japan** use postal transfer to the "Eubios Ethics Institute" account 00340-9-32465.

Eubios Ethics Institute Publications (Books sent by SAL post, Journal by Airmail - Price included)

<i>Eubios Journal of Asian and International Bioethics</i>	Other countries/credit card
Price: US\$35 Euro 35 UK£20 NZ\$40 A\$40 C\$40 ¥3000	NZ\$60
Shaping Genes: Ethics, Law and Science of Using Genetic Technology in Medicine and Agriculture by Darryl Macer, Oct. 1990, 421pp. Cost: US\$20 UK£10 NZ\$30 A\$25 C\$22 ¥2500 Others or credit card	NZ\$30
Equitable Patent Protection in the Developing World by William Lesser, May 1991, 150pp. Cost: US\$15 UK£8 NZ\$20 A\$20 C\$17 ¥1500	NZ\$25
Attitudes to Genetic Engineering: Japanese and International Comparisons (Bilingual) by Darryl Macer, May 1992 330pp. Cost: US\$30 UK£15 NZ\$35 A\$30 C\$30 ¥3000	NZ\$40
Human Genome Research & Society Eds: Norio Fujiki & Darryl R.J. Macer July 1992 ISBN 0-908897-03-0 (English), 230pp. ISBN 0-908897-04-9 (Japanese), 240pp. Cost: US\$20 UK£10 NZ\$30 A\$25 C\$22 ¥2000	NZ\$30
Intractable Neurological Disorders, Human Genome Research and Society Eds: N. Fujiki & D. Macer Feb. 1994 ISBN 0-908897-06-5 (English), 320pp. ISBN 0-908897-07-3 (Japanese), 340pp. Cost: US\$25 UK£12 NZ\$30 A\$30 C\$27 ¥3000	NZ\$40
Bioethics for the People by the People by Darryl Macer,... May 1994 ISBN 0-908897-05-7, 460pp. Cost: US\$30 UK£15 NZ\$35 A\$35 C\$32 ¥3000	NZ\$50
Bioethics in High Schools in Australia, Japan and New Zealand, by D. Macer, Y. Asada, M. Tsuzuki, S. Akiyama, & N.Y. Macer March 1996, ISBN 0-908897-08-1, 200pp.(A4) Cost: US\$25 UK£15 NZ\$30 A\$30 C\$30 ¥2000	NZ\$40
Protection of the Human Genome and Scientific Responsibility (Bilingual) Editors: Michio Okamoto, Norio Fujiki & D.R.J. Macer, April 1996, ISBN 0-908897-09-X, 210pp. Cost: US\$25 UK£15 NZ\$30 A\$30 C\$30 ¥2500	NZ\$35
Bioethics in India (includes 115 papers from Jan.1997 conference) Eds: Jayapaul Azariah, Hilda Azariah & Darryl R.J. Macer June 1998 ISBN 0-908897-10-3, 403 pp. (Printed in India) Cost: US\$30 UK£18 NZ\$34 A\$36 C\$36 ¥3000	NZ\$45
Bioethics is Love of Life: An alternative textbook by Darryl Macer, July 1998 ISBN 0-908897-13-8, 152pp. Cost: US\$26 UK£14 NZ\$34 A\$34 C\$32 ¥3000	NZ\$40
Bioethics in Asia (includes 118 papers from Nov.1997 conferences, ABC'97 Kobe and Fukui Satellite) Eds: Norio Fujiki & Darryl R.J. Macer Cost: US\$36 UK£20 NZ\$40 A\$38 C\$40 ¥3000	NZ\$50
June 1998 ISBN 0-908897-12-X, 478 pp. October 1999 ISBN 0-908897-14-6 (Japanese), 320pp.	
Ethical Challenges as we approach the end of the Human Genome Project Editor: Darryl Macer, April 2000 ISBN 0-908897-15-4, 124pp. Cost: US\$20 UK£12 NZ\$30 A\$30 C\$30 ¥2500	NZ\$35
Bioethics Education in Japanese High Schools (in Japanese only) Editor: Darryl Macer April 2000 ISBN 0-908897-16-2, 112pp. Cost: US\$20 UK£12 NZ\$30 A\$30 C\$30 ¥1000	NZ\$35
Bioethics and the Impact of Human Genome Research in the 21st Century Eds: Norio Fujiki, Masakatsu Sudo, & Darryl R.J. Macer March 2001 (English and Japanese bilingual, 350pp). Cost: US\$30 UK£20 NZ\$40 A\$38 C\$40 ¥3000	NZ\$50
Bioethics in Asia in the 21st Century Eds: Song Sang-yong, Koo Young-Mo & Darryl R.J. Macer August 2003 ISBN 0-908897-19-7, 450pp. Cost: US\$35 Euro35 UK£20 NZ\$40 A\$38 C\$40 ¥3000	NZ\$50
Challenges for Bioethics from Asia Ed: Darryl R.J. Macer November 2004 ISBN 0-908897-22-7 656 pp. Cost: US\$35 Euro35 UK£20 NZ\$40 A\$38 C\$40 ¥3000	NZ\$50
A Cross Cultural Introduction to Bioethics 2006, 300pp. (A4) Editor: Darryl Macer Cost: US\$35 Euro35 UK£20 NZ\$40 A\$38 C\$40 ¥3000	NZ\$50
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