Philosophy and Practice of Bioethics across and between Cultures

Editors: Takao Takahashi, Nader Ghotbi & Darryl R. J. Macer



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Preface

This volume contains a collection of papers on the practice of bioethics. Most of the papers were presented in person at the Eleventh Kumamoto University Bioethics Roundtable: Philosophy and Practice of Bioethics Across and Between Cultures, held from 18-19 November 2017 in Kusunoki Kaikan, Kumamoto University, Japan. All the authors appreciate the thoughtful comments made by other participants at the Roundtable which helped improve their papers.

This collection of papers is less than 10% of the precious work that has been stimulated by holding annual Bioethics Roundtables in Kumamoto over twelve years. Among the features of the roundtables has been diversity of the participants and the wide range of presentations made during each year. Over one hundred different presenters from over thirty countries have joined together in the formal sessions in Kusunoki Kaikan (Hall), as well as on Mount Aso, in Kumamoto castle, and around the city, to share something of their spirit and ideas. The roundtables varied from two to five working days in length, and were always held in plenary session.

The beginning of the Roundtable is as follows: in autumn 2006 Professor Darryl Macer who visited Kumamoto University to teach the graduate students of Professor Takahashi, talked with Prof. Takahashi about the bioethics roundtables at Tsukuba University. After thinking for a while, Prof. Takahashi expressed his will to hold such a roundtable at Kumamoto University. A little amazed, Prof. Macer said "Really!? Do you want to hold it?" The answer was simply "Yes, I do." Our common passion to learn from others has keep them going.

They have been a stimulus for research in bioethics whether a scholar came once, or came regularly. Scholars maintained a high spirit and enthusiasm to share an opportunity to participate in this annual academic research activity that also stimulated the careers of students and researchers. The host of the roundtable was Prof. Takao Takahashi, who welcomed, and worked together, with Prof. Darryl Macer to continue the tradition of interactive international bioethics that had emerged during nine Tsukuba International Bioethics roundtables from 1992 to 2004. Thanks to the introduction to each other of a mutual mentor, Professor Ichiro Matsuda, and the fund raising of Prof. Takahashi, with the generous support of Kumamoto University, already in 2007, the first Kumamoto University Bioethics roundtable could be held.

For the past five years the roundtable has been convened under the auspices of the HIGO program at Kumamoto University, and the current book is a celebration of all the work that was done over the years by many academics, researchers, students and all others interested in the bioethical progress of human societies all over the world. All the meetings have been open to the public in the spirit of open dialogue with participants from all sectors of society.

Bioethics is the love of life and a beautiful transdisciplinary view of the world. One can be a scientist, a philosopher, a policymaker, an academic or a learner, but at the same time follow the intricate humane features that identify him/her as a real individual, a human being willing to discuss matters of life and death. Therefore, bioethics is more than an academic job; it is more of a truly colorful example of

academic life. One can strive to be both a professional and a human in love with all life, the mystery of conscious existence and the struggle to lead everyone into a better life. Thus, a practitioner of bioethics can truly be in love with both his/her profession and the subjects of his/her study. Although bioethics is formally divided into three areas of medical ethics, environmental ethics, and the ethics of biotechnology, the actual number of jobs and professions influenced by its understanding is countless. The huge number of professional activities that are overshadowed by a bioethical understanding leads to an unlimited capacity to research and study, from uses of genetic engineering to policy-making in time of disaster, from conservation of biodiversity to ethical treatment of the refugees, and so on and so forth.

The current collection has thus been prepared as an example of the many years of research work, preparation and presentation of a diverse set of academic studies dealing with the multifaceted issues in bioethics, organized and supported by Kumamoto University's Roundtable of Bioethics. It cannot deliver all the work it helped present to the international community in 12 years, but it is a sample of how dynamic, innovative, interactive and genuine the whole series has been. The drafts of the presented papers have been formatted and copy-edited by three editors, and the suggested revisions have been reflected back to the original author for confirmation and final approval before taking them to the print. There is no doubt that some of the included material could still be improved but the authenticity and genuine lifeline of these papers is itself a proof to the beauty of the imperfect, which only adds value to what is more genuine rather than artificial, called *wabisabi* in Japanese culture.

We would like to thank all people from the general public, academicians, staff and others who somehow helped support this work, and I am happy to say this collection of papers has been an opportunity to demonstrate the climax of an ongoing journey at the heart of Kumamoto University, at the beautiful *Kusonoki Kaikan* for 12 years. It includes papers on the ethical response to disaster, the implications of justice, equal dignity and rights for the disabled, environmental management, animal rights and cloning, ethics of healthcare, genetic technology, human dignity and end of life care, the use of technology for human security, and many other topics that can be described as transdisciplinary bioethics over the world.

As editors of this volume we also sincerely appreciate the assistance of Ms Kimiko Tashima, HIGO Program, Kumamoto University, Kumamoto, Japan, and other staff and students who participated in the Roundtable.

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Disaster ethics in the age of co-disaster

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Introduction

Since ancient times, human beings have been characterized according to two aspects, that they are rational and that they are a kind of animal. Usually humans are regarded as rational animals; that is, the two aspects are intertwined. However, to explain the basis of ethics, this paper focuses on one of the characteristics of human beings, that they are developed animals, and, in addition, that they have much in common with other living things. From this perspective, we can derive the idea of the basis of ethics. Here "ethics" means the most general study of rightness and wrongness (International Encyclopedia of Ethics, 281). It may not be missing the mark to say that "self-preservation" is at the core of living things and to realize it is their basic desire or inclination. For higher animals, "order maintenance" is also basic, but it is a necessary condition of realizing self-preservation, so, here, we focus on self-preservation as the basic desire or inclination.

If we understand that ethics is neither based on following religious rules, nor traditionally established rules, nor obeying the rules of reason, but based on the rules of contributing to the realization of the basic desire of living things, self-preservation and its realization are at the basis of ethics. This position belongs to ethical naturalism, that is, ethical rules can be derived from non-ethical natural facts, inclinations, or desires, although they can be derived in different ways, such as logical derivation from the non-ethical to the ethical, or establishing somewhat more loose relationships between the non-ethical and the ethical. Moreover, as is shown later, the field of ethics lies between the natural area and the area of super-erogancy.

In this paper, disaster ethics are derived from the position of ethical naturalism. To begin, it is useful to provide some insights into the term "disaster."

What is a disaster? According to the Oxford American Handbook of Disaster Medicine, there is no single definition of a disaster, but some common definitions of a disaster are as follows: (1) a disaster is an event that results in a demand for services that exceeds available resources; (2) a disaster is a serious disruption of the functioning of a society, causing widespread human, material, or environmental losses that exceed the ability of the affected society to cope using only its own resources (UN Disaster Management Training Program's definition); (3) a disaster is a natural or man-made event that suddenly or significantly disrupts the environments of care, disrupts care or treatment, or changes or increases demands for the organization's services (The Joint Commission (TJC) definition) (Oxford American Handbook of Disaster Medicine, 4).

[·] pp. 1-10 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

To sum up, we have two elements that constitute the concept of a disaster: (1) it is a natural or man-made event and (2) it causes great damage or disruption. When a major crustal movement occurs at an area far from a residential area and causes no harm to people, no disaster occurs. Specifically, disasters include various events such as earthquakes, tsunamis, typhoons, volcanos, floods, landslides, famines, pandemics, various violent events caused by global warming, nuclear plant accidents, large-scale accidents, and terrorism.

A disaster is often divided into several phases. In the book cited above, we find four phases: the mitigation, planning, response, and recovery phase. "The mitigation phase differs from the planning phase in that the mitigation phase is focused less on the medical or humanitarian response to a disaster and more on protecting physical structures and economic development" (Oxford American Handbook of Disaster Medicine, 22). However, in this paper, a disaster is regarded as having three phases: preparation, response, and recovery. This is because here the distinction between mitigation and planning phases is not necessary, and, moreover, in the Japanese government's "Disaster Management Plan," a disaster is treated as having three such phases.

Triage and its ethical foundation

Disaster ethics deals with ethical issues concerning three phases of a disaster. In this paper, we discuss disaster ethics, focusing mainly on the ethical principles of behavior in the disaster response phase and the virtues of the preparation phase. It seems useful to consider the ethical foundation of triage in considering the ethical principles of behavior in the disaster response phase. This is because within the rules of triage, we can find the primitive intuition that is closely related to the primitive desire we have in an emergent situation. We will see that the ethical foundation of triage can be derived from the idea of self-preservation as the basis of ethics.

Triage is said to have been conceived by Dominique Jean Larrey, Napoleon Bonaparte's chief medical officer. He is also famous for the invention of the ambulance for injured soldiers, "ambulances volantes (flying ambulances)" (Larrey). To cite a concise explanation from another book, triage is the "[s]election and categorization of the victims of a disaster with the view to appropriate treatment according to the degree of severity of illness or injury and availability of medical and transport facilities" (Gunn, 164).

Triage takes place in urgent circumstances, such as battlefronts, disasters, and emergency hospitals. When medical professionals perform triage in disasters or emergency hospitals, they prioritize the severely wounded patients who are likely to survive. However, triage at battlefronts is different from the other two scenarios in that "the goal of maintaining fighting strength became the increasingly dominant, stated goal" (Encyclopedia of Bioethics, 3109).

According to the triage generally used in an accident, victims are evaluated and assigned to one of the following four categories, although the categories are not fixed:

- (1) Deceased/expectant (the color of the triage tag is black): Dead or cardiorespiratory arrest
 - (2) Immediate (red): Life threatening injuries

- (3) Delayed (yellow): Non-life-threatening injuries
- (4) Walking wounded/minor (green): Minor injuries

As has often been stated, the fundamental ethical principles or rules working within triage are utilitarian principles and egalitarian principles. "From the beginning the expressed reasons for such sorting were a blend of utilitarian and egalitarian considerations" (Encyclopedia of Bioethics, 3109).

In Triage and Justice, Winslow provides a "Decision Matrix for Triage Principles" and mentions five utilitarian principles (medical success, immediate usefulness, conservation [of scarce resources], parental role, and general social value) and five egalitarian principles (saving no one, medical neediness, general neediness, queuing, and random selection) (Winslow, 1982:164-165). In his book, Winslow discusses which principles are appropriate for the case of the triage for an implantable artificial heart and the triage for a disaster by using the concept of "justice as fairness" that Rawls proposed in A Theory of Justice (1971). Here, Winslow evaluates the principles of triage by the method of "agreement with the veil of ignorance." The conclusion is that in the case of triage for disasters, the utilitarian principles of medical success, immediate usefulness, and conservation should be accepted by the contractors. That is, they are accepted as the principles which promote greater equality of access to treatment.

The generally accepted rules of triage are formed from the viewpoint of "medical success" with "conservation of scarce resources." However, from the viewpoint of "immediate usefulness," it may be possible to give priority to injured rescue experts, although it is not easy to judge whether the expert is immediately useful or not.

Baker and Strosberg maintain that the primary principle in triage is egalitarian (Baker and Strosberg, 1992), but it is difficult to ignore the importance of utilitarian considerations.

It may be possible to justify the rules of triage by the agreements reached among people. For example, Zack proposes to justify the rules of triage through a broad public discussion (Zack, 28).

However, it is also justified by appealing to primitive ethical intuition or duty, that is, the response to the primitive desire of the wounded. One of the fundamental ethical principles working within triage is the principle of utility—the greatest happiness (survival) of the greatest number. The sense of morality or intuition that appears in the rule of triage shows that what is at the basis of triage is not the greatest happiness of the community or a society; rather, it seems to be the response of rescue experts to the primitive desire for self-preservation of each wounded person. They try to save as many lives as they can. In this way, at the moment of the disaster, the primitive aspect of human beings, that is, the desire for self-preservation, often appears.

Moreover, except for the ultimately emergent cases, in the act of triage, ethics in ordinary situations are respected as far as possible. For example, the "Ethics of Health Care Disaster Preparedness" by the Wisconsin State Expert Panel states that the following are the medical ethics to be relied upon in disasters: "Fairness," "Respect for Persons," "Solidarity," and "Limiting Harm." Some authorities cite as ethical principles in disasters the widely accepted four principles of bioethics: beneficence, non-maleficence, autonomy, and justice (Oxford American Handbook of Disaster Medicine, 365). At any moment, an ordinary situation may change to a

disaster situation in which resources are scarce, but the ethics applied in ordinary situations should be respected in such a case.

The right to self-preservation and the duty of saving family and other people

We regard self-preservation as the basis of ethics. The desire and inclination to realize self-preservation are primitive. Such a primitive desire and inclination are, as it were, pre-ethical, and they are the origins of the primitive concepts of right or duty. It can be said that the desire for self-preservation is the basis of the right to self-preservation, and because the right corresponds to the relevant duty or obligation, people should respect others' primitive right to self-preservation. In an extreme situation, if one abandons others in order to save oneself, one cannot be ethically blamed. If one's life is threatened in the face of the difficulties of other people, the primitive response, intuition, or feeling of saving oneself underlies the duty of helping other people. One is ethically permitted to exercise one's primitive right to life.

Here, family members hold a unique position because they are, in some sense, ourselves, but, in another sense, not ourselves. We have to treat them as distinguished among others. That is, the duty of saving family members is stronger than saving others who are not family members.

In addition to them, even in emergent situations, like the case of triage, we need to pay attention to the present state of ethics, the core of which are such ideas as fairness, equality, human rights, autonomy, and limiting harm. Then we reach the ethical principles of behavior in the response period of a disaster. The response period is the time just after the occurrence of the disaster. In that period, people have to judge and behave quickly to respond to the imminent danger of the disaster. In such a situation, we need ethical principles or rules of behavior, so it is timely to outline them here.

Ethical principles of behavior in the response period of a disaster

For the sake of practicality, we divide the ethical principles of behavior in the response period of a disaster into three parts: ethical principles for rescue experts, for those escaping a disaster and trying to save people other than family members, and for those escaping a disaster who are trying to save family members.

1. For rescue experts:

- (A1) Within one's power, it is one's duty to save as many lives as possible.
- (B) One should respect fairness, human rights, and the principle of limiting harm as far as possible.

We have to distinguish family members from other people. When escaping from a disaster, saving others is desirable, but it is not a strong duty or obligation because, for ordinary people, the duty of saving others in an emergency situation may put too much of a burden on them.

On the other hand, saving family members is a duty, which is stronger than the duty to save others, although such a duty is within one's power. The close relationships between family members overwhelmingly contribute to their self-preservation and happiness; therefore, the duty of saving family members is the basis of ethics and social relations.

Now we can proceed to two different ethical principles as follows:

- 2. For those escaping a disaster, in the case of saving people other than family members:
 - (A2) Within one's power, it is desirable (but a weak duty) to save the lives of other people.
 - (B) One should respect fairness, human rights, and the principle of limiting harm as far as possible.
- 3. In the case of saving family members:
 - (A3) Within one's power, there is a duty to save their lives.
 - (B) One should respect fairness, human rights, and the principle of limiting harm as far as possible.

"Within one's power" in (A1), (A2), and (A3) shows that saving oneself has priority over the duty of saving other people, including family members. That is, in the case of real danger, it is not unethical to abandon other people for the sake of saving one's own life.

Generally speaking, in terms of the relationships between (A) and (B), if we cannot save the lives of other people without violating the principle of fairness or the human right of autonomy, we will admit to such a violation. This is what is meant by "as far as possible" in (B). (A2) and (A3) imply the special position of family members. If the rescue expert finds family members among those escaping, they face a serious dilemma. Whether the rescue expert should (or is ethically permitted to) give priority to family members cannot be decided generally. It depends upon many factors, such as the strength of the duty of the expert, the degree of the urgency, and the job the expert is engaged in.

To summarize, the strength of the right and duty in this context is as follows:

Right to save oneself > Duty of rescue experts to save the lives of others, and Duty to save family members > Duty to save other people other than family members.

I don't mention here "duty to save oneself", because the reason of that duty is not clear, though such a duty is important when we discuss the necessity of preparing for the disaster; preparing disaster prevention set, participating emergency training etc.

If one disregards one's own safety, such a behavior does not follow the ethical principles. It is neither ethical nor unethical. It would be a brave act or, as it were, noble and to be applauded. Such a behavior goes beyond ethics; that is, it comprises supererogation.

Those principles come within the field of Act Ethics or Rule Ethics.

Natural feelings and primitive desires

As I proposed above, in the case of saving family members (A3), within one's power, there is a duty to save their lives.

The objection may be raised that in that case, the expression "duty" is not suitable because, as family members are connected to each other by love and love is a feeling, saving family members is not a matter of duty but a matter of feeling. Here it may be helpful to refer to the example used by Hare in Moral Thinking (138-139).

"To take a pasteboard example with which I was once confronted by Professor Bernard Williams on television: you are in an air crash and the aircraft catches fire, but you have managed to get out; in the burning plane are, among others, your son and a distinguished surgeon who could, if rescued, save many injured passengers' lives; to say nothing of those whose lives he would save in his subsequent career. You have time to rescue only one person."

Hare continues: "However, setting aside all these minor points, we find that you have a very strong feeling that you ought to rescue your son and let the surgeon burn ... You almost certainly will rescue your son. But that is because you have (rightly from the critical utilitarian point of view) been brought up to attach the dominant importance to these family loyalties ... Your intuitions were simply not designed to cope with [this particular situation]. However, you do have the strong moral feelings and will probably act on them in the split second which is all you have in which to decide."

Hare refers to a "feeling" or "moral feeling" which works as the basis of the actions undertaken in an emergency. Moreover, according to Hare, this feeling is to be inculcated; that is, it is a moral feeling. Additionally, as stated above, at the base of such moral feelings, there is a pre-ethical primitive desire or inclination.

Significance of the ethical principles

In setting priorities among right and duties, the principles are very useful for making serious judgments and moving quickly in an emergency. For rescue experts and escaping people, those principles will contribute to saving as many lives as possible within one's power. Without such principles, they will be in a quandary about what the appropriate behavior is and what rights and duties have priority. However, as far as I know, at least in Japan, although papers have been written that deal with the issue of triage, there has been none that generally focuses on those principles from an ethical point of view. Zack outlines a "code of ethics for disaster"; however, she does not refer to the guiding rules for assisting in making quick and adequate decisions around one's behavior in the response period of a disaster (Zack, 125-127).

Moreover, they are useful for alleviating the grief of those who could not save the lives of their family members or close friends, because, even if they were forced to abandon them and could not save their lives, they would not have violated any ethical rules. Their behavior would be unavoidable and ethically permissible. In such a situation, to try to save them while being reckless of the danger to oneself goes beyond ethics, although the action is noble and full of the spirit of self-sacrifice. In this way, their ethical burden would be eased; however, their mental suffering may last for a long time.

The age of co-disaster and virtue ethics

Today disasters, such as earthquakes, tsunamis, typhoons, floods, landslides, famines, pandemics, various violent events caused by global warming, and terrorism, are becoming increasingly internationalized, fierce, and large-scale. Anytime and anywhere, we are surrounded by natural and man-made disasters. We cannot live without thinking about disasters, and so we are in an age where we have to live with disasters; that is, we live in the "age of co-disaster."

Living in the age of co-disaster means, as it were, living in a new world, with a new perspective on death and life, nature, the world, and the sciences. One thing which the age of the co-disaster requires of us is to prepare for disasters not only by preparing disaster prevention equipment, but also by making people prepared, in normal periods, for disasters—in other words, cultivating virtue in emergencies.

In general, virtue ethics require rules for what is good and what is bad, and values common to a society or community; therefore, virtue ethics were dominant in ancient and medieval times when people had common rules or values in a community. However, in modern individualistic societies, where individual autonomy and diverse values are respected, it is not so easy to find the playing field of virtue ethics (MacIntyre).

In the context of disaster ethics, as stated above, the rules or values common to most people include those of preserving oneself and saving as many lives as possible within one's power. The virtues to be cultivated, in this context, presuppose such rules.

Relationships between normal periods and disaster periods

This consideration leads to a new idea of the relationship between normal periods and disaster periods.

In a disaster period, especially a disaster response period, we encounter ethical situations that seem to be different from a normal period. That is, in a disaster period, often serious judgments concerning the life and death of oneself and others are required, and, moreover, we do not have sufficient time and information to make considered judgments. In addition, we may experience a serious dilemma, where saving oneself and saving family members or other people are not compatible. Nevertheless, we may face a situation in which the security of a person or a group has priority over the respect one has for one's individual rights.

To use contractarian terms, the disaster period is similar to the state of nature or the state of war. This line of thinking reminds of the modern social contract theory model, proposed by philosophers such as Thomas Hobbes, John Locke, Jean-Jacques Rousseau, and, as a contemporary version, John Rawls. There are various versions of social contract theory. Roughly speaking, it starts from the state of nature, where individuals or families live without rules made by a government. Very often the state of nature easily changes into a state of war or each state is regarded as the same because of the lack of a government. People wanting to escape such a miserable situation make a fundamental contract to establish a government, which has the authorized power to solve any disputes between them. Thus, social contract theory seeks to justify both the government established by the agreement of the people and the laws or rules it has made.

The state of nature and the disaster period

According to John Locke, even after the establishment of a civil or political society, where the government fixes the rules or laws, the state of nature can reappear.

"This makes it lawful for a man to kill a thief, who has not in the least hurt him, nor declared any design upon his life, any farther than, by the use of force, so to get him in his power, as to take away his money, or what he pleases, from him; because using force, where he has no right, to get me into his power, let his pretence be what

it will, I have no reason to suppose, that he, who would take away my liberty, would not, when he had me in his power, take away everything else. And therefore, it is lawful for me to treat him as one who has put himself into a state of war with me, i.e. kill him if I can; for to that hazard does he justly expose himself, whoever introduces a state of war, and is aggressor in it" (Locke, 348).

If a robber endangers another's life, a state of nature or, more correctly, a state of war occurs between them. Because of the government's lack of power, everyone can follow natural law and can rely on it to solve conflicts, and an endangered man can kill the robber.

We find clearer phrases about the difference between ethics in normal periods and an emergency period in David Hume, who is a contractarian, although he substitutes the word "convention" for "contract."

"Suppose a society to fall into such want of all common necessaries, that the utmost frugality and industry cannot preserve the greater number from perishing, and the whole from extreme misery: It will readily, I believe, be admitted, that the strict laws of justice are suspended, in such a pressing emergence, and give place to the stronger motives of necessity and self-preservation" (Hume, 22).

Likewise, whenever disasters occur, we may appeal to ethics in disasters that are quite different from ordinary ethics. On the other hand, before and after disasters, we appeal to ethics in normal situations. The former ethics are ethics in emergency situations and they permit different rules from the latter. There are, then, quite different ethical principles applied in normal periods and disaster response periods. For example, in the case of triage, the priority of treatment is decided by the severity of the injuries, whereas in normal situations, the rule is, generally, "first come, first served." Moreover, a cardiorespiratory arrest patient would be classified as deceased/expectant, and no further interventions or therapies would be attempted until all other patients had been treated or transported. This is totally different from the treatment in a hospital in a normal period. An explanation of the relationships between normal periods and disaster periods according to social contract theory model is depicted in Figure 1.

Similarity of state of nature (war) and disaster response period

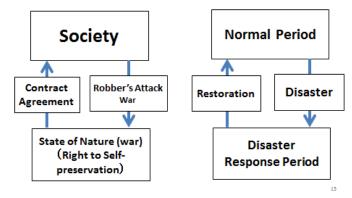


Figure 1: The relationships between normal periods and disaster periods according to social contract theory model

Relationships between normal periods and disaster periods from the codisaster perspective

Nowadays, disaster periods can be divided into three parts: the disaster preparation period (or mitigation period and planning period), the response period, and the restoration period. That is, we cannot divide the normal period and the disaster period clearly as in a civil society state and a state of war in social contract theory. The contract theory model cannot explain this.

Using the co-disaster model, the situation can be explained more clearly. The idea of co-disaster is that, anytime and anywhere, we are surrounded by natural and man-made disasters. We cannot live without thinking about and preparing for disasters. In the age of co-disaster, the normal period is not a normal period in the strict sense; instead, it has become the disaster preparation period.

In discussing disaster ethics in the age of co-disaster, even in a normal period, in addition to normal ethics, we need to cultivate the virtue of quick and adequate behaviors in the response period, and the virtue of engaging in desirable behaviors in the restoration period. In the response period, as we saw above, there are not only disaster specified ethics, that is, the ethical principles underlying behavior and the exercise of virtue, but also the rules of normal ethics, such as fairness, human rights, and limiting harm. In the restoration period, we need both normal ethics and to exercise the virtue of the behavior in the restoration period. In this way, disaster ethics in the age of co-disaster consist of disaster-specific ethics and normal ethics in all three phases (Figure 2).

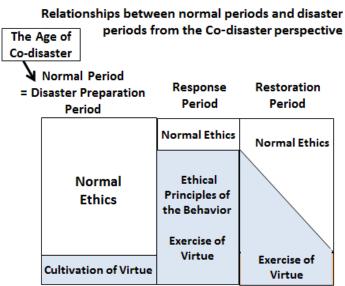


Figure 2: In the age of co-disaster, the normal period has become the disaster preparation period

The thinking behind this paper is based on a philosophy of nature that is derived from Shinto thought. If you want to study this more closely, please refer to the essays by Takahashi (2017a, 2017b).

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Conflict transformation practice for Fukushima: The past encounters the future through a transformative tour to Minamata

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Abstract

In the aftermath of a largescale disaster, affected people often experience conflicts and destruction of human relationships they had with each other in their community, which are caused as a symptom of trauma and of a traumatized community, and also are caused by several other mechanisms. Environmental pollution disasters caused by human-made technology could more easily create conflicts because people are involved in some form of victim-offender relationship in the process of seeking responsibility for the pollution. Also, resolving conflicts caused under an environmental disaster is generally difficult because the disaster often occurs under structural violence and with a big power imbalance.

The TEPCO-Daiichi Fukushima nuclear disaster was not an exemption. The affected people suffered from destruction of many human relationships in their families and communities. This paper will discuss: what kinds of conflicts and destructions of human relationship occurred after the nuclear disaster, why they were caused, what transformation strategies we could have, and one example of a transformation program. In the transformation program discussed, Fukushima leaders were invited to Minamata, which experienced a tragedy in the past. It was a unique conflict transformation practice. A restorative dialogue between "past" and "future" with spiritual resonance started between the two communities. It showed a big potential as a transformational practice for conflicts in which stakeholders cannot easily have conversations over the conflict because of cultural reasons and/or structural violence.

TEPCO Fukushima-Daiichi Nuclear Plant Disaster

On 11 March 2011, the Great Eastern Earthquake hit Eastern Japan. Approximately 16 thousand people died, and another nearly 3 thousand people are still missing. Following the earthquake, the Fukushima-daiichi nuclear power plants lost electricity and could not cool down the nuclear fuel rods and lost control. After meltdowns of the nuclear fuels, the plants had hydrogen explosions. Huge amounts of nuclear particles were spread out in the air, over Japan and even to other areas on the earth that were contaminated. On 11 March, at 9:23 pm, the national government ordered the evacuation of people who lived within 3 km from the TEPCO Fukushima-daiichi nuclear plant, and the order expanded to people who lived within 10 km on 12 March at 5:44 am, and the order again expanded to those who lived within 20 km at 6:25 pm¹. Reactor one of the powerplant had a hydrogen

[·] pp. 11-27 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J..Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

¹ http://www.pref.fukushima.lg.jp/site/portal/cat01-more.html

explosion on 12 March; reactor three had it on 14 March, and reactor four on 15 March.

Soon after the explosions, the Japanese government announced that the accident was a level four accident, but later on 12 April the government announced that it was a level seven accident, one of the worst class nuclear accidents in the world.

The wind on the days of the explosions carried radiative particles to broader areas, which also got contaminated. The government later re-set evacuation zones according to the radiation dose of each area regardless of the distance from the plant. More than one hundred thousand people were forced to evacuate and more than fifty thousand people voluntary evacuated Fukushima prefecture². People who had houses in the restricted areas were compensated by the TEPCO, while those who lived in contaminated areas to which the government did not order evacuation could not get the same compensation. Up to seven years after the disaster, the national government lifted evacuation orders to many affected areas; however, still about forty-five thousand people³ have been forced to evacuate, and many have decided not to move back to their original towns which were contaminated even after the lifting of the restriction to live.

This nuclear disaster caused huge environmental contaminations and physical health risks by radiation; moreover, it caused huge damage to people's mental health and social health such as continuous anxiety on health, loss of employment, communities, homeland, and family ties. Affected people have come to suffer from many conflicts and human relationship destructions within their family and community members. The divisions and conflicts were caused by a huge structural violence through the nuclear industry and politics, and burdens were carried on the affected citizens in Fukushima. The nuclear disaster has many injustice issues.

For seven years after the nuclear disaster, I have worked with the community divisions and conflicts which the nuclear disaster caused to the affected areas and the affected people, as a conflict transformation scholar and practitioner. In this paper I will discuss what divisions and conflict were caused by the TEPCO Fukushima-daiichi nuclear disaster and in what mechanisms those divisions and community conflict were caused. After that, I present one intervention practice to the situation, using some conflict transformation theories, and describe how the encounters between two cities which experienced similar tragedies in different times empowered the affected people and gave hopes to them for transformation.

Conflicts and destruction of human relationships in the affected areas by the TEPCO Fukushima-Daiichi Nuclear Disaster

The TEPCO Fukushima Daiichi Nuclear Disaster caused many conflicts and destruction of human relationship among the affected people by the disaster. In this paper some typical conflicts will be illustrated (Ishihara, et al. 2012).

² The Ministry of Education, Culture, Sports, Science and Technology (MEXT) announced the number of forced evacuees in Fukushima prefecture in September 2011 at 100,501 and the number of voluntary ones was 50,327 including those who evacuated within and those out of Fukushima prefecture (MEXT, 2011). Other than this, many people voluntarily evacuated even from other prefectures than Fukushima. For example, about 90 % of evacuees to Kumamoto Prefecture was from Tokyo areas in our 2012 search.

 $^{^3}$ The number of evacuees "forty-five thousand" announced by the government does not include people who were forced to evacuate and got a new house in a new place.

1. Conflicts among family members: mother versus father, mother versus grandparents, and so on.

While doing field work research in Fukushima for the first time in July 2011, I met many mothers who were suffering from conflicts with other family members such as their husbands and their parents-in-law especially over the risk perception of radiation and over their risk management behaviors.

Most of the mothers in Fukushima had big concerns on the health risks of exposure to radiation for their kids, and were seeking appropriate protection. However, many mothers said they were not able to share the common concerns over the risk, and that they have conflicts with their husband and parents-in-laws over safe behavior. They said that they wanted to discuss how to protect their kids from the radiation exposure with their husband including an option of evacuation from Fukushima, but that the husband got angry saying "I don't want to hear any talk about radiation!" when mothers tried to discuss it with their husband. Also, mothers were suffering from conflicts with their parents-in-law. Parents-in-law often brought vegetables from their garden to their grandchildren even after the nuclear accident. Mothers were struggling how to say "no thank you" without offending the grandparents' feelings every day. These daily quite conflicts overstained mother's nerves, and sometimes caused divorce, which was called "a nuclear divorce".

2. People who voluntarily evacuated versus those who did not

Radioactive particles were distributed all over Japan and even more or less to overseas, after the nuclear reactor explosions. The Japanese national government designated some parts of the Fukushima prefecture as evacuation zones such as the Futaba County. Some people who lived outside of the evacuation zones in the contaminated areas also evacuated voluntary while other people outside of designated evacuation zone did not.

In Fukushima, serious emotional frictions existed between those who voluntary evacuated and those who did not. People who chose to evacuate and to leave Fukushima were called "betrayers of Fukushima" or "people who abandoned Fukushima" and were accused by those who stayed in or could not evacuate from Fukushima. Their consciousness was also internalized among those who chose evacuation. Generally, those who decided to evacuate from Fukushima left in secret from their friends, instead of directly saying good-bye to them in a positive manner. Many people in Fukushima said that they had never spoken to friends who voluntary evacuated after they left even though they had been good friends to each other for a long time; they seemed to be sad and lonely.

3. Farmers versus mothers

Another conflict pattern was between Fukushima farmers and Fukushima mothers. Though all areas were affected by the radiation contamination more or less, the government did not restrict farming all areas in Fukushima. Farmers who did farming outside of restricted areas and who did not get enough compensation money, needed to continue farming to live on, even soon after the disaster⁴. On the other hand, many mothers in Fukushima were afraid of giving their kids Fukushima

⁴ In 2018, agricultural products from Fukushima were sent to market after strict safety tests of radiation. So, it is said that products from Fukushima are safer than those from other areas in Japan. Some consumers still worry about the contamination of Fukushima products and others not.

local foods for several years after the disaster. In this context, conflict between Fukushima farmers and mothers was observed often, sometimes speaking ill of each other saying: "I found my enemy in front of me". This was painful.

4. People who got compensation money versus those who did not

One of the most serious emotional conflicts in Fukushima communities was between those who were compensated and those were not. People who lived in the restricted areas were paid about one hundred thousand yen per month/person as a compensation for mental-suffering and other various compensation money by the TEPCO. However, those who lived outside of the designated areas were not compensated⁵ even if their land were actually contaminated. After several years of compensation, the gap of compensation between those from the restricted areas and those outside became huge.

This caused many emotional frictions between those who were compensated and those who were not. Community frictions in the Iwaki city was a typical case. The Iwaki city in Fukushima prefecture is located next to Futaba County, in which the TEPCO Fukushima Daiichi nuclear plants exist and which was the most seriously contaminated. Many temporary housings for the evacuees from the Futaba County were built in Iwaki City, and the city accepted more than twenty thousand evacuees from the evacuation zone including the Futaba County. Many emotional frictions occurred between the evacuees who live in the temporary housings in Iwaki and the original residents in Iwaki. "The evacuees got money and have no jobs. They are enjoying daytime "pachinko" gambling with the money". "Our hospitals are so crowded from many evacuees. They come to the hospital without serious reasons because their medical fees are exempted and they have nothing to do in daytime! They are using our community facilities for free though they are being compensated. It is unfair!" Although the Iwaki city was just next to the Futaba County, the compensation by TEPCO and the national government was so different. It caused many emotional frictions in the community.

5. School bullies

In some families in Fukushima, parents stayed in Fukushima and sent their kids outside of Fukushima to live with less contamination. Some kids who evacuated from Fukushima were bullied in their new schools being said "you are contaminated". Some of them went back to Fukushima in the next trimester to escape from the bully. Even sadder, some of them were bullied again in the schools in Fukushima, being said "you ran away from Fukushima. You are betrayer".

With these common conflicts in Fukushima, many of Fukushima people said: "Although we would like to help and to collaborate with each other during disaster, our human relationships are getting destructed in our families and communities".

⁵ People who lived outside the restricted areas in Fukushima prefecture got compensated with several hundred thousand yen once after the disaster, though the amount of money varies a bit by their conditions (from interviews with people who lived in Koriyama city and Fukushima city from 2013 to 2015). However, the amount of money paid was quite different from those in the restricted areas. For example, a family with 5 members in the restricted areas got six million yen per year and would get twelve million yen in five years. See TEPCO website (retrieved on November 11, 2018): http://www.tepco.co.jp/fukushima_hq/compensation/guidance/index-j.html

Why does the nuclear environmental disaster cause conflicts?

Why does the nuclear environmental disaster cause conflicts? There are several general reasons why mass-disasters and environmental disasters cause conflicts, with some specific reasons for the TEPCO Fukushima-daiichi nuclear disaster (Ishihara, et al. 2012).

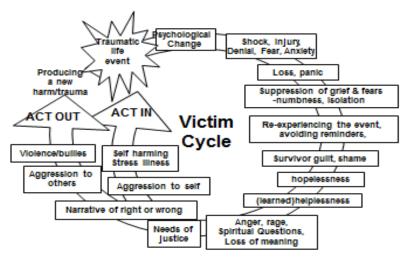


Figure 1: Victim Cycle (Modified by Ishihara)

- Applied from the Eastern Mennonite University STAR model of the Victim Cycle (Yoder, 2005)

1. Traumatic energy of the disaster causes conflict

After a mass disaster, people in affected areas tend to have conflicts amongst one another and human relationships in the community are often destroyed. Especially, an environmental disaster which is recognized to be caused by human factors tends to lead to serious conflicts and human relationship destruction in the community/society.

In the conflict and peace psychology studies, it is known that psychological trauma often causes another violence which is called reenactment of traumatic energy. A large-scale disaster such as earthquake, tsunami, and nuclear disaster leaves affected people stressed or traumatized. Trauma causes psychological change at many individual, relational, communal, and societal levels (Figure 1: Victim Cycle). Unhealed trauma energy may act against the self (acting-in) or out onto others (acting out) which is reenactment behavior. In a traumatized community where most of the community members are traumatized, people are generally more or less involved in this acting-in or acting-out behavior.

Natural disasters such as earthquake and tsunami cause huge traumas in the affected people. However, especially, in cases of environmental disaster such as environmental pollution and nuclear reactor explosion, the disasters are caused by man-made technology and by some level of human factors. It is known that trauma caused by man-made accidents tends to be more serious and to continue longer than that by natural phenomena (Owada, 2003). This causes some sense of victim-offender relationship among the stakeholders. People's trauma caused by nuclear disaster tends to cause conflicts among people. The conflicts among people affected

by the earthquake and the nuclear disaster can partly be explained by this traumaconflict model.

2. Adversarial negotiation process for compensation and lawsuits

In the case of disasters caused by man-made technology, questions of responsibility and compensation are at stake. The current legal system and the administrative compensation system often can cause social tensions between stakeholders and conflicts. The current Japanese legal system is basically an adversarial process of negotiation, which disturbs the collaborative process between the stakeholders of the disasters. Also, the compensation is done only in cash, and TEPCO and the government decide who should be compensated and who should not. This process often causes emotional conflict even among the affected people.

The victims do not always desire money. They might want an investigation of the incident; they might want to be reassured that such incident will not occur again through improvement of policies; or they might want the installation of whole-body counters that measure not only the external radiation exposure but also the internal radiation exposure.

3. Conflict of world view and values

In any crisis caused by a huge disaster, each decision making is seen as crucial to survive. People try to make decisions based on their own world views and values which vary by person. In the process of deciding policies to respond to the disaster, it is difficult to build consensus on the policy and people often have conflicts.

Moreover, people in Fukushima had emotional frictions with each other not only in the process of making social policies but also when making personal decisions such as over evacuation, radiation protection behavior, and so on. In Japanese culture, "harmony" is important. People generally have social norms to try to act in the same way to keep the harmony. It is difficult for them to accept different diverse behaviors in one community.

However, during the crisis, differences of their worldviews and values may get deeper than usual. People tend to make different decisions in response to the crisis. This situation is not easily accepted in the Japanese culture.

4. Social Disparities and Structural Violence

The acting-out (or acting-in) behavior discussed above is not only expressed as a visible aggressive behavior but often as social contradictions. When different parties have different needs, people will be able to meet each other halfway or to take winwin resolutions as in normal times. However, during crisis and in the middle of a traumatic event such as a serious disaster, people have no room for thinking of others' needs, and people with more power silently oppress ones with less power. The weak in society tends to bear a bigger burden.

The electric power generation industry is a huge industry. Especially, the nuclear energy industry consists of huge international conglomerates, and also plays some role in nuclear international security politics. In Japan, most of the nuclear generation plants are located in rural areas, because rural areas have accepted or have been forced to accept the safety risk of the plants in return for economic benefit by the power generation industry. In this structural violence, the social contradictions caused by the nuclear disaster easily take a toll on the weak, and the local people in Fukushima.

By analyzing the family conflicts over radiation risk perceptions and behaviors discussed above, we can observe how structural violence is caused by the conflicts. The radiation risk announced by the government in Fukushima had a big gap from the risk discussed across the internet or by the media outside of Fukushima. In Fukushima, the prefectural government made a campaign to announce to the Fukushima residents that one-hundred milli-Sievert (mSV) radiation exposure per year is safe. But the original safety standard of radiation in Japan was one mSV per year, so the public reaction to the radiation risk of Fukushima on the web and by general media outside of Fukushima was more severe than the Fukushima government announcement. The Fukushima prefecture made the safety campaign of 100 mSV because they did not want the Fukushima people to get panic and, more than that, they did not want to lose the population. Also, the local governor had been the very person who had supported the nuclear energy industry in Fukushima, and protected the industry. Even the national government did not want to say too much about the radiation risk in Fukushima because the nuclear energy industry has been and is still promoted as national policy.

Under this social structure, the Fukushima families suffered from differing information on radiation risk. The information given by the government in Fukushima said Fukushima was safe, but the one given in the Internet or from outside of Fukushima said it was unsafe. Young mothers in Fukushima who could have access to the Internet information read the information that Fukushima was unsafe, which was different from the "formal" information by Fukushima government. Also, many of Fukushima mothers whose hometown was not Fukushima were advised and told to evacuate from Fukushima by their friends and their original family who lived outside of Fukushima. But their husbands and the parents-in-law tended to be exposed to the "formal" information by the Fukushima government because the parents-in-law did not have access to the Internet and because the husbands were surrounded by the prefecture business community. This social structure caused an information gap over the radiation risk among the family members.

Also, the background of "Fukushima farmers-mothers conflict" discussed above was similar. The government did not want to emphasize the risk in Fukushima and did not designate too many Fukushima agricultural lands as prohibited areas even if they were more or less contaminated. So, if the farmers in Fukushima needed they could continue their farming even after their land was contaminated. However, mothers in Fukushima did not want to consume their products.

Under this situation, family members and community people in Fukushima recognized each other as an enemy and had conflict with each other, without knowing the root causes of the conflict which were related to the larger social structure.

Lack of basic human needs causes conflicts: natural environment is the foundation for basic human needs.

The conflict theory says that conflict occurs over the resources to fulfill one's own needs; it shows how to fulfill the needs is the key factor for peace. Maslow presented the famous model of the hierarchy of needs. In accordance with Maslow's model, water, food, air, health and physical security are the most basic needs of human

beings. Nature/environment plays a crucial role in providing human beings with such basic needs. Thus, the destruction and contamination of the natural environment threaten the human basic needs crucially. So, a large-scale natural destruction such as this nuclear disaster ultimately could lead to an occurrence of numerous conflicts and adds more complications to conflict resolution.

(A)Mechanism	(B) Conflict Transformation	(C) Tools for
of conflict	Theory	Transformation
1. Conflict of interest/unmet needs 2. Cycle of violence, Trauma 3. Different perceptions 4. Different values and worldviews 5. Victim and offender relationship 6. Asymmetric conflict (Power imbalance), Structural violence	1. Win-win negotiation, Non-violent communication 2. Transformative mediation, Empowerment, Counseling, Trauma healing 3. Role change, Process work 4. Process work, intercultural communication 5. Restorative justice 6. Adam Curle's asymmetric conflict transformation model, non-violent social movement, advocacy, Research, change structure, change laws	Inner work Negotiation Dialogue Mediation Lawsuit Making new laws Media strategies Research Psychological care, trauma healing Art-based peacebuilding

Figure 2: Strategic Conflict Transformation (Ishihara, 2018b)

Conflict transformation strategies

What conflict transformation strategies could we take to respond to the conflicts in Fukushima? Figure 2 shows how we can make a conflict transformation strategy. First, we should assess and determine by which mechanism the conflict occurs (A). The middle column (B) shows conflict transformation theories which respond to each mechanism of conflict. The second step is finding an appropriate theory of transformation to respond to the mechanism of the conflict. The right column shows tools for conflict transformation. We should choose tools depending on what resources are available. We would use the tools in different ways according to the transformation theories chosen in (B). So, finally we would make an actual strategy thinking of the theories and the tools we can chose.

Conflict transformation theories for the nuclear disaster conflicts in Fukushima

Thinking about the mechanisms of conflict discussed in the last section, I chose two theories below (Ishihara 2012, 2013):

1) Transformation theory for a victim cycle

The STAR program in Eastern Mennonite University presented the breaking-victim cycle model (Figure 3) to respond to breaking the victim cycle shown in Figure 1.

First for breaking a victim cycle, a safe space where people can express/share their honest feelings, experiences, and stories is essential. To acknowledge and embrace one's own feelings especially mourning and grieving are important first steps for healing. Without the healing process, one cannot tolerate to face the enemy's stories and root causes.

The second step is for people to acknowledge different experiences, stories, values, and positions. This may involve meeting a person who has a conflict with you or someone who you perceive as your enemy. People do not need to agree, but rather recognize and acknowledge differences of perspectives.

The third step is reflection and contemplation on the root causes, together with people who have different perspectives. This will shine a light on numerous aspects of the event, and allow people to explore the root causes deeply and from multiperspectives.

The fourth step is to find one's own responsibility in terms of the root cause, and to try to find out what needs to be done to build justice and a better society that will fulfill the needs of the society/community members, especially victims.

The fifth step is to try to collaboratively find creative solutions and build a better future. The sixth step is to encourage people to share/express their vision for the future of the society. Each society member should find his/her roles and responsibilities in creating a better future.

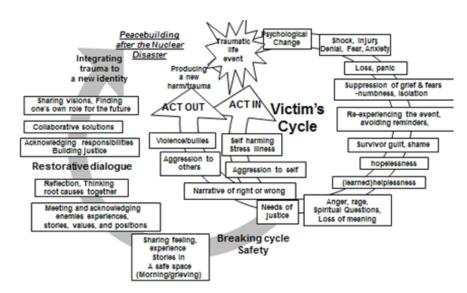


Figure 3: The breaking-victim cycle model after a nuclear disaster -modified by Ishihara, applied from the Eastern Mennonite University STAR model, (Yoder, 2005)

2) Transformation theory for structural violence

Adam Curle presented a transformation model for asymmetric conflict in 1971 as shown in Figure 4 (Ramsbotham, 2011). Since the conflicts in Fukushima were caused by structural violence related to an asymmetric balance of power between the stakeholders over the nuclear energy policies, as discussed in 4 in the last section, I decided to use the model by A. Curle in addition to the breaking victim

cycle model.

Curle said that people in an asymmetric conflict situation do not even notice the situation is non-peaceful and have latent conflict. Both parties just tend to see their situation as "normal" and "no problem" even though the oppressed people have pain; there are latent conflicts. So, the first step to take is to raise awareness about the non-peaceful situation and that there are latent conflicts. Then the victims start to raise their voices, the people in power start to be aware of the conflicts, and may come to the table for negotiation towards transformation.

Unpeaceful Peaceful Relations Relations Balanced Peaceful Power Development Negotiation Unbalanced Conscientization Power Raising awareness Confrontation Education Latent conflict Overt conflict

Figure. 4 Transforming Asymmetric Conflict (A. Curle, 1971)

3) Tools and resources for intervention

What tools and resources can we use for an intervention to the Fukushima conflict? For the breaking victim cycle model discussed in section 1-1 above, we usually use a trauma healing program and a restorative dialogue process as an actual program. But when I started to make a program, I was told by a Fukushima community leader not to offer a dialogue program in Fukushima. She said: "We have had terrible dialogue facilitators in Fukushima. Please do not disturb the Fukushima community by doing that. Instead, please do something only Kumamoto University can do for us". It is true that unskilled facilitators made a mess in Fukushima after the disaster⁶; at the same time, dialogue over conflicts did not fit into the Japanese culture, especially the culture of the Tohoku region including Fukushima. They culturally depend too much on harmony to have direct conversation over their conflicts.

For the asymmetric conflict transformation model, usually we apply non-violent social actions such as demonstration, sit-in, and so on. However, in Fukushima, there was a general atmosphere to reject such social activism as many of the Fukushima citizens see the social activists as persons who break social harmony. So, it was difficult to recommend the general population in Fukushima to join those existing

⁶ On the other hand, some wonderful facilitators successfully lead the dialogue processes in Fukushima. We are doing another research project on successful dialogue programs in Fukushima.

social actions. What could we do in a culture in which they don't want direct conversations over conflicts and in which they don't want to show their objections and resistance directly? Observing their culture in Fukushima, I found that they are very good at self-reflection and internal dialogue in themselves, instead of having interpersonal dialogue over conflicts.

Also, I found that many Fukushima people were interested in the history of Minamata. Minamata is a city located at the South end of Kumamoto Prefecture which experienced serious environmental pollution about sixty years ago. Minamata also experienced conflicts and destruction of human relationship among the community members with a similar mechanism as that of Fukushima, and has developed a rich culture of restorative justice and reconciliation in the last thirty years.

Brief history of Minamata's environmental pollution and recovery

Minamata City experienced serious environmental pollution with methyl-mercury from the industrial wastewater of the Chisso Corporation's chemical factory. The affected people got a neurological syndrome including ataxia, numbness in hands and feet, muscle weakness, loss of peripheral vision, and so on. In severe cases, the poisoning caused deaths.

By the year 2018, more than fifty thousand people were officially designated as people who should be compensated as affected people⁷. The factory wasted the contaminated water from 1932 to 1968, and the first affected patient was "officially" found in 1956⁸.

In 1959, a research team in Chisso Hospital and a research team at Kumamoto University separately found that the symptoms were being caused by methylmercury in the wastewater from Chisso factory; however, the company and the Japanese national government decided to hide the fact of environmental pollution and ordered the research team in Kumamoto University to dissolve, because Chisso was one of the most important chemical industries for Japan's economic growth at the time. In September 1968, the Japanese government finally issued an official recognition that the disease was caused by poisoning with methyl-mercury in Chisso factory's wastewater. This official recognition was made four months after Chisso stopped producing acetaldehyde for which mercury was used in a technological innovation as a catalyst.

During the time the government and Chisso Company hid the real cause of disease, the Minamata disease was dealt as a transmissible disease. So, the patients and their families suffered from discrimination as contagious disease patients, and the discrimination even continued after the government's official announcement of environmental pollution in 1968. The discrimination was not only towards the

⁷ The system of designation as an affected patient by Chisso environmental pollution is complicated. The government designated over two thousand victims as certified patients (so called "Nintei Kanja"), more than ten thousand as people who should be financially compensated in 1995 (so called "Seiji-Kaiketsu), a little less than forty thousand people as people who should be supported as affected in 2010 (so called "Tokuso-hou") (Ministry of Environment, 2018). And some other victims won a court trial to be considered victims and compensated.

⁸ This was the year the government officially recognized the first patient of Minamata disease. But people in Minamata community had recognized people with the same symptom in the community from 1930's.

Minamata disease patients but also towards Minamata general citizens regardless of their affection. Minamata people were often rejected marriage by people outside of Minamata as they were seen as contagious or hereditary disease patients.

After the government recognition, the compensation for the patients started. However, the affected people could not appeal their right to get compensation because of the discrimination and because the majority of Minamata citizens saw the patients as enemies of Minamata. The majority of citizens thought Minamata's economy would not decline and Minamata would not be stigmatized, if the affected people had been silent. They said that the patients are telling a lie that they were affected in order to get compensation money. Under this situation, Minamata people continued to suffer from human relationship destructions and division among community members and even among family members, and suffered from discrimination by people outside of Minamata.

In Minamata, reconciliation efforts by the local government started around 1990. Several important patient leaders played key roles in the process. One was Mr. Masato Ogata. His family including him were severely affected by the pollution including tragic deaths of family members. He was one of the most active even fierce leaders of patients' movement at first, and later he left from all of the organized patients' movements and moved into his original social movement instead. He said: "I myself was Chisso. Chisso needs the biggest forgiveness" and quit to ask any institutional reliefs, went back to the contaminated sea as a fisherman with prayers, and started a dialogue from heart with anyone regardless of their position such as offender, victim, and so on (Oiwa and Ogata, 2001).

Another important leader was Mrs. Eiko Sugimoto. Her family was also severely affected the same as Ogata family was. After long years of suffering and fighting with injustice of Minamata environmental pollution, she became a leader of forgiveness and restorative justice as she said: "I would be willing to receive Minamata disease instead of my neighbors if Minamata disease is God's punishment to human beings who contaminated the nature created by God9".

Through the leadership of these patient leaders, many reconciliation efforts with sense of restorative justice have been done in Minamata, and they got a new identity integrating the past trauma into a different better future as described in the last step of the breaking victim cycle model. Now, Minamata is one of the world leaders among eco-friendly and sustainable cities.

I decided to develop a transformation program for Fukushima people using these resources: Minamata history and high self-reflection ability of Fukushima people.

Conflict transformation program: transformative tour to Minamata

1. Program outline

I designed and conducted a transformative program for Fukushima leaders: a transformative tour to Minamata. The tours were held twice: a three-day tour from the end of November to the beginning of December in 2013 and a five-day tour in March 2014. The participants were different in the two tours and were chosen intentionally from different parts of Fukushima and their age was from eighteen to

 $^{^9}$ Some people says her thought is similer to the idea of Jesus' Passion even though she was not a Christian.

forty-seven years old.

I designed the tour basically using the breaking victim cycle model combining the asymmetric conflict transformation model discussed in the last section. The first step is creating a safe space for grieving; the second step is to know the root causes of conflict; the third step is finding choices for transformation to integrate past trauma to a future new identity; and the last step is to find hope and vision for one's new identity.

2. Program contents

The Program consists of the components below:

- 1) Learning the history of Minamata mercury pollution, including how the structural violence divided the community people.
 - ---Raising awareness of structural violence and root causes of conflicts
- 2) Meeting with a Minamata victim in order to grieve in a safe space together.
- 3) Meeting with other Minamata victims/restorative justice leaders to know options to go ahead from here.
 - --How can we move ahead from here?
 - --Learning many approaches for justice: memorialization, story-telling, lawsuits, non-violent actions, forgiveness, dialogues, etc.
- 4) Meeting with the same age people from Minamata (party)
 - --People from eighteen years old to mid forty in Minamata form the second or third generation after Minamata pollution, while people of that age group from Fukushima form the first generation of the nuclear disaster.
 - --This means "past (the first generation) encountered future (the second and third generation)" in the tour, starting a dialogue between the past and the future.
- 5) Visiting symbolic sights of the recovery/re-birth of Minamata to know that their tragedy could be a source for a better future and to acquire a sense of bright future vision.
- 6) Presentation at Kumamoto University regarding their experiences in Fukushima and what they found in Minamata.

3. Intentions and theories of change

Intentions and theories of change were below:

<Primary Intentions—Theories of Change>

- 1) Learning the history of Minamata helps raise the awareness of Fukushima people about structural violence (root causes) in the Fukushima nuclear disaster and their community conflicts.
- 2) Creating a safe space for Fukushima people to grieve creates a mental space for them to see the truth of structural violence.
- 3) Fukushima people can learn the choice of actions for their future including restorative approaches to justice, from Minamata restorative leaders.
- <Secondary Intentions—Theories of Change >
- 4) Transformation of relationships among a) Fukushima community leaders who have divisions, and b) victims who evacuated to Kumamoto and those who still live in Fukushima.
- 5) Building a continuous relationship between Minamata and Fukushima.
- 6) Minamata people's transformation by encountering the Fukushima leaders.

I intentionally invited community leaders from different parts of Fukushima because I expected the tour to be an opportunity for the leaders from different areas to reconcile with each other as they have different interests and some tensions with each other. I did not invite the leaders of active anti-nuclear movement leaders who know the structural violence well but invited new community leaders who have questions about the situation of Fukushima after the disaster but did not know the social backgrounds of the nuclear issues.

Impressive things that happened in the tour

There were several very impressive transformative scenes in the tours.

1) Apology from a Minamata victim leader to the participants from Fukushima (Ishihara, 2018a)

The participants and I visited Mr. Hajime Sugimoto, who was a storyteller of Minamata disease as he himself was affected and he was a son of Mrs. Eiko Sugimoto, a forgiveness leader whom I mentioned in the last section. He shared his experiences and the sense of loss he felt when he lost his grandfather by the disease and how anxious and lonely he was when both his parents were hospitalized due to Minamata disease. As a young boy, Mr. Sugimoto was already overwhelmed by fear and hated the disease-raddled life he, his family, and his community had to suffer through. Seeing no other option, he decided to escape from Minamata while he was still young. We were listening to his testimony with heartrending feelings when suddenly Mr. Sugimoto broke down in tears, saying: "I'm sorry to the people in Fukushima. I think the accident of the nuclear power plant might not have occurred if I had faced the Minamata issue more seriously and earlier and did not run away from the reality at that time. I'm terribly sorry." He apologized and cried. All the Fukushima participants, and I as a coordinator, cried together.

This feeling is very difficult to explain in words. If we think in a purely logical way, we might wonder why one victim is apologizing to another, or how someone could think apologizing to another, or how someone could think that the choice of just one Minamata disease patient (or a member of their family) could have stopped the Fukushima nuclear disaster. Instead of thinking in such a logical way, our souls were touched deeply by this voice expressing "sorry." It was the moment at which that voice surely saved "something" in us.

2) The words which impacted the participants

Many of participants said that the words which impacted them the

Many of participants said that the words which impacted them the most was words by Ms. Eiko Sugimoto exhibited in Minamata Disease Museum.

"Don't try to change others (the offenders). Change yourself first, then people will follow you".

In other words, this meant "forgive first, and open you heart to face your offender. Then the offender will hear your story and will be pushed into taking accountability."

3) Sense of warm solidarity between Minamata and Fukushima (Ishihara 2018) A Fukushima leader said: "in other places than Minamata, people say to Fukushma people, 'I feel sorry for you' or 'I am praying for you'. Here in Minamata, people say 'we pray and support each other' and 'let's walk together'. This was the first experience for her to find a friend to walk together after the nuclear disaster".

Another participant said: "the situation concerning Fukushima is very complicated, so we feel it is almost impossible to explain our feelings to people in other areas. But in Minamata, we do not need to explain those complicated things. People can understand our feelings. We can be relieved."

4) Sense of "living"

One Fukushima victim said. "My image of Minamata was "a black and white world" because of the negative image of Minamata. But now I get to know that Minamata is so colorful world where people are living and enjoying their life. Yes! I can say the same thing with Fukushima, my home town. Fukushima also has colors: beautiful mountain, rivers, and beach."

Outcomes: impacts of the tour

It seems that the tour was successful and impacted positively the Fukushima leaders a lot.

- 1) Empowerment and transformation of Fukushima leaders
- All participants from Fukushima said that they were healed and empowered by joining the tour. The voices of participants were:
- --We were so much healed by meeting people who understand the same sufferings of Fukushima which usually were difficult to understand.
- --I had not expected anyone in the world would cry for us and would regard this nuclear power disaster as his own problem, before I visited Minamata. I did not expect anyone would apologize to us from his or her heart.
- --I had not expected anyone in this world would say "we" to us, instead of "you". I found a voiceless but strong sense of solidarity.

Actually, 15 new projects were planned as voluntary spin offs from this tour in six months by the participants.

2) Continuous exchanges between Minamata and Fukushima

After this tour, continuous voluntary exchange started between Minamata and Fukushima. Some participants organized tours to invite other Fukushima friends to Minamata, and not a few participants have been continuing to visit Minamata from Fukushima even four and five years after the first tour. Other participants invited the Minamata leader for their talks in Fukushima.

3) Awareness Raising of the structural violence

One purpose of this tour was to raise awareness with the root cause of the community conflicts in Fukushima, instead of Fukushima people's seeing each other as an enemy. Many of participants started to talk that they should know the root cause and the social structural background of the nuclear disaster, instead of just focusing on the conflicts with community neighbors. Some participants creatively started non-violent social actions in their own ways after the tour.

4) Awareness of restorative approach

Even after they became aware of the injustice, of the structural violence, and of the nuclear disaster, many of the participants chose restorative ways to rebuild justice instead of accusing offenders.

5) Transformation of Minamata people

Another unexpected change occurred after the tour. Minamata people also started to change. Minamata community still have unhealed trauma from the past and a few people can speak out about their trauma from Minamata environmental pollution and diseases. Through the encounters and dialogues with Fukushima young leaders, they could talk to "their past" and be empowered also. Some of the Minamata youth started to speak about their trauma by Minamata tragedy in public, and started new paths. We are now trying to evaluate the impact of the tour scientifically.

Discussion

This transformative tour was unique as a conflict transformation program for divided communities. What can we do if all of community members are traumatized and have hurt each other in their relationships, if people have cultural difficulty with making a direct conversation over conflict, and if divisions are causing structural violence? In Fukushima, people culturally avoid direct conversation once they have conflicts with each other. And, it was difficult for Fukushima citizens to have a sincere conversation with the most important stakeholders who root-caused the problem such as TEPCO, the national government, the international business conglomerates on nuclear industry, and the international political stakeholders on nuclear security, because of the power imbalance and the structural violence.

For the transformation program in Fukushima, I applied a breaking victim cycle model without direct conversation between the stakeholders, especially between the victims and the offenders of the nuclear disaster, to respond to the conditions above. Instead, by leveraging to Fukushima people's high ability of self-reflection and internal dialogue, I designed a transformative tour in which Fukushima people could reflect on the situation of Fukushima and become aware by seeing Minamata as similar.

Interesting things happened such as Mr. Sugimoto's apology. We know that apology is important to restore relationships over harm, that usually happens between an offender and a victim of harm. But, Mr. Sugimoto was not directly the offender of the nuclear disaster but a victim of another similar tragedy. However, his apology truly touched and reached the Fukushima victims' heart and even my heart. It will be meaningful to think of what apology is, what human beings are, what a structural violence is, and what environmental harms are. Probably sometimes apology need not necessarily be done by the direct offender. Jun Ui, a scholar of environmental pollution in Japan, said that "There is no third party in environmental pollution". He meant everyone in this community are partly an offender and partly a victim at the same time as long as one lives in this world using the technology which caused the pollution. So, Mr. Ogata said "I myself was Chisso". Many of Minamata disease victims are deeply aware of such contradictions after their big suffering as victims and forgave human beings' sin without giving up on justice, so their words touched the hearts of Fukushima participants.

This program can be analyzed as a unique form of restorative justice program. I will continue to analyze the meaning of the encounters between two cities and to practice the program.

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Justice as a moral virtue

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Summary

The current view of the concept of justice is commonly limited to fairness in relations between people or between individuals and organizations, which implies the prerequisite of having an institutional framework where actions and relations may be just or unjust. This paper, however, argues that justice can also be considered a moral virtue as stated in Plato's view of justice and in the biblical scripture where humankind is encouraged to follow justice in their actions to do the right thing. In this article, first the concept of justice is broken down into four discrete layers/levels including fairness, equality, desert for diversity, and respecting others' moral rights. Next, the philosophical question whether we live in a just world, is debated as it can influence one's attitude towards injustice and one's incentive to act for justice. If the world is just, how is justice served, and if the world in not just, then how does living and dying in an unjust world find meaning and purpose? These questions are discussed in regard with observed realities, social psychology and religion. To help improve the clarity of discussion, many cases are presented along the debate.

Introduction

There are different interpretations of the notion of justice in the literature on ethics. For Plato, justice was the paramount virtue, or, the sum of virtue in one's relations with others. According to Plato, "justice does not depend on external forces but is the right condition of the human soul by the very nature of man when seen in the fullness of his environment" (Bhandari, 2008). Plato believed that justice could be a virtue of both individuals and societies, and therefore he associated almost every ethical issue with the notion of justice (Stanford Encyclopedia of Philosophy, 2016). However, Aristotle presented a less inclusive view of the notion of justice, limiting it to a virtue of character as an intermediate between the vices of excess and defect, as well as a virtue of constitutions and political arrangements (Ibid).

John Rawls regarded justice as "the first virtue of social institutions" and his theory of 'justice as fairness' emphasized on equal basic rights, equal opportunities and support for the least advantaged members of society (Rawls, 1999). Therefore, by focusing on social justice, he associated justice mainly with organizational relations between people, and did not examine justice as a virtue of individuals or their character. Moreover, his main preoccupation was with distributive justice, while a broader view would include retributive and restorative justice, too. This is important because injustice is not limited to economic hardship inflicted upon the

^{··} pp. 28-42 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

poor but exists in other areas such as the division of political power, as well as property, and personal crimes inflicted on humans. The situation of Syria in recent years is an example of gross injustice in the form of state crime by imprisoning and torture of innocent people for speaking their mind, bombing civilian neighborhoods and killing of innocent children and women in order to control political power (Van Dam, 2017).

In "The Idea of Justice", Amartya Sen (2009) has criticized John Rawls for a sole focus on building just institutions, emphasizing instead on the central role that human behavior plays in administration of (in)justice. Furthermore, Sen suggests that the theoretical framework devised by Rawls to achieve perfect justice is far from the reality of the world, while it makes a lot more sense to try and remove clear injustice to the extent possible. Therefore, he argues for the identification of amendable injustice, and emphasizes that applying theory to set up just institutions is not enough without compliant "behavior" by people running and engaging with these institutions (Sen, 2009).

But to have people behave with justice, one needs to define the virtue of justice. Mathews (2010) has described the virtue of justice as love limiting itself with the example of a father limiting his overwhelming love to his child in order to not spoil her. Building on the example of justice as what balances a parent's love to his child, and broadening this notion to apply it to the wider community, one may say that compassion (love of others) and justice are what is needed to help keep the community together and help it grow and flourish. Therefore, love and justice may be better described as two complementary virtues; an example of the *yin* and *yang* in ancient Chinese philosophy that speaks of compassion and wisdom (Cooper, 2010) which in the West are commonly referred to as the head and the heart. To not act justly would demonstrate one's ignorance or lack of wisdom, and to not act kindly would demonstrate one's lack of compassion or heartlessness.

However, nowadays goodness/morality is commonly considered different from justice, in the same way that being bad/immoral is considered separately from being unjust. For example, if someone is a liar, his lies are considered immoral but not necessarily unjust. I do not mean to say that injustice is not considered an evil, but that injustice is commonly seen in a wider spectrum that includes evil and immoral acts of oppression at one end, and some "social problems" such as poverty and homelessness, at the other end. Also, justice is commonly treated as belonging to a different domain from moral virtues such as honesty, generosity and gentleness, though interestingly these virtues also find meaning mostly in one's relation with others, just like justice. Therefore, the question of why justice has been somehow pushed aside from other virtues is itself a valid one. Is it possible that the society has become desensitized to injustice because it is so prevalent and/or structured into our civilization? An alternative explanation, however, could be the common use of the term justice in the context of "social" justice, and thus allowing the concept of justice to be examined as more of a social problem, and not a (personal) moral virtue.

Nevertheless, as it was mentioned earlier, justice was considered a moral virtue by a few ancient philosophers such as Plato, and more recently Amartya Sen has emphasized the importance of just "behavior", beyond the notion of building a just structure in social institutions. In this article, first I shall explain a more complex

view of the notion of justice, by referring to the four overlying layers of "fairness", "equality", "desert" and "respecting others' moral rights" (Shaw, 2011). The next question I will discuss is about the position of justice in the world. There is so much injustice, and evil, in the world. Without justice, it is hard for humanity to make sense of the purpose of life especially when it is cut short by gross injustice. Do we live in a just world? If yes, as some religions say, how?! If not, what does this fact say about the value of justice as a virtue? I will answer these questions in the second part.

Research motivation, methods and limitations

I grew up in a majority Muslim country and received extensive education in Islam as part of public education at high school and the university. Later, as I moved to Kyoto in 2000, I began to study Buddhism as practiced in Japan, and have attended regular lectures on Buddhism and received preliminary training in Buddhist meditation in Oita for the last 5 years. I had learned about Christianity as a child and have continued studying the Bible for personal spiritual support in times of stress through these years, though intermittently. My familiarity with these religions and friendship with their followers enabled me to form a number of hypotheses for this study and to interview colleagues and acquaintances over their thoughts on justice.

Nowadays, the news from sociopolitical affairs of the world are easily accessible to most people. The Internet has done a great deal in globalization of information, and thanks to these technologies we come to know of the brutality and the cruelty of life in certain geographical locations on this planet, and for certain groups of people everywhere. The Middle East has very often captured a title on the daily world news, such as the time that ancient Buddha statues in Bamiyan, Afghanistan were destroyed by the Taliban in 2001. Some events elsewhere have also been pictured strongly in public media, for example when the persecution of Rohingya minority Muslims in Myanmar made news more recently (2017). I started asking the question of how Buddhists and Muslims would think of these examples of gross injustice to one another within their worldview, and I hoped that a critical analysis of the concept of justice would bring more insight to interfaith tolerance.

Having been recognized as a Middle Eastern foreigner living in Japan for 18 years, I have had my share of difficulties with discrimination, which also motivated me to do research on the topic of justice. Moreover, while collecting and writing down the facts and arguments for this paper, I observed a series of events that could be described as a chain of coincidences; there is no doubt that uncertainty as a factor plays a significant role in physical real-life experiences. In such instances, arriving at a spiritual conclusion is usually considered naïve and unscientific, even though people commonly spend a lot of time interpreting cultural myths into a doctrine to help decide how to live their life. Moreover, they can be strong motivating factors at a subconscious level, even when they are hard to discuss.

Some experiential wisdom is almost impossible to communicate and to share because it has to be personally experienced. Meditation is one such example, because one cannot grasp its impact without going through the experience. At a personal level, these experiences have shaped me both spiritually and morally. I learned to define "faith" as beliefs based on close personal encounters under mindful introspection in the spiritual realm, but not what one might choose to "pick up" to

blindly believe in. On one hand, I realized there was some wisdom for debating them, and on the other hand, I felt that not all wisdom can be communicated and what one learns by seeking out the truth may be his and only his, forever.

However, modern academic paradigms require researchers to ignore personal bias in their study, especially when there is uncertainty over cause and effect in an issue surrounded by controversy. The final solution I contended with was to stick to my notes, the facts of the world as reported and the arguments that could be logically based on them. Therefore, I shall refer to many cases of actual events, as they help with an understanding of the underlying argument which otherwise would be difficult to convey. Fortunately, a lot of data, even remote historical ones, can be debated and a decision can be made whether they are backed up with evidence and logic or not. And such conclusions are good enough for stepping into the path, knowing that you carry the light of critical examination over the collected data and information. That is how I planned to work on this topic.

The layers of justice

Here I argue for a broader meaning of justice as used by Plato. Justice is not merely a simple concept limited to social institutions but quite a complex one that can be broken down to four overlying layers or levels. The first level that is commonly used in economics and law is to allege that "justice" is "fairness". Justice as fairness has a comparative basis: one is treated "fairly" when others are treated the same for committing the same act. In this view, if the "law" is implemented to all people in a similar way, it is fair and just. This is also what Aristotle believed in: "one must treat similar cases alike except where there is a relevant difference". However, this view of justice as only fairness is deficient because applying an unjust rule to all similar cases does not qualify as justice. Let's look at an actual case:

Iranian News Report (January 19, 2018); Thief's Hand Reportedly Cut Off by 'Guillotine' as Punishment: "Authorities in Iran have amputated the hand of a convicted thief in a prison in the country's northeast. The report from the ISNA news agency says one hand of the 34-year-old convict identified only as Ali was cut off by "guillotine" in a prison in Mashhad, Iran. The report says man's hand was amputated after he was convicted of stealing jewels, sheep and a motorcycle."

Iranian people were especially upset about this news story and other similar cases because poverty and unemployment have been soaring to new peaks in recent years. How is it just to cut off someone's hand without taking responsibility for the dire economic situation resulting from growing inflation, wide scale mismanagement and rampant corruption? One may realize that in the examination of the notion of justice one needs to rise beyond the domain of the law, because the lawmakers' assumption is that the laws are just and even if not, they must be respected as such. This is one of the many distinctions between law and ethics. Ethics has expectations far beyond the interpretations of law, and as its mission, ethics commends on the existing laws and attempts to improve and correct their flaws. Martin Luther King Jr. said: "One has a moral responsibility to disobey unjust laws." (letter from a Birmingham jail, April 16, 1963; Martin Luther King Jr. Research

and Education Institute). Therefore, a move to the next level, is what an ethical direction would require.

A ruler must not apply an unjust rule to his subjects. But how can one know if a law is just or unjust? A general rule is that laws would be written justly only when all people are "equally" respected and given consideration. This is similar to the Golden Rule of ethics: Do to others what you would want them to do to you. Therefore, the next level adds the idea of "equality" of all humans to the notion of justice. Racism, sexism, ageism, and other forms of discrimination between people which are common causes of injustice can thus be amended because at this level, it is necessary for justice to view everyone as equal. For instance, if the rights of the disadvantaged and the poor are respected, and their welfare is considered as important as that of the wealthy, then regressive taxes that put a relatively higher burden on the middle class and the poor would not be enacted. Would a lawmaker draft a regressive tax law if he represented the poor?!

Aljazeera report (December 2017): "A UN rights expert has issued a damning report on the state of the US under President Donald Trump, saying the Republican president's tax reform plan "stakes out America's bid to become the most unequal society in the world" and "will greatly increase" income inequality. Philip Alston, the UN special rapporteur on extreme poverty and rights, made the comments on Friday, after visiting US cities and states to examine the level of homelessness and poverty facing the country. The proposed tax reform plan "is essentially a bid to make the US the world champion of extreme inequality", Alston said in his preliminary report" (Alston 2017).

The third layer adds another requirement for justice which is "desert". Desert means that justice requires that one should get what one deserves. For example, if a person has the needed talent to become a skilled surgeon (or any other profession), he deserves to be given priority to study medicine, over those who do not have the needed talent. That is why people consider it right to have entrance exams for various schools to make sure the limited resources are provided to those who deserve it the most. If such level of justice is achieved, people may be treated in some situations "differently" based on desert, and not treated the same "blindly". One might suggest that justice at this level facilitates self-actualization of each individual according to diversity and the associated desert. Therefore, this level of justice is an acceptance and affirmation of human diversity as opposed to "plain" fairness.

The Western reader may think consideration of desert is an obvious fact, but would be astonished to know that a lack of consideration of desert is one of the fundamental problems in some cultures that are based on strong collectivism. For example, it is often accepted that women "deserve" to be treated differently at the workplace when issues related to pregnancy, childbirth and motherhood (such as breastfeeding) arise.

Kyodo news in Japan reports on "maternity harassment" (February 2016): "Maternity harassment is a well-documented reality that involves the bullying, demotion or even dismissal of workers who become pregnant. Despite being illegal, harassment against pregnant women remains rife in Japan. A labor ministry survey

on harassment conducted last year showed that 21 percent of full-time female employees and 48 percent of temporary workers experienced it relating to their pregnancy or maternity. Behind the trend is an old-fashioned corporate culture which holds that people who cannot perform under the same conditions as others should not continue to work."

During my 18 years of life and work in Japan, I realized how the system would sometimes make inefficient choices based on a "plain" equal treatment of all employees without even attempting to consider their individual strengths and weaknesses. During committee meetings, the main reason put forward for making such bad decisions was treating everyone "similarly" ("fairly"?!) while the managers knew that the employees and their performance would be affected negatively. Interestingly, many employees were afraid of citing their concern because "standing out" was not a safe policy in their eyes. Such examples demonstrate the need to consider the diversity of people to treat them "justly", based on desert.

Research Committee Meeting at Japanese University (2014): The office in charge of research subsidies at the school asked the committee in which I was a senior member, to approve all research fund applications that had been filled out according to the prescribed format. Two non-Japanese committee members referred to a few very weak applications with almost no chance for any research outcome such as a publication, but the Japanese office members who formed the majority finally approved all received applications based on the idea of fairness. The outcome resonated with a notion of fairness as equal treatment of all employees with no regard for efficiency (and desert), and was reminiscent of the observation I had at Kyoto University School of Economics over a surprising interest by the faculty in Marxism and their unique interpretation of it, which has also been referred to by Meek (1958) and Albritton (1986).

Finally, at the fourth level, justice is not served when the "moral rights" of a person are violated (Mill 1957). This level elevates the concept of justice to the assurance that other moral/ethical principles are being observed. Thus, justice requires that the autonomy of people be respected, that people not be harmed, that benefits be realized where there is a potential, and so on. If our view of justice includes the notion covered in this last layer, many moral duties will be covered directly or indirectly through the requirement of preserving the moral rights of anyone and everyone. For example, one needs to be truthful to others, to not deceive them, and to respect their other moral rights. Justice can thus become a foundation of ethical behavior and the source of one's ethical duties towards the environment, other people, and generally to the world one lives in.

Let's examine a case of injustice in the Islamic Republic of Iran that has influenced education, citizens' rights of representation, and the provision of public services and public works:

ACCORD report on Iran (September 2015): "Sunni leaders reported bans on Sunni religious literature and teachings in public schools, even in predominantly Sunni areas. Sunnis also noted the underrepresentation of Sunnis in government-appointed positions in the provinces where they form a majority, such as Kurdistan and Khuzestan, as well as their inability to obtain senior government positions.

Residents of provinces with large Sunni populations, including Kurdistan, Khuzestan, and Sistan-Baluchistan, reported repression by the judiciary and security services, discrimination, lack of basic government services, and inadequate funding for infrastructure projects."

Justice in the world

The issue of justice in the world is in fact a very important one from the standpoint of philosophy as well as theology. Philosophers have asked a much-related question of whether there is evil (such as gross injustice) in the world, and if so how would an almighty God allow evil to exist in his domain. The underlying assumption in monotheist religions is that an almighty God would not do evil, would not create evil, and would not allow evil in his domain. Let's focus on the issue of evil in the form of gross injustice in the world, such as racial segregation and ethnic cleansing. If such gross injustice is evil, then we may also ask if the world we live in is a just one, or is unjust; and would an almighty God create a world that is grossly unjust?

We shall come back to the issue of God and the theological debate later, but for now let's focus on the reality of the world including "nature". In the eyes of a fair observer who is informed of human history and current world affairs, there is no question that gross injustice has existed in the past and continues to exist in modern times. Also, a fair observer can hardly refute that there is a lot of injustice in the world which at times is as dark and evil as it can get. For secular academicians like Amartya Sen (2009), there is no question that the world we live in is filled with plenty of gross injustice.

The Town Where Children Are Bombed, BBC Video Report (January 24, 2018): "Syrian regime routinely bombs civilians in Eastern Ghouta; the BBC has obtained shocking footage from the besieged area of Eastern Ghouta in Syria where 200 people have been killed in the last two weeks, including 50 children. Since mid-November 2017, the estimated 393,000 people trapped there have been subjected to air strikes, shelling and bombardment on an almost daily basis by government forces and their allies."

Empirical examinations of the current situation of the natural world as well as human societies and historical facts provide strong proof that we do not live in a just world. Wars, slavery, genocide, ethnic cleansing, mass killings, and so on, are only some examples of the vast number of injustices that have occurred and still are occurring around the world. The natural world is not a just one, either. From genetic aberrations that put some people at very high risk of diseases, to natural disasters like earthquakes that suddenly happen to others, innocent children who die because they are born in a certain country as a result of famine or war, etc., the world does not appear to be just. Still, this is not a reality that most people can find acceptable.

Quite the opposite, according to social psychologists most people suffer from a delusion that the world is fair and justice prevails; psychologists call this "the justworld hypothesis" which in their view is a common assumption by people that actions have appropriate consequences which therefore helps people make sense of senseless events (Lerner, 1980). There are popular expressions in various languages implying a certain consequence for one's actions, such as: "what goes around comes around", and "you reap what you sow". One consequence of this assumption is a

dispositional attribute called "blaming the victim"; for example, it is reassuring to think that somebody who was killed in an accident deserved what happened to her. Lerner started this research wanting to know why cruel systems of government received popular support and how people accepted social norms and laws that caused misery and suffering (Lerner, 1966). Apparently, people commonly assume that there is a reason for the misery experienced by the victims of cruelty, even if they do not know what exactly the reason is.

Nevertheless, most people accept that definitely there is some evil and injustice in this world; however, the problem is that they think evil and injustice will somehow receive its due punishment, and good people will receive the reward for their hard work through opportunities to succeed such as by getting rich. Somehow, justice prevails in both retributive and distributive ways, and people receive their due reward and/or punishment. These are very reassuring thoughts, indeed. The only problem is that this is a false assumption, or as Lerner calls it, a delusion. We do not live in a perfect world, and even advocates for justice are not looking for perfection; they just hope that gross injustice can be eliminated. In many places, the human societies are far from this goal.

Islam

Religions offer a more romanticized view of justice in the world. In Islam, God is known to be just and the world he created is also considered a just place (especially in *Shia* Islam) where people may suffer for their sins or undergo a divine test of their faith, or experience the natural consequence of their actions; an example for the latter is a child who dies in a car crash because the driver was speeding and the car overturned. The death of the child is a natural consequence of the car speeding and thus crashing.

Dr. Abdolkarim Soroush (2016), a well-known Islamic philosopher from Iran, explains that God's rule over the world does not (have to) follow justice but rather defines it; it is justice that follows the rule of God, and therefore justice is a redundant concept in Islamic jurisprudence. He goes as far as saying that justice is how the world functions under the God's realm, and any human attempt at justice is in vain as it is artificial and arbitrary (ibid). Thus, he recommends following the other virtues and the word of God, and leaving justice aside.

Let's have a look at two quotes from the Quran about justice:

"Whoever does good, does so to his own benefit; and whoever does evil, will suffer its evil consequence. And your Lord is not ever unjust to His servants." (Surah Fussilat, 41:46)

"God did not do injustice to them, but they had wronged themselves". (Surah al-Ankabut, 29:40)

Muslims are expected to act on their duties toward God, and follow the instructions provided to them through Islamic law. This law (*sharia'*) includes rewards and punishments for certain actions but the aim of these is not to protect justice, which is the realm of God, but rather following the word of God and surrendering to him. Injustice in Islam results from living under the rule and oppression of an enemy of God. Otherwise, in an Islamic system, any suffering may be part of the exercise of divine justice.

The speech of Ayatollah Jannati (January 2018): An audio file of a recorded speech by Ayatollah Jannati, a very powerful figure in the Islamic Republic of Iran, has been circulating through social media in Iran in which he says people "should be patient and accept the increasing inflation and rising living costs because that is what God wants for them". Ordinary people are spreading this audio recording as a humorous example of lame justification and rationalization by the authorities attempting to not take responsibility for economic hardship and the suffering of the people. People want justice, whether Muslim or not, but they are mostly not aware of the doctrine behind the Ayatollah comments.

This is not the first time that corrupt rulers preached to people to accept misery, suffering and injustice as the fate written by God. The Umayyad Caliphs, for instance, exploited this argument to sanction their absolute authority over the people, and claimed that all their actions were in fact decreed by God because they were the chosen rulers (Aslan, 2005). Hasan al-Basra, an acclaimed Sunni scholar and a distinguished theologian in the 7th century AD adopted this view and claimed that even a wicked Caliph must be obeyed, for the simple reason that God had let him take the throne (ibid, page 152). It should be emphasized that Muslims expect to be treated with justice just like almost every human being. What I have described here is how the issue of justice may be viewed differently through Islamic worldview by trained scholars.

Essentially, Islam teaches that Gods delivers justice in the world and somehow everything that happens to anyone, including the faithful, has a reason and should not be viewed as a failure of (divine) justice. In Islam, there is also the afterlife to carry out justice and make up for any disadvantages and injustice done to righteous people. This is contrary to the overwhelming view in Western countries where justice is expected from the political system and not through punishments or rewards in the afterlife. According to John Shelby Spong who was a bishop of the Episcopal church till 2000, since belief in life after death faded in the West in the late 19th and early 20th centuries, "liberal politics was born to fill the vacuum created by the denial of a belief in life after death ... If fairness was not destined to be achieved in an afterlife, a passion to achieve it in this life must be served" (Shelby 1994, p. 289).

Interestingly, Islam offers still another explanation for the living conditions of a people, suggesting that collective justice is possible where people receive retributions for their "collective" conduct:

"Indeed, God will not change the condition of a people until they change what is in themselves." (Surah al-Ra`d, 13:11)

This is an interesting notion, especially in modern times in which people have clear-cut ideas on nation-statehood. For example, Iranians are asking if they deserved the socioeconomic hardship following the 1979 revolution against the Shah for turning their back on his development policies. Do people deserve all the hardship associated with a dictatorship for their silence in the face of tyranny? Will God change a nation's fate if they correct the wrongs they have committed as a whole? What if a nation inherits the wrongs committed by their predecessors? Are people morally responsible for tolerating injustice, even if voicing their opposition may cost them their lives?

Buddhism

The problem of injustice in the world is resolved differently in Buddhism. Buddhism believes in *karma* and reincarnation which were ideas already existing in Hinduism before *Buddha*. Reincarnation was a popular belief in India at the time of the Buddha that a person would be reborn after death into a new state determined by the quality of his/her actions in the life they had lived (Armstrong 2001). *Karma* is a natural consequence of an action that rewards or punishes that act; one's collected karma at the time of death will also determine in which form one will be reincarnated. "The law of karma was a wholly impersonal mechanism that applied fairly and without discrimination to everybody." (ibid page 31). Therefore, by coming back to life in a different form in many cycles, through reincarnation, and receiving the *karma* of one's actions in this life and/or the next life-form, justice may be realized. What is the origin of these beliefs in reincarnation and *karma*?

The world-renouncing (ascetic) views of the so-called "renouncer tradition" have been cited as the origin of the two pillars of Indian theologies; one is *samsara*, the belief that life is suffering and subject to repeated death and rebirth, and the other is *moksha/nirvana* as the goal of human existence (Flood, 2003, pp. 273-4). Not only the doctrine of reincarnation was widely accepted at the time of Buddha, it would also be a necessary precondition to Buddha's struggle to stop the cycle of suffering. What would be the significance of finding a cure for suffering if it ended with death? Instead of spending a lifetime in exhausting meditation to find release from the cycle of suffering, one would surely find release with the inevitably incoming death. Hinduism claimed that one's soul or self would be carried over into the next body but the Buddhist doctrine that a permanent self was a delusion taught that only a stream of consciousness would move from one body to the next (Armstrong, 2001, p. 144).

Although intuition agrees that committing an unjust act by an individual may have a negative impact on the individual himself (bad *karma*), this doesn't help much with the person who was wronged; the *karmic* mechanism cannot explain how the recipient of the injustice may be compensated. Moreover, there is no objective evidence or any research method to examine the claim of reincarnation based on *karma*; and it is not a simple doctrine either. To say that a soul continues to exist after death is one thing, and to say it chooses another body, based on the *karma* of its actions in a previous life, is another thing. One is asked to believe that somehow, a stream of consciousness makes a universally appropriate assessment of its actions and merits to find the right body for reincarnation so that the cycle of suffering may continue in a fairly selected body. As stated before, there is no empirical proof for any of these claims. Children dying from hunger, war, cancer and other diseases are hard proof that we do not live in a just world, and to claim these evils are somehow 'just' is delusional at best and discriminatory injustice at worst. But let's look at an example of what behavior may result from this line of thinking:

The New Humanist report by DeBakcsy (January 2013): DeBakcsy is a calculus teacher who worked in a Buddhist school for 9 years. He writes: "Buddhism has inherited from Hinduism the notion that existence is a painful continuous failure negating itself. The wheel of reincarnation rumbles ruthlessly over us all, forcing us to live again and again in this horrid world until we get it right and learn to not exist. Life basically is suffering and is something to finally escape from. There was a

student having problems memorizing material for tests. Distraught, she went to the monks who explained to her that she was having such trouble now because, in a past life, she was a murderous dictator who burned books, and so now, in this life, she is doomed to forever be learning challenged. To a kid who earnestly believed that these monks had hidden knowledge of the karmic cycle, it was devastating. She was convinced that her soul was polluted and irretrievably flawed, and that nothing she could do would allow her to ever learn like the people around her."

Discussion

It is hard not to see the injustice in our world, if one seriously looks for it. A lot of people are discriminated against because of their race, gender, religion, nationality, skin color, social class and so many other attributes. This is while in many such instances there are laws, but they are either broken or ignored, and the disadvantaged suffer from a lower visibility by the law, too. Looking back into world history brings out even more shame. The memory of the World War II is still very close. Tens of millions of innocent civilians were killed in a senseless war. Their deaths were not just and our world did not treat them justly. Many people live a hard life and die in miserable conditions. The deepest philosophical question that every human being may need to answer for him/herself is the purpose of life and its meaning in the face of inevitable death.

As a teacher, I have had to not only make my own assumptions, but also prepare an answer for young students some of whom were dealing with minor depression, difficulties of adjustment as a university student and anxiety over what the future holds for them. Many people find the daily struggle of living too hard to cope with, and finally after all they achieve with hard work for many years, there comes ageing and death anyway! What I tell them is that our life is a blessing of love, a chance to experience living and its pleasures, and an opportunity to share our experiences with other living things including loved ones, family and friends, and the broader society where we learn to form our own identity. We are given a chance of love, something no nonliving thing ever gets.

If they ask me why bother living with all the difficulties and the stress of conformity to social rules, the pain of losing loved ones, and the suffering of physical illness and injuries that finally lead to death, I respond using a simple game theory in economics. If you are offered a \$100 bill, will you accept it or not? A rational person will accept it even though she knows that the bill will be used up and there will be no money left after it is all spent. Why should we not appreciate a gift of love which is the life we are given, even though it won't last forever? Not accepting a gift, knowing that no gift can last forever, is irrational.

And if asked to explain the meaning of death in spite of love, I suggest that living a life is based on both love and justice; one may give and/or receive love more or less through the life, but death is where everybody is treated the same, because everybody dies. Death is the guarantee that ultimately, we end up just like everyone else. No king, no dictator, no warrior, and no false leader will be able to live out other people indefinitely; everyone gets a limited share of the gift of love, and knowing that there is death after a lifetime filled with both moments of joy as well as suffering, one can appreciate love and justice, both. The moments of life are

meaningless without the experience of love, and worthless without the knowledge that they are on offer for a limited time.

A similar concern for both love and justice can be seen in the work of Amartya Sen. Sen (2009) insists that fairness involves a reasonable concern for the interests of others, and introduces public reasoning and democracy through decision-making by discussion, rather than just holding regular elections, as a practical method to achieve fairness. He asserts that a lot of injustice in the world results from human behavior. Almost everyone wants to be treated justly but when it comes to the treatment of others, many might be happy getting away with injustice. Having compassion to others which is a common teaching in most religions, helps but is not enough without the development of a sense for justice. This is the notion of the virtue of justice that I have been arguing for. Here, I would like to refer to a few quotes from Bible:

"Follow justice and justice alone, so that you may live and possess the land the Lord your God is giving you". (Deuteronomy 16:20)

"Blessed are those who act justly, who always do what is right". (Psalm 106:3)

"This is what the Lord Almighty said: 'Administer true justice; show mercy and compassion to one another". (Zechariah 7:9)

"He told them, 'You also go and work in my vineyard, and I will pay you whatever is just'." (Matthew 20:4)

As seen in these quotes, there is an emphasis especially in the Old Testament on justice as righteousness, and also on administration of justice along with compassion (love). Although a search in the New Testament brings fewer verses with the word justice, it must be remembered that the words justice and righteousness were commonly interchanged during translation from Greek, as seen in Matthew 20:4. However, overall it is agreed by most Christian thinkers that the kind of justice mentioned in the New Testament is mostly of restorative rather than retributive kind. The important point is that justice is a significant biblical concept on morality, along with love and compassion. Snyder (2001) speaks of the Christian belief in restoration of justice with the formation of the God's kingdom on earth.

The last question on my mind was about a belief in praying to god for justice. In the Middle East, people commonly believe in praying to God for his wrath on the oppressors. This is a bit similar to the Japanese concept of *tenbatsu* (divine punishment). For example, some Iranians may believe that Iraq has suffered a long war brought to them by the US president at the time because of the aggression they committed first on Iran and Kuwait. Of course, there is no proof for that. However, I had the chance to witness a strange case in a Japanese civil court which appeared as a total sham. A Middle Eastern man was ripped out of his savings by a prefectural civil court and after he asked for an appeal to the higher court, the ruling was simply approved as is the case in well over 90% of cases in Japan. The man was extremely upset over the discriminatory attitude of the local court and its blatant approval by the Fukuoka Higher Court communicated to him by his lawyer on November 7, 2016. In a bout of anger and disappointment, he sat on his porch and prayed for avengement. On the same day, he sent an e-mail to his lawyer to foretell a divine wrath, and simply asked me to watch the news in the next morning.

Huge street sinkhole disrupts services, forces evacuations near Fukuoka's Hakata Station (Japan Times Report, November 8, 2016): "A sinkhole opened up beneath a major road in downtown Fukuoka on Tuesday morning, disrupting traffic, power, transmission and banking systems as authorities scrambled to evacuate surrounding areas at risk of more cave-ins. The Fukuoka police and City Hall said they had not received any reports of injuries but blocked off nearby areas as a safety precaution. The road apparently caved in at around 5:15 a.m. at an intersection near JR Hakata Station, according to Fukuoka City Hall. City officials said the sinkhole was likely caused by water flowing into tunnels at the site."

What a coincidence! Still, I cannot think of a mechanism that can be researched. How can any research method examine such possibility? There is no way I could verify a causal relationship between a prayer for justice and events that follow. However, I have found the following verse in biblical scripture:

"Beloved, never avenge yourselves, but leave it to the wrath of God, for it is written, Vengeance is mine, I will repay, says the Lord'." (Romans 12:19).

This was a part of my study that lies outside empirical research methodology. I will not discuss it any further and will not include it in the conclusion of this study, but would like to keep it here only because it emphasizes on religious views over retribution as well as nonviolence.

Conclusion

Justice is not a simple concept that could be summarized as fairness, but is a complex notion that can be broken down into four levels. The first level is fairness in applying the rules. The second level is making sure the rules are just themselves, paying attention to equality of people, whether poor or rich, black or white, man or woman, etc. The third layer is a consideration of diversity that may deserve a different approach. The fourth layer involves the just treatment of others over their moral rights. To be able to preserve justice, requires more than a machinery design of the system. It requires people who have invested in the virtue of justice so that they behave justly in complex situations.

I have argued for justice as a paramount virtue, which together with love makes up the philosophical foundation of ethical behavior. The reason is not too difficult to see; justice is a hard virtue to acquire and to propagate. Justice finds special merit in the current era in which large steps have been taken in the society to protect individual autonomy, to maximize beneficence and reduce harm while the gap and disparities between the rich and the poor, the advantaged and the disadvantaged have only become wider. The modern human civilization has been quite successful in its continuous progress towards protecting the autonomy of individuals, the benefits of technology and reducing the harms of diseases and disasters, but the achievement of justice has always been far from reality. Socioeconomic studies draw a picture of a widening gap between the rich and the poor in most places.

The very fact that we live in a world which *is not* just, makes our pursuit of justice the most humane virtue possible. If we lived in a just world, moral virtues did not mean anything; they would be redundant. This fact alone can make the pursuit of justice what gives meaning and purpose to our lives as human beings. People like Mahatma Gandhi are examples of the virtue of justice that starts within a person and

shines through him to others and the society, ultimately freeing a nation from colonialism.

Critics might say that such assessment of justice still does not cover important areas of morality such as compassion, forgiveness, generosity, etc. and I agree with such observation. In fact, love and justice need to go hand in hand, and indeed some philosophers including professor Cornel West have suggested that justice is how love presents itself in the public arena. My perspective of justice is a bit different from this latter view, as I explained earlier regarding the balance of love and justice, but it suffices to say here that love and justice are the two main foundations of morality and ethical behavior.

Love gives meaning to our birth, when we are blessed with the gift of life, and death gives meaning to justice, reminding us that we all have a limited time that is too short to justify cruelty to others. To remove injustice from the world, society needs to help grow the virtue of justice as a paramount ethical virtue in every individual, just as people need to be loved. This is how humanity may discover a higher meaning in its everyday struggle to live a better life where the conscience of humanity does not get continuously smashed by poverty, conflict, war and misery for a vast number of people.

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I had the honor of attending the 2009 Bioethics Roundtable in 2009 as an observer. I still remember how excited I was from the diversity of the participants and the wide range of presentations made over two full working days. I decided to make a presentation from the next roundtable and I have continued to do so every year until 2018. In other words, I never missed any of the roundtable conferences and they became my main stimulus for doing research in bioethics. This fact by itself tells a lot about the high spirit and enthusiasm of having an opportunity to participate in this annual academic research activity. However, it would still not be possible without the hard work and the energy poured into it by both Professor Takao Takahashi, the host, and Professor Darryl Macer, the Secretary of Asian Bioethics Association (ABA).

Running an international conference every year can be a lot of work for one host institute only; however, Professor Takahashi never showed any sign of fatigue over this job. I have always admired his persistence, his interest in academic philosophy and bioethics, and his compassion towards all the participants all these years. He continued to arrange for the needed logistics of this conference even after his official retirement at the age of 65 and has kept on supporting the roundtable for 5 more years under the auspices of the HIGO program at Kumamoto University. I would also like to honor and express my gratitude and respect to the wonderful and compassionate master of Japanese ethical philosophy, Professor Takao Takahashi, who has beautifully taken care of 12 years of research presentations with patience, confidence and diligence.

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Equal dignity and social inclusion

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Summary

Much of the literature dealing with impairment, and autism in particular, discusses the medical nature of the condition but does not deepen its social dimension. John Rawls, for instance, is criticized for postponing the issue of disability. Persons with mental disability are often discriminated against. The reason is that society imposes its will in terms of rules, laws, and policies. People are expected to be rational agents and productive members of society. This rigid requirement undermines the equal dignity of human persons. This paper seeks to address the above gap by explaining the social nature of impairment. To do so, it will propose systems modeling as the appropriate means in improving the situation of an individual with autism. Persons with cognitive impairment can live meaningful lives. They have so much to contribute in terms of a productive and integrated society in which individuals are valued for their moral worth. Social inclusion is crucial in this regard. To broaden the implication of systems modeling to social policy, the Philippine disability law will be analyzed.

Introduction

It can be argued that the Rawlsian theory of justice is committed to individual rights and to an egalitarian model of economic redistribution. John Rawls believes that the respect for the basic liberties of the individual has a special importance. It must never be restricted. Persons are to be principally valued on the basis of their moral worth. In this regard, the fundamental rights of every individual must be protected by their government. The basic entitlements that each is expected to enjoy, being a citizen of the state, cannot be sacrificed nor put aside in favor of political expediencies.

Rawls grounds his theory in the ideal of moral equality. However, Rawls has failed to consider the other ramifications of an impartial starting point. Rawls's position is viewed as inadequate, given the fact that the hypothetical character of the original position disregards the situated contexts of people, including those with mental disability, which he deliberately excludes from the starting point of his theory of justice. It is society's moral obligation to recognize the rights and entitlements of persons with impairments.

But while many laws are intended to be the remedy in the unfair treatment of persons with physical or cognitive disability, society as a whole often fails in addressing the systemic abuse these persons suffer from. Children and adults who have been diagnosed with autism, for instance, experience various forms of discrimination. They are oftentimes subjected or forced into embarrassing

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situations, denied of their basic right to fully grow as persons, and deprived, in many ways, of the valuable things that they are entitled to as members of human society.

What is Autism Spectrum Disorder (ASD)?

Autism Spectrum Disorder (ASD) research has been thoroughly focused on the medical aspect of the condition, but not much has been stated from the point of view of social policy. But autism, it can be argued, is also a justice issue. Ingrid Robeyns thinks that researchers are inclined to investigate the medical aspect of autism instead of considering the actual experience of impairment on the part of the families and the individual. Autism is seen as a financial burden to families and society in general (Randolph-Gips and Srinivasan 2012, p.1).

It is also worth mentioning that there has not been any definitive finding with respect to its root cause, although most researches still point to genetic anomalies. According to a recent study by Mary Randolph-Gips and Pramila Srinivasan, "autism has an established genetic component," though they also report that the search for "single autism genes has not been fruitful" (ibid). Meanwhile, another investigation also confirms that ASD is "a disorder of neurological origin with abnormalities found in the coordinated functioning of brain regions" (Just et al. 2012, p.1293).

From a strictly medical point of view, autism includes classic autism, Rett syndrome, PDD-NOS (Pervasive Developmental Disorder – Not Otherwise Specified) and Asperger's syndrome (Robeyns 2005, p.193). According to Robeyns, the recent diagnostic criteria says that in order to be diagnosed with autism, "one needs to have persistent deficits in social communication and social interaction across multiple contexts, as well as restricted, repetitive patterns of behavior, interests and activities" (ibid, p.194). In this view, Randolph-Gips and Srinivasan note that "there is increasing evidence that it is a highly diverse disease affecting multiple systems of the body" (Randolph-Gips and Srinivasan 2012, p.1).

Autism as an impairment involves certain motor abnormalities (Robeyns 2005, p.194). It has been suggested that "consistent with autism being a developmental disorder, there is an abnormal developmental trajectory of the brain" (Just et al. 2012, p.1294). Robeyns's research in the field has indicated that about 45% of those afflicted have an intellectual disability (Robeyns 2005, p.194). She explains that there are co-concurring conditions, including "ADHD, gastro-intestinal problems, immune dysregulation and sleep disorders, anxiety and depression, oppositional defiant disorder, aggressive behaviors and self-injurious behavior" (ibid).

Randolph-Gips and Srinivasan also reveal that in most cases, "some children have frank immune disorders, while others appear healthy" (Randolph-Gips and Srinivasan 2012, p.2). Both add that "some individuals show signs of autism from birth, while others appear to have a period of normal development, and then regress" (ibid). The two researchers believe that "many of the patients present with behavioral challenges, so the testing procedures must be all-encompassing and as less invasive as possible" (ibid). It is common that persons with autism exhibit sensitivity to certain food and some have gastro-intestinal problems which restrict their food intake (Robeyns 2005, p.194).

Recently, "several genetic variants have been associated with increased risk for autism. The variants found so far are mostly associated with differences in the metabolism, rather than in brain structure" (Randolph-Gips and Srinivasan 2012,

p.2). Some research is on-going, although what has prevailed in the medical literature is the claim that autism is "a combination of genetic and environmental factors characterized by impairments in social behavior, stereotypic movements and difficulties in communicating" (ibid, p.1). It has been observed, for instance, that irregularities in neuro-chemistry could be a factor in abnormal brain activity (Just et al. 2012, p.1294).

Social justice and the question of disability

While the above are significant ways of describing the condition, they do not however provide a social framework for a holistic approach in terms of addressing the concerns and the requirement of adaptability and integration that persons with autism are faced with. The basic point is that human beings are equal in dignity. To pay respect to the equal dignity of each person means that human society must recognize rather than put aside the issue of disability. There is a need to explore and deepen the discussions on autism and social policy from the point of view of justice, though John Rawls seems to defer the issue. He explains in *Political Liberalism*:

"We do not mean to say, of course, that no one ever suffers from illness and accident; such misfortunes are to be expected in the ordinary course of life, and provision for these contingencies must be made but given our aim, I put aside for the time being these temporary disabilities and also permanent disabilities or mental disorders so severe as to prevent people from being cooperating members of society in the usual sense" (Rawls 1993, p.20).

Rawls writes in *A Theory of Justice*, that "the subject of justice is the basic structure of society" (Rawls 1999, p.6). The basic structure refers to the way the major social institutions "distribute fundamental rights and duties and determine the division of advantages from social cooperation" (ibid). The major social institutions for Rawls include the basic law or the constitution, and the social system of any country. The Rawlsian distributive paradigm is rooted in the concept of "justice as fairness" as the central organizing principle of social cooperation. People may pursue the merits that their liberty allows them, but it must be to the benefit of the worst off

But social cooperation is founded on the rational agency of the contracting parties. It is to be grounded in mutual consent. Samuel Freeman, in *Justice and the Social Contract*, thinks that Rawls's contractarian tradition is premised in an intuitive idea (Freeman 2007, p.17). In this regard, the parties to the Rawlsian hypothetical starting point contract should find the original terms of the agreement acceptable. Since rational individuals have basic notions as to their personal good or advantage, the legitimacy of social cooperation must be based on impartial, rationally sound, and satisfactory rules.

Martha Nussbaum will censure Rawls for postponing the question of disability. She says that any society that is just must not only seek equality, but must also recognize the equal dignity of each human being. For her, the concept of human dignity spells out what it means to be a person, which should not be limited to the rational attributes of the individual. Being human is rooted in the precious value of the life of each. Yet, the Rawlsian contractarian tradition only considers as cooperating members of society the individuals whose capacities lie within the normal range. As parties to the contract, citizens are expected to possess the rational

agency to be independent. But this is morally unacceptable because the exclusion of persons with cognitive impairment is a violation of their dignity as persons.

Elizabeth Anderson will argue that the desire for democratic equality seeks to end oppressive forms of relations (Anderson 1999, p.313). In this sense, the deferment of the question of disability means that the needs and rights of persons with disability are nothing but an after-thought. This is an affront to decent human beings who deserve equal treatment in society notwithstanding their difficult condition. While latent inequalities in society can have tremendous repercussions in the lives of persons who suffer from intellectual handicap, hardly anything has been done to the political arrangements that may promote their well-being.

According to Nussbaum, individuals with cognitive disabilities, "are also excluded from making their own political choices" (Nussbaum 2006, p.109). It is the case that mainstream society exphasizes as a matter of priority the meritorious achievements of people, but the issue concerning mental disability is perceived as unimportant in the pursuit of social justice. Persons with autism are viewed as social burdens, and government efforts are indicative of the prejudices against them. Responsibility and commitment are often limited to the family, but the community as a whole also shows less concern for the situation of autistic persons.

Jonathan Wolff thinks that in a society of equals, the citizens have "to consider the range of possible options that are available if we wish to treat people with disabilities as equal members of society, and of these, which are most appropriate and feasible for people with cognitive disability" (Wolff 2010, p.147). The problem, it can be argued, lies in that many people think that one cannot derive any form of advantage from people with impairment. Nussbaum expresses her dissatisfaction by protesting the blunt refusal of Rawls to include benevolent motivations in his starting point, saying that Rawls sees such things as uneven and partial, and therefore, "would not support determinate political principles" (Nussbaum 2006, p.157).

But the basic position is that persons with autism will need care for the rest of their lives. The emphasis on rational agency ignores this. The postponement of the issue, hence, Nussbaum says, is deliberate (ibid, 109). She thinks that the position of Rawls is that this question "should be resolved only at a later stage, after basic political principles are already chosen" (ibid). Such position will leave behind a significant number of people without any political representation. Nussbaum avers that individuals with cognitive impairment need to be treated fairly if "they are to live fully integrated and productive lives" (ibid, p.99).

The Rawlsian social contract is unacceptable if we try to imagine the contracting parties as limited only to those who can be fully cooperating members of society. Nussbaum believes that the failure of governments to secure the human rights of persons with disability is "a particularly grave violation of basic justice, since these entitlements are held to be implicit in the very notions of dignity and a life that is worthy of human dignity" (ibid, p.155) The postponement of the issue by Rawls is out of theoretical convenience, and yet its impact in the lives of actual human beings is considerable and must not be disregarded.

The present standards of society undermine the situation of children and adults with developmental delay. Anita Silvers and Michael Ashley Stein say that those with impairment "are precluded from being the subjects of justice…because they cannot participate in the contracting process" (Silvers and Stein 2007, p.1624). Apparently,

the core emphasis has always been the equal rights of independent and rational citizens. In this sense, Eva Feder Kittay thinks that the issue of cognitive disability for liberalism is a limiting case (Kittay 2001, p.559).

For instance, it can be observed that autistics do not have any role in the politics of the state and in the way in which the public sphere is being engaged by ordinary people. Silvers and Stein say that "neither their participation nor their perspectives, thus have seemed important to social contract theorists in developing fundamental principles and procedures for justice" (Silvers and Stein 2007, p.1616). In this way, an appropriate model of meaningful participation must be pursued in order to address the issue at hand.

What society needs is a dynamic definition of the human person. This will enable us to see the child as a unique human being possessing beautiful attributes. Randolph-Gips and Srinivasan think that, "modeling Autism requires new techniques to be developed to harness and tame the complexity of interactions" (Randolph-Gips and Srinivasan 2012, p.10). But the two authors note that "little research exists in autism modeling outside of the genetic and neurological systems" (ibid, p.6). It is argued here that the application of a systems model of disability is fully warranted.

The systems model of disability

The real task at hand is to apply systems modeling in understanding the social aspect of cognitive impairment. In "Linking Models of Disability for Children with Developmental Disabilities," John Bricout et al. argue that "the strength of ecological or systems model is that they put the person with a disability in the context of an environment that can produce real developmental changes" (Bricout et al. 2004, p.54). The aim is not just functional but also a meaningful social integration that gives value to the individual with autism as a full human person.

The systems model is rooted in the way human beings interact in their environment. There is a need to understand not only the condition, but the ecology in which the individual operates. While persons with disability may have a particular difficulty in dealing with their day to day activities, the dynamism of the person is often crucial. Cognitive disability is either reinforced or eased by lifeenhancing interventions. The point is to look for a framework that works, whether in the social or physical infrastructure, in which the "lack of fit" as described by Iris Marion Young (2011) between individuals and their social systems may be dealt with more effectively.

To deliver their mandate effectively, fundamental changes are needed not only in the institutional rules and policies governing social systems, but also in the attitude of people. Systems modeling, in this sense, is an approach that seeks the transformation of structures to make them more adaptable. Bricout, et al. say that models "can provide the basis for a systematic approach to understanding the causes and contexts of disability" (ibid, p.46). Archetypal designs can allow us to look into reality with an all-embracing perspective. The systems model can be used in the remodeling of social institutions. For instance, Bricout et al. also say that a systems model can "attribute individual characteristics to the joint effect of personal traits and environmental factors" (ibid, p.53).

The right way forward is for us to examine a particular model of society and determine whether or not it is working in terms of our expectations. It is wrong to

limit approaches to cognitive structures. It is important to look into social constraints, political situation, and the available technology within the locality. The presence of resources and opportunities for well-being, as well as the support of the community, will also matter in this regard. In this sense, social inclusion requires systemic changes and the overhaul of bad attitudes on the part of the public.

Randolph-Gips and Srinivasan believe that "the diverse systems involved in autism and its complex etiology make the development of new techniques to model Autism and mine its data, imperative" (Randolph-Gips and Srinivasan 2012, p.2). For instance, autism is based on a broad spectrum. Therefore, there is no absolute categorization. This explains why each autistic child is always considered unique. To define a human being based on repetitive habits relating to a disability is to simply reduce the dynamism of the same human individual. In "Autism as a Neural Systems Disorder: A Theory of Frontal-Posterior Underconnectivity," Marcel Adam Just et al. think that most of "the deficits in social interaction are among the most evident in Autism, and are often accorded a central or even causal role in the disorder" (Just et al. 2012, p.1314).

It can be said that there are ways in which families and society can create empowering situations that will positivize the experiences of the autistic person that are wrongly viewed as universally disabling. From a practical end, there is a need to examine the complexities of a person's life history, the heterogeneities within the family, or the norms of a particular culture, including the legal systems that are set in place. A systems model in this sense will be helpful in analyzing structural imbalances since it is broad in terms of its appreciation of the bare facts and its analysis of the various factors affecting the human situation. These factors can be both direct and indirect. The interventions from schools, institutions, and the way the family manages the experience of the autistic child may be viewed as having a direct impact on the child's well-being.

The issues associated with autism are often socially generated. The sentiment among many is that persons with impairments make the life for any family difficult. People think that they is a huge burden to carry, so concerned families need to be dynamic in order to adjust to a particular situation and for them to be able to find out the most workable solution using the most economical means. Silvers and Stein point to a faulty mindset in which it is suggested that people with disabilities will require so much from the state because of their condition (Silvers and Stein 2007, p.1616).

However, the problem goes beyond the need to government financial support for the individual with disability. There is also an underlying social wound. There are some families who are harshly stigmatized by the reality of having to care for an autistic child. For this reason, these families opt to hide their child away from the view of the public due to their unfounded fear, embarrassment, and ignorance. To end this negative attitude, communities should manifest understanding and acceptance if they truly value the life of every person. The deeper interplay between the child and the community can have a meaningful effect in the former's life.

Bricout and his co-authors say that "parents enter the medical health care system with the intention of fixing their child, at least to the extent possible" (Bricout et al., p.47). Parents can make the proper adjustments, most especially if the child is hyperactive, which is the usual case for those with autism. If the parents of an

autistic child have low tolerance for their child's behavior, it will make the situation of the child much more difficult to manage. Parents, in this regard, should find the courage to commit themselves to the well-being of the child.

Analysis of the Philippine disability law

Our purpose in examining the *Magna Carta for Persons with Disabilities* (RA 7277) is for us to determine if the said law is compatible with the Philippine social, cultural and political context. We need to know if this legislation is responsive to the needs of PWDs. Iris Marion Young says that individuals have an obligation in terms of the *"shared moral responsibility to transform unjust institutional processes so that social outcomes can be improved"* (Young 2011, p.96). The main focus should be in understanding our shared commitment in terms of improving the life situation of PWDs in the country.

In their 2009 discussion paper, Josef Yap, Celia Reyes, Jose Ramon Albert, and Aubrey Tabuga summarize the main purpose of RA 7277 "is the definitive legislation that addresses disability concerns in the country. It contains specific provisions and policies to ensure that Persons with Disabilities are provided equal opportunities and participation. Moreover, it ensures the protection of their rights through the prohibition of any discrimination against them" (Yap et al. 2009, p.4).

In truth, PWDs belong to such a discriminated group or sector. Policies, as a result, are not reflective of the actual needs of this sector. The point here is that it is the government's duty, as a matter of principle, to promote programs that advance the welfare of disadvantaged groups. The law, of course, is laudable in terms of its objectives. Social institutions can be viewed as instrumental in making the situation of people dignified. But this vital mediating function often involves "the proper implementation, monitoring, assessment, and evaluation of laws and policies, which is a problem in the Philippines" (ibid, p.4).

We find it useful to consider several provisions of the law that deal with state policy. Let us start with Section 2, paragraph (a):

"Disabled persons are part of Philippine society, thus, the State shall give full support to the improvement of the total well-being of disabled persons and their integration into the mainstream of society. Toward this end, the State shall adopt those policies ensuring the rehabilitation, self-development and self-reliance of disabled persons. It shall develop their skills and potentials to enable them to compete favorably for available opportunities."

As an anti-discrimination law, RA 7277 is admirable if the act were fully implemented, since "the rights of PWDs would be highly respected and their welfare level would be higher" (Mori and Yamagata 2008, p.7). But the problem is that the law is known only by less than a third of the population. There is an explanation for this. Most Filipinos consider the law as abstraction with no concrete application in their lives. There is a serious gap between what one might consider as the formal aspect of the law and its application in the state of affairs of the people. This is a result of the state-centric approach of policy making in the country.

Social policy making in the Philippines follows the top-down leadership approach. Since the implementation of programs has been centralized as well, this precludes participation at the grassroots level. In this respect, there appears to be no collective

sense of responsibility on the part of the public. Some laws have not been effectively translated into practices that are supposed to empower individuals in the margins of Philippine society. In view of this, "social policies need to focus simultaneously on the needs of children with disabilities and their families. Such policies should be focused on the functional consequences of disability" (Bricout et al. 2004, p.60).

Young points out that the "institutions are mediated instruments for the coordinated action of those people who share responsibility for structures, rather than as distinct actors independent of us." (Young 2011, p.112). Local schools as formative learning institutions, for instance, have a responsibility not only in terms of managing the curricula, but also in terms of the value formation of students. Bullying in schools is prevalent and this is due to the lack of awareness of the general population regarding autism. Schools, of course, as private institutions can always act independently from the government in terms of in-house programs to instill basic awareness in parents about the condition of developmental delay.

Discrimination at work is also an area of particular concern. According to the study of Yap et al., the labor department "has been mandated to formulate policies, procedures, and programs designed to benefit disadvantaged groups and communities" (Yap et al. 2009, p.8). The role of the labor secretary is not limited to looking after the basic welfare of workers. This position also has a duty to increase employment opportunities in a nation that has over forty million in its workforce. Given this gargantuan responsibility, the issues that concern PWDs, including their employment prospects, are often put at the sidelines.

A recent case that was decided by the Supreme Court might help in terms of situating ourselves in the proper social context of the above issue. In *Bernardo v NLRC* (GR 122917), a case that involves some 43 complainants, deaf-mutes employed on various periods from 1988 to 1993 by the respondent Far East Bank and Trust Co., the SC cited the *Magna Carta for Persons with Disability* in its judgment. The *Majority Decision* penned by former SC Justice Artemio Panganiban reads:

"Qualified disabled persons are to be granted the same terms and conditions of employment as qualified able-bodied employees. Once they have attained the status of regular workers, they should be accorded all the benefits granted by law, notwithstanding written or verbal contracts to the contrary. Bernardo v NLRC" (GR 122917)

The Supreme Court points out in the same decision that "this treatment is rooted not merely on charity or accommodation, but on justice for all" (ibid). As a matter of fact, the same ruling indicates that the regular employment of the PWD workers is a matter of right. It is unacceptable to prescribe two sets of rules, one for normal people and another for PWDs, for that would be discriminatory. For as long as any employee complies with requirements of the company regarding regularization, then an employee should not be deprived of the right to get tenure. Herein, Section 2, paragraph (b) of RA 7277 states:

"Disabled persons have the same rights as other people to take their proper place in society. They should be able to live freely and as independently as possible. This must be the concern of everyone — the family, community and all

government and nongovernment organizations. Disabled persons' rights must never be perceived as welfare services by the Government."

The law views the right of the handicapped to a decent life as a matter of entitlement. The law recognizes the role of the family in this respect. Yet it is still the case that there are people who remain unsympathetic to cases of mental disability. For instance, many children who suffer from retardation are ostracized by people, and unfairly removed from the normal scheme of things in society. They suffer from bad or demeaning social labels. One implication of the formalistic approach to social justice is the latent subordination of those who do not have the power to defend themselves against the domination of the majority. In most poor countries, PWDs suffer from the obvious ills of discrimination.

There is in fact wanton disregard of the well-being of PWDs in the country from a fiscal point of view. Government underspending on programs for PWDs, as revealed by an in-depth study by the Asian Institute of Management in 2014, reveals that the appropriation for programs for the disabled accounted for only 0.1 percent of the national budget and 0.02 of the Gross Domestic Product in 2011. This finding is telling since Section 16 of the Local Government Code of 1991 (RA 7160) or the general welfare clause, has been used to justify the mandate that Local Government Units allocate one percent of its local development fund for programs that cater to the needs of persons with disabilities.

The government, of course, in principle, declares that it desires the good of all persons with disabilities, at least on paper. The problem, however, is that some of our state policies often look at human lives only in terms of one's productive capacity, thus limiting the meaning of life into an economic or productive and satisfying life. The government sees the value of people by investing in them. This is the nature and character of an unjust world that has been defined by a new global order that is anchored on profit-making. Meanwhile, section 2, paragraph (c) of RA 7277 says:

"The rehabilitation of the disabled persons shall be the concern of the Government in order to foster their capacity to attain a more meaningful, productive and satisfying life. To reach out to a greater number of disabled persons, the rehabilitation services and benefits shall be expanded beyond the traditional urban-based centers to community-based programs that will ensure full participation of different sectors as supported by national and local government agencies."

While the law intends to secure the well-being of PWDs, the above provision of the law has failed to consider the reality that there are deficits in the Philippine democratic system. Our leaders, in view of our immature political culture, often act on the basis of their vested interests. Our society needs to overhaul this corrupt system if we desire a way forward in the quality of life of the people in general, and of persons with cognitive disability, in particular. It is an institutional moral obligation that must be embraced by all.

Finally, an important consideration should be changing the definition of "dependents" in the Philippine Social Security law. Right now, it appears that the government has not really gone beyond the notion of age as basis for dependency. Only children below 18 years of age and parents who are at least 60 years old are

the ones who are qualified as beneficiaries for Social Security pensions and allowances. But children with mental disability are dependents for life, and when parents are no longer there to take care of them, huge and unimaginable problems happen, given the reality that future guardians might not have enough financial resources. For this reason, an amendment to the Social Security law is in order to address this social gap.

Conclusion

To conclude, Rawls has erred by omitting the situation of impairment in the design of society. The principles of justice can only maintain their true value or worth if they serve not just the freedom of rational people but of all, including those who are mentally impaired. The basic point, hence, is that postponing the issue of disability is not a morally acceptable position. It is so because such is violative of the equal dignity of persons. While disability may be a matter of lottery, we still believe that the right perspective should be based on the ethical relation between moral equals. Excluding individuals because of their condition, be it natural or otherwise, is a betrayal of what social justice is all about.

Caring for every autistic person is a justice issue. A systems model of cognitive disability can provide the appropriate moral framework in understanding how the environment, laws, and the attitude of people affect the caring of persons with mental disabilities. In arguing that care should be included in the list of primary social goods, we have come to realize that it is crucial to look at the issue of autism from the situated context of people, and not just depend on political abstractions. What this means is that caring truly recognizes the role not only of individuals but of social institutions as well. Policies, rules, and laws have an effect on the lives of children and adults who have autism. For this very reason, the Philippine law on disability should reflect the need for change in our systems, norms, and attitudes.

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The distinctive features of Nishida's and Tanabe's ideas in the context of socio-historical dynamics

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Summary

As Hegel elevates and translates Christian theology into philosophical concepts with the identification of the tentative actual world and the universal essence, i.e., the absolutization of the existing state existence as the Kingdom of God on earth, so Tanabe, too, tries to justify the present state existence as the self-manifestation of the Absolute, though later admitting its fault devoid of its reverse side of evil by repentance. Why does he commit himself to such a default, even if provisionally during the war time, contrary to his own principle of negative conversion? Behind this matter there might be a long history of the mythological lineage of the sole emperor characterized as the self-identity of being based on the agricultural society in which politics and religion are directly linked without negative mediation. His mentor Kitaro Nishida's last position of the Topos qua Absolute Nothingness might be conceived of as reflecting the substrative field of the natural land in cooperation with the human activity of producing things, with the logical inclination towards the self-identical being in opposition to nothingness. Hereby it is obvious that the concept stems from the social productive style of things in terms of the mutual determination of the subject and the object, human existence and its peculiar natural environment: the double structure of a society composed of the upper surface and deeper ground. This may be analyzable into the past as real potential and the subjective act of becoming in the present with the attainment of the future aim as the occurrence of actuality in unity with potentiality in the dynamic processive movement from the Aristotelian-Whiteheadian perspective of efficient and final causation. In the socio-historical context, Nishida's logic of topos and Tanabe's dialectic of conversion in negation may correspond to the agricultural and industrial structure of the society in the evolving history respectively as the conceptual frameworks appropriate for the societal activities of production of things as well.

Introduction

As Nishida asserts, concepts originate from the social productive mode of things in the historical world where human beings are engaged in creatively making things in mediating the past to the future. The modern stylish Nishida's memorial hall is built on the rural circumstance of his hometown with the impression of unbalance. This fact seems to symbolize the complex social structure of the modern Japan: the duality of agriculture and industry as the discontinuity of historical actuality.

It is highly significant to take into consideration the historical prototypical society as to how Nishida finally arrives at the logic of topos qua Absolute

^{··} pp. 54-66 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

Nothingness despite his assertion of the identity of space and time vis-à-vis Tanabe's perpetual conversion in negation in a dynamic movement of human action. Tanabe's triadic logic of individuality, species and universality as socio-ontology is also formed through the controversy with his contemporary Satomi Takahashi holding the position of wholeness as the perpendicularly encompassing transcendence. Takahashi's transcendent wholeness may be common to Nishida's topos in its claim of Absolute Nothingness, and in Testuro Watsuji's ethics the priority is afforded to the totality of society rather than the individual, reflecting the general propensity for holistic tenet of Japanese intellectual history. They all share the concept of Absolute Nothingness as the traditional Buddhist basis, and three of them, except for Tanabe, opt for the idea of whole; this might be the shadow of the pre-Buddhist agricultural society laden with nature in which land qua the natural substratum serves as the crucial element of the total composition of the societal activity of making things in general. It is the trace of the original event of human action to produce what is to be made in a reciprocal determination of subject and object in a creatively developing process of history.

As J. Habermas criticizes, the post-metaphysical thinking of Heidegger attempts at conquering the modernity having forgotten the original beginning and subsequently declined by suggesting the other beginning for the future in the eschatological terms such as the escape and coming of Gods, event, turn, and so on., borrowed from the salvific religion connotating the promise. It is important to discern the concealed traditional heritages to which Nishida and Tanabe owe in their endeavor to construct the systems of thought relevant to the modern Japan in coping and competing with the West, especially by inquiring into the archetypical foundation of the conceptual framework in terms of the socio-historical contextuality.

While Hegel and Heidegger stand on the messianic expectation and the coming of the Kingdom of God on earth in the Judeo-Christian apocalyptic tradition, there is no such a linear teleological historical background in general for both Nishida and Tanabe who place the emphasis on the point-like isolated present as the absolute moment of unifying eternity and time without being in conjunction with each present directing towards the end of history. This might be reflective of the first era of the ancient agricultural society in which the four seasons, i.e., the same pattern, are cyclically repeated, as the basic strata of evolving history into the second industrial era and third informational era, as suggested by Peter Drucker, though Tanabe takes the position of transformative change, negative conversion in action, instead of contemplation of truth as in the case of Nishida, reflecting the historical transmutation into the urban type of society chiefly based on the transportation-systems along with the modern industrialization. In this regard, Nishida's artistic intuition might bear a resemblance to Heidegger's priority of poetic myth over thinking as its source, living in the rural circumstances.

With regard to Miki's logic of imagination, stemming from the human habitual experience, in particular, the social institution among the four constituting elements of history plays an important role in the formation of social organizations and legal systems in the hierarchical structure leading up to the nation state and the international framework of the world, as in the cases of Tanabe's logic of species on the level of the state existence and Watsuji's social relative totalities as the self-

negative limitations of Absolute Totality *qua* Absolute Negativity on the status of the basic principle of human existence in a variety of forms in the historical development.

Exception may be found out in the Lotus Sutra thought, originated in India and further developed in China and Japan, depicting the anticipation of the deeply hidden Buddha's appearance in the other form of the superior Bodhisattva in the post-Shakyamuni's era. India is linguistically connected with Europe, and the anticipated Bodhisattva in the future might share the common element concealed with the messianic expectation, as implied by the *Maitreya* Bodhisattva mythologically predicted to come out in the indefinitely remote future as a hope.

Both Nishida and Tanabe represent modern Japanese society which drastically experienced the westernization of the traditional Buddhist and Confucianist bondages in terms of intellectual historical turn. As a result, there are the two distinctive strata of the new and old intelligence in divergence and integrity: the most basic concept of Absolute Nothingness is the disguise of the Buddhist notion of Emptiness as the absolute unity of being and nothing in relativity of opposition. Nishida connects this basic traditional concept of Absolute Nothingness with the western notion of Topos as the ultimate Place whereby everything actual is embraced and ascribed eventually. The ultimate Place qua Absolute Nothingness might be a self-reflective image of the nostalgic old agricultural society having now been involved in danger of being lost. This might be the reason why many Japanese people favor Nishida's intuitive intelligence rather than Tanabe's logical abstraction. Japanese language is not so rigorously logical as western language but much more emotional and fitting to poetic images of feeling. The thinking way does not occur in air but is rather influenced by the natural and social circumstances giving rise to the specific features and styles of cultural life. Even philosophical thinking is also not an exception but implicitly reflective of the particularity of the environment as the place or topos in which the individual point is surrounded. This is what is meant by the logic of topos or place, i.e., topology of human beings, for the human subject and its objective environment are reciprocally determined in term of the self-identity of subject and object, the coincidence of the opposites, as Nishida himself articulates and Watsuji too explores in his renowned work on the climate.

Tanabe's dialectic is socio-ontology as the triadic structure of the individual, specific society, and universal humankind with the view of establishing the world-wide government in relation to world religion. In this respect, his idea might be much influenced by Hegel's dialectic of negative mediation in accordance with the socio-historical affairs of state in his time. Tanabe's another idea concerning a possible unification of relativity and quantum mechanics may reflect an integralist tendency of sublating the different elements into a higher unity in and through negative mediation in anticipation of the future orientation implied in the matter. His way of thinking is an attempt at a dynamic unification of the opposed in the direction of the historical movement towards a harmonious ideal world as the logical application of the Buddhist source of Absolute Nothingness to historical actuality. While Nishida's way of thinking is mainly vertical from the geometrical standpoint without referring to political affairs, Tanabe is positively engaging in the world affairs with the intention of attaining the ideal as reality in terms of the constant activity of negation.

Whereas Nishida takes the individualistic stance of intellectual intuition or contemplation of truth, i.e., meditation, for Tanabe social practice is crucial in reformation of the already existing actual world as a truth-moment of the whole taken from the Marxist dialectical materialism. They may be said to be typical of the Japanese underlying intellectual tendency of synthesizing all factors into an integral totality, as found in the Lotus Sutra in which all other Buddhist sutras are synthesized in the end, and Tanabe particularly is eminent in taking the rival ideas into his own system. Nishida's idea of the self-identity in absolute contradistinction is the well expression of the old traditional Buddhist logic of non-duality in the new westernized style. In the background of Nishida and Tanabe there might be the concealed Buddhist sources in coping with the western ideas to create a new synthesis of them.

This might be true for Heidegger who is in pursuit of the origin of western history of metaphysics, i.e., Being itself in distinction from beings as the essential cause of the latter. Heidegger regards the western history of metaphysics after Plato as having forgotten Being itself but instead concerned with beings or entities, claiming that it is now the time to return to the primordial origin hidden so far of western metaphysics for its restoration of and in preparation for the other beginning for a new era in which the last God advents. For western metaphysics Being is the ultimate source of reality, whereas for eastern thought Nothingness or Emptiness is the primordial origin of all things in the universe. Both Nishida and Tanabe make efforts to overcome the divergent opposition between western Being and eastern Nothingness in the way of a dialectical unification of the opposed, ensuing the static attitude of contemplation and the dynamic position of practical action in society respectively. This difference might be reflective of the socio-historical complex manifold structural strata in their times; Nishida is representative of the basic structure of the ancient longstanding agriculture, and Tanabe the modern industrialized urbanite society on each own. Tanabe's abstract logicism is the symbol of the well-ordered social institution, in contrast to Nishida's intellectual intuition of much poetic images. There is a discontinuity between them in respect to the socio-historical dynamic movement of the modern Japan, either relying upon the traditional society or advancing into novel change accompanied by the unprecedented modernization. Even so, however, this never signifies that Nishida is less progressive but rather deeply rooted in the traditional ground of the society which is inevitably connected with historical development. In other words, Nishida elaborates the past traditional heritages in the guise of a fresh style of expression, while Tanabe makes a reaction to the past to open a new horizon of the future; their difference is just the emphasis on either side. This is evident in the fact that when Tanabe attempts to synthesize Japanese Buddhism, Christianity and Marxism as the second religious reformation, Nishida is implicitly very critical of a new creation of religion but concentrates himself on contemplation as a training of his own mind, the so-called Zen meditation, without extending to the social realm any more.

At any rate, an actual event does not arise without mediating the past being, and hence Nishida starts from his own experience in which subject and object have not yet been separated and Tanabe mediates the historical antecedent existences to the future possible forms in a way of synthetic integration as a dialectical development. For the agriculture land as the substratum and human subjective action are

intimately related to each other as the prototypical experience, whereas in the modern industrialized society information communicative systems are established apart from the human basic proto-experience rooted in the agricultural community, accompanied by losing the original home. Tanabe's abstract logical thinking stems from the institutionalized society in which science and technology are highly advanced in terms of mathematical logic: in fact, Tanabe starts his carrier from mathematics and physics and turns to religious philosophy both of Buddhism and Christianity. These initial experiences of them may be indicative of their distinctive features of thought, artistic intuitive or abstract logical in retrospect. This holds true for Hegel and Heidegger who started as Christian theologians, and hence their systems of thought are significantly influenced by Christian theology, as Karl Löwit and others duly point out. Heidegger prefers to live in rural circumstance fitting for poetic thinking to urban life, while Hegel staying in Berlin systemizes the dialectical logic as the eternal essence of God prior to the world creation and legal philosophy of the state existence as the going way of God in the world. In this respect, Nishida is common to Heidegger in artistic intuition and Tanabe to Hegel in abstract logic. Even though Nishida does not evaluate Heidegger, nevertheless, it is interesting enough that their achievements are stocked in the Heidegger's memorial home and Hegel's habilitation dissertation on astrophysics is parallel to Tanabe's doctorate on mathematical philosophy. This may be not accident but a necessary link between both types of thinkers in terms of the mutual determination of the thinking subjects and their environments. As Whitehead articulates, a new subjective becoming arises from the actual world as the past beings; the present subjective free action does not occur apart from the objective given facts as the surrounding in terms of efficient and final causation as well.

Whitehead inherits efficient and final causation from Aristotle in combination with the Platonic universal forms as eternal objects in arising of a new actuality out of the actual world as the given data operating the objective immortality of the past. Free subjective action does not occur independently of the already given world of the past being but in the form of concrescence of them in causality. This is the triadic structure of human experience of subjectivity of becoming in the present and objectivity of the past towards attaining the future aim. Nishida's notion of pure experience of non-separation of subject and object is the archetypical root structure from which bifurcation emerges with the implication of origin of the relativity of being and nothing, i.e., Absolute Nothingness. Hereby Nishida's idea of Absolute Nothingness might be akin to Lao-ztu's Nothingness as ultimate reality rather than Buddhist Emptiness as non-substantiality of any entity.

Nishida's primal experience signifies the direction of later development of his thinking with the result of retaining the position of immanent transcendence of God or universal religion. In the last part of his latest most significant thesis he suggests a new possible future religion in the direction of immanent transcendence from the Buddhist side with the view of projecting pure ideal land into the mundane world from the today's world historical standpoint, though in the contemplating propensity. In this regard, Nishida, Tanabe anticipating world religion as the integration of Buddhism, Christianity and Marxism, Hegel in quest for the third religion, neither Catholic nor Protestant, and Heidegger's prediction of the last God in the other beginning are concomitantly in agreement with each other, despite their

slight differences on the surface. This coincidence might not be incident but rather the product of their profoundly insightful thinking in view of the future implicit direction of human world history. This may also be matching to the Whiteheadian analysis of human experience into subjective becoming action and objective past being in terms of the Aristotelian efficient and final causality.

In fact, Nishida points out that human conceptual knowledge comes from the social making style of things (*The Self-Identity in absolute Contradistinction*). The productive mode of things is the form of the historical creation in the world as the mutual determination of the subject and the object: the world becomes a producing mode of things as the determination of the present upon which eternity is touched. For him, the concrete logic is to comprehend the producing style of the world in the self-formation of human existence. Hence, his ultimate concept of Topos *qua* Absolute Nothingness beyond the identity of space and time might be conceived of as reflective of the agricultural productive style of the Japanese primary society.

In agriculture the same pattern is cyclically repeated as the four seasons every year, and this fact entails the self-identity of being over and against ever change or conversion in negation on the self-identical substratum of the invariable underlying land. Agriculture is the producing form of human creative activity in connection with the statistically substrative land as a correlation of human subjectivity and natural environment. Even agriculture is a sort of technology as a unity of causality and teleology by means of imagination; technology is the creative transformation of matter and idea (eidos) by human freedom for the purpose of improving the existing society for the future ideal life.

Highly advanced technology such as communicative information systems supported by electrical energy took place in the second industrial or the third knowledge society. This is the historical phenomenon of change or transformation undertaken by the computer revolution as well as transportation systems from the agricultural society into the nascent information society based upon the population concentrated by urbanization beyond the limits of the national states on a global scale. It takes off from the ground or land, and the instant communications occur regardless of the land above the transportation basis, as recently seen. In this historical changed situation, the concept of self-identical being seems to be no longer relevant but rather the concept of perpetual conversion or transformation in negation appropriate for the productive mode of the changing society. Here might be Tanabe's logic of negative conversion significant. Even though, however, the primary agricultural basis cannot disappear but remains the foundation for the consecutive construction of the more complex dynamic structured society in the incessantly creative movement of history.

Nishida's acute insight is still valid in view of the current Japanese political situation in which the juridical system of the democratic state seems to be distorted by the majority dictatorship-political power in the totalitarian manner, as recently happened. This shows the Japanese traditional mentality of swallowing up into and subjugation to the top power in the vertical structure of hierarchical society which has been long formed since the primal agricultural age and intensively nourished during the medieval feudal systems, despite its ostensible pretension of the modern legal state after the defeat of the world war II. This distorted mentality can be seen even in most organizations such as companies, schools, communities or people at

large without authentic critical reason: anti-opinions are inclined to be excluded and genuine debate or controversy is very difficult, the majority are apt to be regarded as good in the one-sided way and minority is neglected. These features are abused results of the agricultural community in which the transcendent God is absent.

This is the distinguishing characteristic of Japanese cultural collectivism in general in contrast to western individualism, and hence, according to Watsuji's ethics, an individual rebellion against the whole social community is regarded as bad and its conformity to the society as good in the historical course of the constant selfnegating activity of Absolute Negativity. It may be tenable in Tanabe's view that Nishida's primacy of Topos qua Absolute Nothingness is turned into Absolute Being of self-identity. This might be in concreto evident in the endless succession of the sole lineage of the Japanese emperor mythology, in contrast to the Chinese change or revolution of the regime, as the conceptual expression of the self-identical being as the self-reflective form of the agricultural society in which politics and religion are immediately united with one another, without self-negation within itself. Hereby the religion in question is the naïve natural folk religion, i.e., the so-called Shinto, without sophistication of dogma like Buddhism, and this immediate conformity of politics to religion in antiquity has remained as the stubborn fact of the objective immortal past constituting the efficient causation à la Whitehead, even actually reviving in a variant shape in the present political situation of Japan.

In the homogenously self-identical being of society there is no room left for the categorical imperative with respect to ethical action owing to the absence of transcendent God as in the western society. As a matter of fact, injustice, bad deed, arbitrary abuse of power, etc., are the phenomena pertaining to such a homogenous self-identical society in the superficial pretension of the formal juridical system as involving the distortion of the double structure of the traditional bondage of the immortal past being on the foundation and a new occurrence of becoming subjective action to reform the already given world in competition.

In the dark period of the world, Heidegger predicts the coming of the last God as the metaphysical version of the second coming of Christ by returning to the primordial origin profoundly concealed so far of western history in the other beginning of a new era, overcoming the uniformity of mass production prevailing nowadays in a secular world brought about by technology predominant of calculating method of mathematics. Heidegger's thinking is based upon the past tradition for a new creative shift of the future paradigm of thought, and this may correspond to Nishida's insight according to which the past is the basis of a new subjective action in the future and actual time becomes the productive style of the historical world (*The Self-Identity in Absolute Contradistinction*).

On the relationship of Nothingness and Being in terms of Topos, God is Absolute Being as well as Absolute Nothingness that is the self-identity in absolute contradistinction, i.e., Being on the level of Place or Topos (*On the Self-Awareness, The Logic of Topos and the Religious World View*). Here it is obvious that for Nishida Absolute Nothingness is identical to Absolute Being on the level of Topos with the stress on Being as Place. Regarding the relation of human beings and the Absolute in terms of the principle of immanence, our selves are at every time in confrontation with and to be united with the Absolute One in the ground of the world in returning to our own origin while at the same time going to the One (*On the Self-Awareness*).

The transcendent God is simultaneously immanent within human original essence, and this is another expression of the original Buddhahood innate in the human nature as the self-identity of human beings and the Buddha from the panentheistic standpoint which is permeated in the agricultural society in which humans and nature are correlated to each other in general, sharing with the Hegelian immanent God operating in the world as the wider extension of the principle of God's Incarnation in the human person of Jesus in the form of the divine self-manifestations in history as the triadic dialectical development, though Hegel makes a compromise between the present actual state existence and the essential realization of divinity, as implied by the famous formula of the identity of rationality and actuality. In Tanabe, too, in the same token much influenced by Hegel, the already existing state is considered as the proper manifestation of the universal principle of Absolute Nothingness comparable to the Christ or the Bodhisattva, though immediately later severely criticizing himself with repentance for the misjudgment on this matter.

This might be the reflecting form of the age unavoidably involved in war on a world-wide scale in the human history, even extending its danger to our time facing the possible nuclear destruction of humankind as the reverse side of scientific technological advance far from the agricultural correlation of human activity and natural environment on the biological basis, viewed from the socio-historical dynamic contextual perspective.

Behind the Kantian dichotomy of noumenon and phenomenon there might be the Biblical absolute distinction between the creator God and creature, and this cleavage is overcome by the self-negatively becoming human being of God in principle in the Hegelian dialectic, with the entailment of the Divine self-manifestation in the historical world whereby the substance is activated as the subject. The transcendent Absolute is converted from substance into subject immanent in history whereby human subjective free action plays a central role in making culture.

This is a symbolic event of the transition from the antiquity through the medieval to the modern time as the conceptualization of the primacy of human active subjectivity in time over static substance in tranquility. In this sense, Hegel's conception represents the modern spirit common to modern science and technology predominant in the modern world, as Heidegger and Takezo Kaneko remark. For Hegel, truth is revealed in the temporal process in such a way that at the end is the beginning for the first time actualized in totality. This scheme might be well supported by the biological model, e.g., the growth of a plant in the step by step process of seed, maturity and fruit, with subsequent harvest in nature or the agricultural production.

Whitehead is more modern in his speculative cosmology of process as reality without presupposing the substance or underlying substratum in support of relativity and quantum physics. In this regard, Whitehead is in accordance with the Buddhist notion of Emptiness devoid of substantiality of own being; time is the process of perpetual arising and perishing of actual entities in supersession with the asymmetric vector direction towards the future, accompanied by the superposition of accumulated past. The Buddhist notion of codependent origination of phenomena is equivalent to the concrescence of the past being and the present becoming towards the future aim constituted by efficient and final causation. The world is the

process of creative advance into novelty as the consequent nature of God as the realized primordial nature of God in time on the panentheistic principle.

In the Buddhist sutras the same phrases are often repeated, and this fact might reflect the agricultural productive style of society; specifically, the figurative concept of seed, maturity and fruit or harvest is modeled on and comparable to the biological fact intimately connected with agriculture founded on the place or land correlative with nature. Agriculture is the primary producing mode of the correlation between human subjective action and natural environment, and Buddhist theories and practices might be largely reflected on the primal agriculture in the socio-historical context. This might be the reason why Buddhism in general sticks to the traditional style and does not go beyond it to open a future development with breakthrough.

The endless repetition of the one pattern is peculiar to the agricultural society with the infinite cycles of four-seasons concomitant with the astrophysical movements, entailing the self-identity of being rather than incessant change. Abstract concept originates from concrete fact as a self-reflective copy of the world that is ever being created from the made, i.e., objective being, to the making, i.e., subjective becoming, through human action in the extensive continuum of space and time. In this context, the Buddhist idea of original enlightenment as the self-identity of human beings and the Buddha, a kind of ultimate non-dual monism, has arisen in the early medieval Japanese Tendai school, invoking the direct identification of the opposed without the practical mediation on the human side: human being as such is already the Buddha. This idea, however, confuses potentiality and actuality, essence and existence, in a hasty way of immediately identifying the opposed without negative mediation in action, viewed from the Aristotelian concept of entelecheia. That is, it is devoid of dialectical unification of the opposed in mutual negation but instead ensues the one-sided way affirmation of the given facts, as the peculiarity pertaining to the Japanese agricultural society inclined towards affirming the actual existing world, over and against the Buddhist principle of Emptiness of incessant self-negation. This tendency may be reflective of the Chinese and Japanese ways of thinking tending to positively affirm the actuality as a habitual character of the agricultural society; Confucianism is regarded as the ideology of conserving the feudal system rather than serving as reformation, and Japanese Buddhism was also under the control of the regime without contributing to a social reform in the direction of realizing the pure ideal land in this world.

The idea of original enlightenment as the self-identity of the opposed without the difference may be comparable to Schelling's idea of undifferentiated self-identity of being. In West, the prototype of the difference between Parmenides' Being as the One and Heraclitus' becoming flux in antiquity recurs between Schelling and Hegel as to the relation of identity and difference. This might be analogous to the rival views on identity and difference concerning the two parts of the Lotus Sutra of which Tendai interprets that although the original event and its trace are different, nevertheless, they are identical with each other. This never means their homogeneous self-identity abolishing the difference but rather retaining it within itself. Therefore, Tannen (the 7th abbot in China) also further annotates that although the original event and its trace are identical to each other, nonetheless, they are eminently different from one another. Even so, however, the idea of original enlightenment takes part in the abolishment of the difference, and this current of

thought stimulates the following reactive emergence of the new Buddhist schools in the medieval Japan with the special emphasis on the duality of the difference in terms of active mediation between them for their integrity, particularly in the Nichiren school whose main aim is to construct the ideal-real world on the foundation of the Buddhist truth. Whereas Tendai represents the trace phase of truth-contemplation, Nichiren stands on the position of original event in eternity from the historical practical perspective. And this distinction of them may correspond to that of Nishida and Tanabe in modernity with regard to the contrast attitudes of contemplation of truth vis-à-vis practical action involving social change.

In the later medieval Japan Confucianist metaphysics is adopted by the political power in service of the ideology in defense of the feudal system fixed with the four social classes until its breakdown brought about by modernization from the West.

Conclusion

While the Indian way of thinking is in search of eternity, e.g., Brahman as the Absolute One negative of the actual world, for the Chinese and Japanese ways of thinking in East Asia the priority is placed on historical actuality representing the social producing style of things in the agriculture, as shown in the oldest classical Chinese of Change as the ontology of cyclic time, i.e., the periodic sameness. In Japanese Buddhist thought with respect to the Lotus Sutra there are the two opposed tendencies of contemplation and social practice in the underlying streams, and this rivalry implicitly continues to the modern times in encounter with western philosophy, giving rise to Nishida's and Tanabe's eminent ideas constructing the new forms of metaphysics on the traditional basis. Both Nishida and Tanabe engage to synthesize eastern and western thought in the creative way adapting for the current world from the different aspects of what matters, reflecting the social productive styles of historical actuality as the unity of essence and existence in the form of abstract concept respectively. Their thoughts are no less than the selfprojective copies of the actual historical world on consciousness as the selfexpression of the spirit of the age.

On the contrary to Nishida's standpoint of contemplation of truth, Tanabe is in pursuit of establishing the state existence in relation to religion in terms of his own dialectic of the individual, the species, and universality in the negative mediation of social practice on the theoretical level, shadowing a shifting phase of the age from agriculture to industrial urbanite civilization along with the scientific technological progress.

As Heidegger insists, today's world is in danger of regressing into the self-alienation of human existence due to the overwhelming prevail of the uniform calculating method of dichotomy without employing the triadic logic of dialectic. Instead of calculation entailing the self-estrangement of authentic human essence, it is now the dawn of opening of a novel horizon for the attainment of ideal as reality in terms of the dynamic unification of potentiality and actuality in the historical movement from the neo-Aristotelian bio-cosmological perspective. In this historical context, Nishida's and Tanabe's ideas are apprehended to contribute to a possible integration of them as the conceptualization of the creatively forming world in complementarity in comparison to Heidegger in the last resort.

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Governance of common pool resources in Aso area

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Summary

People over centuries have constructed beautiful landscapes based on land use according to weather and geographic features in Aso area. The grassland, trails in the grass, spring water, roads for cultivation of rice fields, community centers and shrines are Common Pool Resources (CPRs) which make beautiful landscape in Aso area. Historically, people design land use for agriculture and local infrastructure in residential districts, and they keep on governing CPRs depending on land use in each residential district.

To explore the governance of CPRs in Aso area, I outline the governance of CPRs in Adogase district which is located in Aso city. Most of the families living in Adogase district have been there since late Edo period. The majority of population in Adogase district are elderly persons beyond 65 years of age. There are many cooperative works including hard physical labor for governance of CPRs in Adogase district. The principles for self-organizing and self-governance according to Elinor Ostrom (1990) are monitoring, economic returns and punishment. In Adogase district, there are penalties and monitoring for governance of CPRs like those that Ostrom indicated. People who are not farmers cannot get returns by physical work. People keep on governing CPRs by penalty and monitoring without returns. Meanwhile, there are leaders who are not farmers. They keep on supplying many labor hours for management concerning organization and governance without returns. In this case, we can observe agency goals as Amartya Sen (2007, 2009) indicated. We can observe agency goals in the choice of leader.

In short, there are ethical viewpoints which Elinor Ostrom and Amartya Sen didn't explore in economics such as the custom to inherit historical tradition, love of homeland and group consciousness for choice of cooperative works.

Geographic characteristics of Aso area

Aso area is located in central Kyusyu island. According to Aso UNESCO Global Geopark, "Aso Caldera measures approximately 18 km from east to west and 25 km north to south. At 350 square kilometers, it is one of the world's largest collapsed volcanoes." Mt Aso is the name of a mountain with a central volcanic cone group and the world's largest Caldera.

Though winter is cold, summer is humid and hot in Aso. While the weather affects the water system and vegetation in Aso, the weather as well as geographic features also affects the land use. The primary vegetation is temperate zone rain forest. According to Toma, Yo, et al (2013), though primary soil consists of fly ashes and rocks released from the active volcano, analysis of plant carbon can detect the

^{··} pp. 67-79 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

effect of grassland cultivation. The center of Aso basin is not grass land; biomass is based on plant species in grass land and is included in soil in the basin. This means there is human transported biomass from grassland to basin because of cultivation of rice field and truck field.

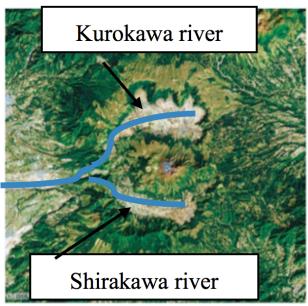


Figure 1: Aso area. Source: NASA (2006) Goddrand space flight center, GDAAC, MODIS

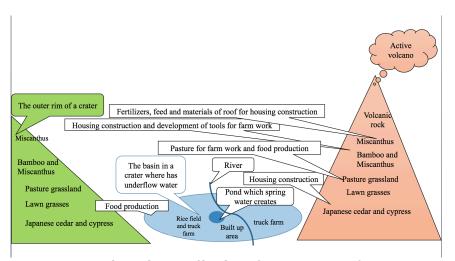


Figure 2: Circulative layers of land use for governance of CPRs in Aso area

We can observe a circulative system in layers of land use in Aso (Figure 2). The land use in Figure 2 shows concentric circles according to the following factors: Geographic features: altitude, rivers and vegetation; Water system: river, spring pond and underflow water; Cooperative works based on manpower: farm works, forestry and transportation.

Considering the geographic characteristics in Aso area, sustenance of artificial vegetation and land use based on grass land is impossible without cooperative works based on human activity. Aso area is famous for the grassland that creates a beautiful landscape. The grassland is not wild grass field. It is the artificial grass field that people keep on cultivating over generations.

The case of governance of grassland in Aso area

According to historical documents, people in Aso area have kept on managing the grassland which is a common resource for over 1000 years. Meanwhile, according to the recent scientific research concerning the historical vegetation of the grassland (Miyauchi and Sugiyama, 2008), Miscanthus sinensis grassland has dominated consistently since 10,000 years ago in Aso area. This shows a scientific evidence which the ancient people also had managed grassland by burning field in Aso area.

Takahashi (2013, p.4) and Aso nature environmental office of the Ministry of Environment (2006) show historical documents about the grassland in Aso area as below. The official historical documents of the grassland in Aso area at 720 on Nara era ("Nihon-shoki") include:

- 1) The description about grassland in Nihon shoki in 720, Nara era
- 2) The description about pasturage of horse in grassland in Enghisiki in 905, Heian era
- 3) The authorization of the right of commons for the utilization of the grassland by Hosokawa feudal lord in the domain of Higo (which corresponds to Kumamoto prefecture) in 1633, Edo era.

In short, while people in Aso area had kept on cultivating the grassland by cooperative work since 10,000 years ago, the right of common for governance of grassland were authorized by feudal load in Kumamoto since 400 years ago in Edo era. There are traditional tools and techniques for firefighting which are manufactured from bamboo. People keep on using traditional tools and techniques for firefighting in glass land. However, governance of the grassland in Aso area faces a sustainability crisis.

Table 1 shows that instead of a decrease in pasture land and grass field, the bush forest has increased. This indicates abandonment of governance of grassland which is one of CPRs in Aso area. According to Kumamoto prefecture (2017, p2), while the grassland keeps on decreasing because of decrease of people to govern CPRs, forests based on bush keep on increasing.

Items		1998	2003	2011	2016	Change for
		(ha)	(ha)	(ha)	(ha)	18 years
The gross area		22,434	22,128	21,986	21,797	-189
						(-0.9%)
Breakdown of	Pasture land	5,365	4,911	4,254	4,090	-309
the gross		(24%)	(22%)	(18%)	(19%)	(-3.7%)
number of	Grass field except	15,116	15,264	15,690	15,592	-202
areas	for pasture land	(67%)	(69%)	(72%)	(71%)	(-0.9%)
	Forest based on	1,953	1,953	2,051	2,115	+64 (3.1%)
	bush	(9%)	(9%)	(9%)	(10%)	

Table 1: The gross area of grassland for governance of CPRs in Aso area Source: Kumamoto prefectural government (2017)

The governance of grassland relates to revenues for stock famers which use the grassland for livestock. The number of families unrelated to agriculture amounts to 40 % in 2016. This means the increase of families which cannot get revenue by cooperative works for governance of grassland. Families however keep on participating in cooperative works for governance of grassland in Aso area. The grassland is used for livestock of beef and horse meat. There is a municipal law for permission of utilization of grassland. As for consensus building for permission, two-third of members in the management commission of grassland have to agree to utilization of grassland under the municipal law. The construction of facilities for electric power as well as water and sewage in grassland is expensive. Therefore, even if families get the right of commons to utilize the grassland, they cannot get any revenue for participation in cooperative works for governance of grassland without utilization of grassland.

Labor shortages

Though local government worries about maintaining the grassland landscape and tries to solve support by volunteers who don't live in Aso area, there are shortages of volunteers. According to Reiko Machida, et.al. (2014), volunteers who participate in cooperative works for management of the grassland choose cooperative works for maintaining the landscape. The local government doesn't assist in gathering volunteers for governance of CPRs except grassland in each residential district.

Though the government provides laws and a small subsidy for governance of CPRs by residential people in the community, there is nothing for volunteer institution or other institution to maintain many CPRs besides grasslands. We can see the population characteristics of Aso city which is one of municipal area in Aso area by comparing with the population characteristics of Japan (Table 3 and Table 4). According to the Japanese Cabinet Office (2017), the average of population structure on 2017 in Japan is: younger Population: 12.3%; Working Population: 60.0%; and Aged Population: 27.7% (Table 3).

Table 2: The number of households which have the right of commons to utilize grassland in Aso area (Source: Kumamoto prefectural government, 2017)

Items		1998	2003	2011	2016	Change for
						18 years
Number of pasture associations for		175	181	174	172	-2
livestock by utili	zation of grassland					(-1.1%)
Number of hous	eholds	10,268	9,760	9,193	8,874	-319
						(-3.5%)
Breakdown of	Stock rising famers	6,865	6,446	5,637	5,328	-309
the number of		(18%)	(12%)	(10%)	(8%)	(-5.5%)
households	Famers not stock	1,846	1,183	884	682	-202
	rising	(49%)	(54%)	(52%)	(52%)	(-23%)
	Families not in	3,403	3,314	3,556	3,546	+1,307
	agriculture	(33%)	(34%)	(38%)	(40%)	(+8.4%)

Table 3: The population in Japan in 2017 (Source: Cabinet office in Japan, 2018)

Items	Number of population (component rate %)
Younger population below 14	15.59 million (12.3)
Population aged between 15 and	75.96 million (60.0)
64 years ("Working age")	
Elderjy population beyond 65	35.15million (27.7)

Table 4: Population in Aso city on 2017. (Source: Aso municipal government, 2018)

Items	Number of population (component rate %)
Total population	27,015
Younger Population below 14 years old	3,239 (12.0%)
Working Population between 15 and 64 years	14,143 (52.4%)
old	
Aged Population beyond 65 years old	9,633 (35.7%)
Population of the primary industry	2,402 (17.8%)
Population of the secondary industry	2,987 (22.1%)
Population of the thirdly industry	8,080 (59.8%)

Additionally, we can see the economic condition in Aso city (Table 5). According to the Cabinet Office (2018), the average of prefectural income per capita in Japan was 3,190,000 (yen) in 2015. As for income per capita, there is the disparity over 900,000 yen between Aso city and the average of Japan.

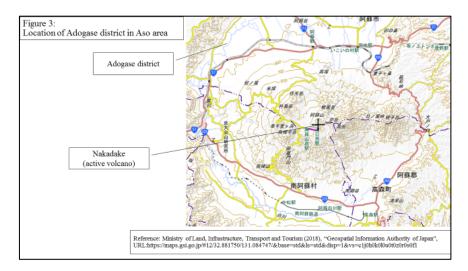
Only farmers on their own cannot govern CPRs in such an extensive area. Because of small income per person in Aso, local government also cannot govern CPRs. Therefore, people who live in residential district keep on governing CPRs by cooperative works without returns to individual.

Items	Numbers
Income per person	\ 2,230,000
Stock rising farmers	515 households
Farmers	1,742 house holds
Gross area	37,630 ha
River, irrigation and water surface	970 ha
Grassland	2,921 ha
National forest	1,440 ha

Table 5: Economic data concerning governance of CPRs in Aso city, 2017. (Source: Aso municipal government, 2017).

Governance of CPRs in Adogase district in Aso city

There were 52 households and a population of 137 people in Adogase district in 2017. The rate of the aged population is beyond 50%. Adogase district was a village for an administrative unit of small local government in Aso area before World War 2, and which Aso city local municipal government administrates since WW2. Though Adogase community was a village for an administrative unit of small local government in Aso area until 1889, Adogase community is a small administrative division which Aso city local municipal government administrates since 1954.



According to my hearing investigation, the traditional people kept on having various mutual aids and cooperative works in Adogase community. There were cooperative works for housing construction before World War II. As for various mutual aids, there were rotating savings and credit association (Tanomoshi Kou), cultural festival and religious ceremonies for marriages and funerals. Though traditional people had developed and managed financial system by daily discussions in human-relationships based on the community (e.g. Tanomoshi Kou), the people in Adogase community lost the community financial system since 1980 since financial system by bank based on capitalism was spread.

As for governance of CPRs in Adogase community, the members of traditional community which kept on staying during Edo era (since 400 years ago) had the right of common to manage and use CPRs. It is a closed system for permission and usages of CPRs. People who move to Adogase community since Meiji era need to apply for permission of common right to traditional community. The permission is controlled by strict council system. According to the past case, traditional community has not permitted rights for new members because of protection of nature and common resources by damaging development. But, depopulation and population aging make serious problem for governance of CPRs in Adogase community zone. The problem will make serious destruction of land use and land scape for future generation.

In the case of Adogase community, according to Sakaguchi (2009) who was headman of this ward and representative of the management association for governance of grassland in Adogase community, 50 families had common rights for governance of grassland in 2009.

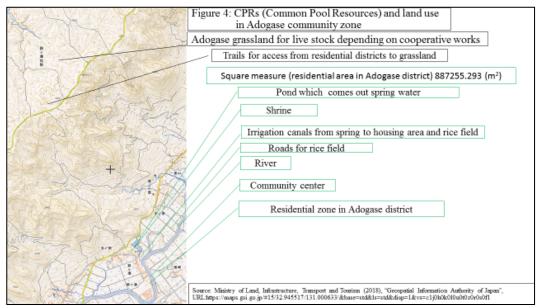
We can observe the recent condition depending on depopulation and population aging in Adogase community by population census in 2015.

Total population was 125 persons in 2015. The ratio of aging population over 65 ages was 44.0%. The elder people need to work for governance of CPRs in Adogase community zone, because of depopulation. Similarly, people who are not famers need to work for governance of grassland and trails because of shortage of famers.

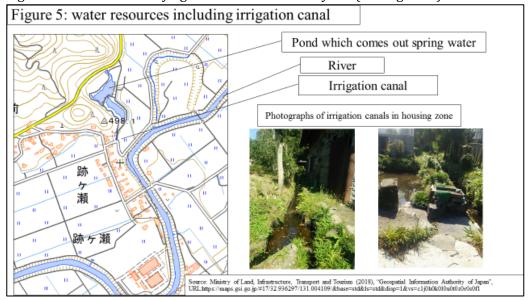
Table 6: population and household data in Adogase community on 2015 Source: Population census (2015), Statistics Bureau, Ministry of Internal Affairs and Communications

Total population (headcount)	125	Total households number	43
Young population below15 ages	11	Single household	9
Ratio of young population (%)	8.8	Ratio of single household	20.9
Working age population	59	2 persons household	12
Ratio of working age population (%)	47.2	Ratio of 2 persons household	27.9
Aging population over 65 ages	55	Household of only farmers	4
Ratio of aging population over 65 ages (%)	44.0	Household of both farmers and employees except for farmers	6
Population of later-stage elderly over 75 ages	41	Household of employees except for farmers	21
Ratio of population of later-stage	32.8	Household of only non-worker	11
elderly over 75 ages (%)		Other household (classification according to occupation is impossible.)	1

Figure 4 shows various common resources (grassland, water recourses, roads, trails and shrine) which are CPRs in Adogase community zone.



As for utilization of water resources, traditional people made a water system by cooperative work based on man power. There are regular cooperative works for maintaining water resources by the people. Since traditional people constructed irrigation canals from the pond which comes out the spring water to residential zone and rice field zone in Edo era, current generation also keeps on using the irrigation canal for not only agriculture but also daily life (see Figure 5).



There is a traditional community built shrine which is located near forest (for construction of house), spring, river and soil (for agriculture). Nature (water, forest, soil, and mountain) is God for traditional people in Adogase community. Therefore, location of shrine has the important meaning (see Figure 6).



The location of shrine shows not only starting points of grace and disaster by nature but also the boundary between nature and residential zone (i.e. edge between nature which is God and people). There are daily cooperative works for sustention of the shrine by people in Adogase community.

For governance of CPRs, there are many cooperative works in Adogase community (Table 7). Most of cooperative works for governance of CPRs are the hard physical cooperative works. As for rules and penalty for physical works, though there isn't a rule that people can retire, there are mutual monitoring and penalty for nonparticipation of cooperative works because of depopulation and population aging.

In a year, there are not only hard physical works for governance of grassland, roads and trails beyond 10 times in a year. Especially, when the people don't participate in hard cooperative works for governance of grassland and roads in a time, they must pay 6,000 yen per one time missed. Therefore, when people cannot participate hard physical work for many times, they must pay a high penalty to the community.

Though people sometimes die or wounded in accidents by hard work for governance of CPRs, there is no compensation. There is not insurance against cooperative work for governing CPRs in because of shouldering cost of insurance. In the case of living alone, the elder person needs to keep on participate not only hard cooperative works but also periodical works or pay penalties for nonparticipation until the end of their life in Adogase community. Even if he or she is not a farmer or retires from agriculture, he or she must participate in many cooperative works for governance of CPRs.

Month	Cooperative works by Hard physical work (Penalty is JPY6,000 per a nonparticipation)	Cooperative works by tenant farmers and land owner of rice field (there is not penalty)	Cooperative works for Festival and ceremony	Cooperative work by members who are on duty	
January			New year's call	1) Weekly cleaning	
February				work of	
March	Burning grassland (twice a month)	Mowing on irrigation canals (once a month)		shrine 2) weekly	
April	Mowing on the road (once a month)			cleaning work of community	
May		Mowing on irrigation canals (once a month for summer season)		center 3) Daily manageme	
June				nt of	
July	Mowing on the road (once a month)			Irrigation during	
August			Ceremony for lantern Festival to cerebrate Jizo	summer season 4) holding of council for governance	
Septembe r	Mowing in grassland (twice a week) Mowing on the road (once a month)		Festival to respect elder person	(2 times in a month) 5) Leaders of council for	
October				organizatio	
Novembe r	Mowing on the road (once a month)	Mowing on irrigation canals (once a month)	Communit y Festival	n and governance	
December					

Table 7: Cooperative works for governance of CPRs in Adogase community

Consideration of a case study

Hardin (1968) wrote the "Tragedy of the Commons" over the governance of common resources. This follows self-centered choices by people who govern CPRs. Similarly, Elinor Ostrom (1990, p.26) focused on "small scale Common Pool Resources (CPRs) where the CPR is itself located within one country and the number of individuals affected varies from 50 to 15,000 persons who are heavily dependent on the CPR for economic returns". For avoidance of the free-riders issue, achievement of high levels of commitment and self-organizing and self-governing CPRs, Ostrom (1990, p.27, p.184) indicated rules like punishment and mutual monitoring.

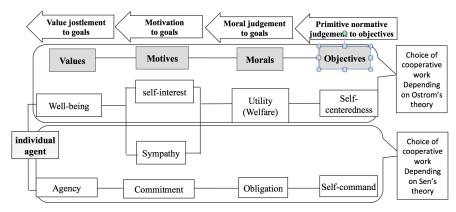
In short, the principles for self-organizing and self-governance according to Ostrom are monitoring, economic returns and punishment. We can observe monitoring and punishment in Adogase district. However, people who are not farmers cannot get returns by hard physical works. There is penalty and monitoring without returns. There is no insurance system and people except farmers cannot get revenue for participation in cooperative works. However, people except for farmers

often choose a leader of a group like council members for management of CPRs in the community. People who choose leaders have to provide many working hours for management of CPRs and residential district.¹⁰ This means self-command choice which reduces self-centered choice for pursuance of self-interest and well-being.

While Sen (2009, pp.39-41) referred to reasoned scrutiny under the demand of justice, he emphasized on the importance of reasoning on thinking about the issues of justice and injustice. Sen (2007, p.275) pointed out the pursuit of agency goals under reasons instead of the advancement of his or her own well-being.

There are leaders who are not farmers and stock rising famers for organization and governance of CPRs. They keep on supplying many labor hours for management concerning organization and governance without returns. We can observe agency goals that are a case of the choice of leaders.

According to Sen (1992, pp.59-60), people perform actions for agency goals to take away inequality and to pursue social justice. Sen (2007, p.275) pointed out the pursuit of agency goals for reasons other than the advancement of his or her own well-being. The choice of leader by people who are not famers relates to actions that are goals as an agency. Figure 7 shows the introspective choice process depending on Sen's choice theory (Figure 7). We can understand the difference of theory between Ostrom's theory and Sen's theory for choice of cooperative works¹¹.



The individual agent means a human-being who has capabilities to perform actions based on functioning.

Figure 7: Introspective Choice process depending on Sen's choice theory

Meanwhile, there are diverse choices which are not applied to Figure 7. My investigation among people in Adogase district showed that there are some people who are damaged by participation of cooperative works for governance of CPRs. There are examples of death and injured persons. However, they and their family didn't ask for compensation from Adogase district. Historically, for generations residential people in Adogase district keep on experiencing these cases by

¹⁰ I have defined the choice of leader who shoulders (1) organization cost for bargaining with government, companies and inhabitant in the community (2) information cost (3) management cost for residential movement to solve regional pollution problem (Uejima, 2013).

 $^{^{11}}$ I have written the meta structure for classification of choice of action by individual agent based on Sen's social choice theory in a Ph.D. paper (Uejima, 2014). Figure 7 shows revision of the meta structure.

cooperative works which is daily common works.

In May 2018, as a company tried to provide renewable energy in the community, and explained to the residential people to get permission for construction of the facilities to produce electric power, some residential leaders in the community replied the following comments to oppose development of building to produce electricity.

"We love our homeland of Adogase district beyond generation."

"We are people who are a family in Adogase district."

"We need to protect the beautiful nature in the current period and future. If the company can build the facilities in a zone which is not affected with pollution depending on construction of facilities, we cooperate for contribution to people in Adogase district. But for it, we need scientific environmental assessment under regulations which the council in Adogase district requires."

Thus, the company could not build the facilities in Adogase district, because the company could not get permission from residential leaders. Hence, we can understand the cultural virtue in Aso area. Aso Grassland Restoration Committee (2007, pp.9) noted the virtue for the management of grassland in communities in Aso area as shown below.

"There are wisdom and technology for the sustainable utilization of the blessing from grassland. For example, there are various knowhows concerning the burning method and the fire belt for prevention and security. While people in Aso keep on utilizing various wild grasses which have different qualities depending on various uses and purposes, traditional people kept on developing the technology for picking the grasses, transportation and storage. Additionally, the traditional people kept on circulative utilization of grass resources to improve the poor farmlands by the volcanic ash soil. Hence, for governance of glass land, people kept on passing down the social system of various cooperative works in each community." 12

Conclusions

By this case study in Aso area, we can see choices according to their values which can explain social choices by economic theory for governance of CPRs in Aso area. We can summarize the ethical viewpoints for choice of cooperative works which explanation by Sen's social choice theory and Ostrom's theory is difficult to govern CPRs in Adogase community as below:

- 1) Custom to inherit historical tradition: Though there are rapid depopulation and aged population in Adogase district, people keep on inheriting traditional rules beyond generation in their custom.
- 2) Love of homeland: When people know about the penalty and hard physical works, they may not return to Adogase district after their retirement. However, some

 $^{^{\}rm 12}$ Reiko Machida et al.(2014) "Study on the recognition of the grassland landscape of volunteers for to conserve and restore in the Aso region.

people who know the penalty and hard physical works, for the love of homeland, return to Adogase district.

3) *Group consciousness:* Elderly people say people in Adogase district are their family. They keep on taking care of each other in daily life. Physical works are one which family (i.e. people of community) should conduct. Even if people die or are injured by an accident during physical work, they don't ask for compensation.

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Environmental attitudes among students in a post Laudato Si paradigm: Transferees vs continuing students in a Catholic university in the Philippines

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Summary

Over the last century, scientific studies have shown that greenhouse gases emanating from anthropogenic activity have affected climate patterns around the world. The urgency of an international agreement on this issue, as well as other environmental concerns, has prompted the leader of the Catholic Church, Pope Francis, to write the encyclical *Laudato Si*. In this letter, he addressed environmental concerns and called for a dialogue among people across different nations, cultures and religion. He also urged for a change in environmental attitudes and behavior.

Catholic universities are on the frontline for this mission. But in order to motivate different groups in the university, different strategies have to be made. In particular, transferees or those new students to the university might have to be treated differently than those who are continuing in their respective programs. One research question to ask is whether there is a significant difference in the environmental attitudes between transferees and continuing students? In this study, a survey based on the New Ecological Paradigm Scale developed by Dunlap (2008) was used to measure differences in environmental attitudes among students in Saint Paul University Quezon City (SPUQC), a catholic university. The respondents for this survey were Grade 11 students for the school year 2017-2018. The respondents were divided into two: students who just came in for the Grade 11 level (transferees) and those who have already studied in SPUQC before (continuing). Based on statistical analysis, no significant difference between the two groups in terms of environmental attitudes were apparent. Further studies are being done to measure environmental attitudes among employees, parents of the students and other groups associated with the university to fulfill the *Laudato Si* mandate.

Introduction

Since the end of the last ice age, the human species has been dominating over all other living things throughout most of our world, destroying or disturbing existing ecosystems and the environment in general (Cunningham, 2007). The disturbance has escalated this past century; it is estimated that around forty percent of the biomes have been affected by *Homo sapiens*, either by converting it for anthropogenic use, or indirectly by altering the balance between the biotic and abiotic factors present in the ecosystem. It is not just the terrestrial ecosystems that are affected; marine ecosystems are affected as well. Anthropogenic activities on our

^{··} pp. 80-89 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

oceans and water bodies have resulted in insatiable extraction of resources, increased pollution, and decreasing biodiversity and ecological balance (Pauly et al, 2005).

Too much greed and lack of leadership has led us to an irreversible path in changing our climate. After the Kyoto protocol, talk among industrialized countries has led to a compromised solution. The next path was the climate change talk in Paris. But before world leaders met (UN Climate Change Forum in Paris), the Bishop of Rome for the first time wrote a ground-breaking papal letter, called an encyclical, on the topic of the environment and our common home. This document is the product of research, consultation and is inclusiveness of all people of faith, and its main aim is a call for dialogue for what to do with our common home.

Pope Francis' Laudato Si (in Italian means "Praised Be") is the most complete church document to address the environment, Christian ethics and intercultural dialogue. The document targets Christians and non-Christians alike, Catholics and non-Catholics. The pope consulted the best scientists and theologians to come up with this masterpiece. While his arguments are founded on Church doctrine and religious convictions, these convictions are then put into a language that can be understood by people of all faiths. Laudato Si covers vast intellectual themes and many topics that stimulate thought with its 40,000 words, originally written in Italian. Many categories of reasoning are used: eco justice, the cry of the poor, human rights, natural law, character, and implications on the environment. Throughout the encyclal, two dominant themes emerge, the common good and how it relates to the concepts of human dignity. But in the letter, one of the salient features is its emphasis on the intrinsic value and rights of all creatures (ecocentrism). Every living thing is connected, the letter says repeatedly, and ethical failure in engagement with the natural world will happen when this interconnectedness is ignored or a sense of apathy takes over. Laudato Si urges us to dialogue, not just across cultures, generations, but we are dared to change a paradigm that centers on human well-being but redefines what is home to us, which should include all creatures under our care (stewards of God's creation). Laudato Si is a welcome respite from dangerous Christian anthropocentrism, that preaches that all of nature can be utilized by humans as they see fit. This view is dominant among US evangelical Christians, who supported US President Donald Trump in pulling out of the Paris Agreement. They deny that climate change is real, and advocate the use of fossil fuel for energy needs.

Theoretical/conceptual framework

The framework used in this study is one that was proposed by Hargens and Zimmerman (2009) and how the message of Laudato Si encompasses all aspects of environmental morale and motivation that will trigger a paradigm shift from anthropocentrism to ecocentrism.



Figure 1. The message of Laudato Si incorporation into the four terrains of integral ecology (Hargens et al, 2009)

Review of literature

Pope Francis. Throughout history, science and religion clash on a variety of issues. In the midst of these clashes, there emerged a stereotype of a scientist who does not believe in God, ready to defy religion in any way. And there is the stereotype of a Christian fanatic, looking down on science as mainly anti-religion.

It is but timely that these stereotypes are now broken: in Pope Francis, for the first time ever, we have a spiritual leader with a degree in chemistry who can be able to create a bridge between the two worldviews. Like the priest-scientist in the movie "Angels and demons", he sees no conflict between being a servant of God and a believer in scientific reality. In this age of discord and divergence, we finally have a champion who can unite the two systems of belief and deal with current issues confronting modern society. "Science and religion, with their distinctive approaches to understanding reality," he points out in his encyclical Laudato Si' "can enter into an intense dialogue fruitful for both". However, he warns scientists that "the scientific and experimental method itself can be part of the problem when it decouples creation from the Creator". For him, Christianity and other religions can help in the movement "towards an integral ecology and the full development of humanity".

The theme of the encyclical is clear: care for our common home. We often read or hear scientists talk about the dangers of the rapid changes in the environment and view environmental advocacy as a popular fad that we can choose not to join. But in Laudato Si', Pope Francis made it clear that indifference is not an option. Apathy and greed, among other human-related factors, are to be blamed for the destruction of the environment.

Climate scientists who have claimed global warming and climate change are largely due to anthropogenic activities have met opposition from politicians, corporate leaders, and a minority of scientists. But Pope Francis made it clear that he agrees with the scientific consensus. The draft of the encyclical has undergone consultation with scientific experts. He warns that if no action is taken

Environmental Stewardship of SPUQC. Stewardship of God's creation is one of the advocacies of Saint Paul University Quezon City. Being located in an urban environment, however, presents a challenge for educators to instill love for nature if the students are used to living in a concrete jungle, and where taking care of the environment is an abstract concept. In addition to these, climate change and anthropogenic activities are drastically affecting biodiversity and the amount of agricultural produce needed to sustain a growing population. Scientists predict that food supply will dwindle as the effects of climate change will be more severe: longer droughts, stronger typhoons and heavier rain. Pristine tropical forests are being converted into agricultural land, depriving different species of habitat and food sources.

Environmental morale and motivation

In coining the term "environmental sensitivity", Tanner (1980) discussed the significance of the kinds of experiences that create an informed and environmentally aware community. In forming environmental psychology, Frey and Stutzer (2008) discussed the important role of environmental morale and motivation in achieving the desired environmental value in the individual or the community.

Model approaches to this as shown in Figure 1 deals with altruism, social norms, internalized norms and intrinsic motivation (Frey and Stutzer, 2008). Pure altruism has its problems in explaining with consistency on why people do good deeds. It was suggested that the impure altruism model would better explain why moral exploits are targeted; the "warm-glow" or the positive emotion or feeling that people do seek which results from doing good deeds or giving (Andreoni, 1990)

Because of social norms, how a person should conduct himself based on social approval is a factor that can contribute to public good. Based on evolutionary game theory, individuals are seen as programmed to do certain things in limited learning through imitation or reinforcement (Rege 1999). Internal norms are created when a person penalizes himself that are normally associated with feelings of guilt or lack of self-respect (Rege 1999)

The intrinsic orientation of motivation is, in contrast to extrinsic motivation, considered superior because the person is motivated to act out of personal satisfaction, fun or challenge. It is defined as "the doing of an activity for its inherent satisfactions rather than for some separable consequence" (Ryan and Deci, 2000). These four models are the discernable approaches to study a person's motivation to contribute to public environmental goods. A suitable questionnaire that will be constructed to measure environmental morale based on the approaches discussed by Frey and Stutzer (2008) in the targeted institution. It is desired that through this study, environmental policies and advocacies that would generate interest, increase environmental morale and motivation throughout a higher educational institution in the Philippine setting would be established

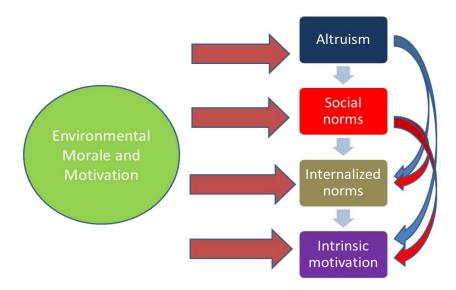


Figure 2. Model approaches to environmental morale and motivation (Frey and Stutzer, 2008)

Significance of the study

People continue to do environmental damaging behaviors at the government, individual, and social levels. These are likely to contributed to the large-scale environmental problems, which are serious threats to the health of the biosphere (Gore, 1993). Because of the apparent greed and unbecoming behaviors of humans on the environment, environmental education becomes the forefront of the survival of our ecosystems.

In light of the global impacts of environmental destruction and climate change, various forms of environmental education are among the issues discussed in the framing of Agenda 21 (UNESCO, 1997). Educational institutions are logically at the forefront for environmental conservation and awareness (Jadhav et al, 2014). In the local setting. the Commission on Higher Education has incorporated environmental and climate change mitigation in its priority agenda (CHED, 2011). Therefore, it is imperative that universities take advocacies that will help protect the environment (UNEP, 2008). Changes in human behavior and views on the environment is needed for this to be successfully implemented. The challenge is to come up with activities that would encourage the community to enhance environmental sensitivity and awareness (Steg and Vlek, 2009).

Pope Francis' *Laudato Si* is both a religious text and an important document for environmental education. In the letter, he admonished people living on the planet for a change in environmental behavior and attitudes. Catholic universities as institution for learning serves as the vanguard for this call. But there are diverse groups in a university. Different strategies have to be made. In particular, transferees or those new students to the university might have to be treated differently than those who are continuing in their respective programs. One

research question has to be made: is there a significant difference in the environmental attitudes between transferees and continuing students?

Methodology

In 2008, Dunlap developed a survey for this study, based on the New Ecological Paradigm Scale developed by Dunlap (2008) to measure differences in environmental attitudes among students in Saint Paul University Quezon City (SPUQC), a Catholic university.

Questions	Tran	Transferees		Continuing	
	Mean	Variance	Mean	Variance	
1. We are approaching the limit of the number of people the Earth can support.	4.163	0.706	3.357	1.478	
2. Humans have the right to modify the natural environment to suit their needs.	3.278	1.471	3.214	1.104	
3. When humans interfere with nature it often produces disastrous consequences.	3.770	0.746	3.500	1.346	
4. Human ingenuity will insure that we do not make the Earth unlivable.	3.606	0.676	3.571	0.263	
5. Humans are seriously abusing the environment.	4.196	0.960	4.214	1.412	
6. The Earth has plenty of natural resources if we just learn how to develop them.	4.557	0.384	4.500	0.423	
7. Plants and animals have as much right as humans to exist.	4.278	0.871	4.285	1.296	
8. The balance of nature is strong enough to cope with the impacts of modern industrial nations.	2.885	1.036	2.928	1.456	
9. Despite our special abilities, humans are still subject to the laws of nature.	3.901	0.656	3.928	1.609	
10. The so-called "ecological crisis" facing humankind has been greatly exaggerated.	3.049	1.047	2.642	1.785	
11. The Earth is like a spaceship with very limited room and resources.	3.770	1.379	3.642	1.324	
12. Humans were meant to rule over the rest of nature.	2.786	1.803	2.928	2.225	
13. The balance of nature is very delicate and easily upset	3.868	0.649	4.428	0.263	
14. Humans will eventually learn enough about how nature works to be able to control it.	3.590	0.912	3.428	1.340	
15. If things continue on their present course, we will soon experience a major ecological catastrophe	4.311	0.618	4.571	0.571	

The respondents for this survey were Grade 11 students for the school year 2017-2018. The respondents were divided into two: students who just came in for the Grade 11 level (transferees) and those who have already studied in SPUQC before (continuing).

The New Ecological Paradigm (NEP) Scale was developed to predict environmental attitudes and behaviors and to measure people's shifting worldviews from a human dominant view to an ecological one, with humans as part of nature. The Dominant Social Paradigm (DSP), positing endless progress, growth, abundance and attitudes contributing to environmental degradation, is then opposed to the New Ecological Paradigm (NEP) Scale was developed to predict environmental attitudes and behaviors and to measure people's shifting worldviews from a human dominant view to an ecological one, with humans as part of nature. The Dominant Social Paradigm (DSP), positing endless progress, growth, abundance and attitudes contributing to environmental degradation, is then opposed to the other models.

Results and Discussion

Using the NEP scale, Grade 11 students were surveyed using the questions mentioned in statistical analysis were done and interpretations of the values were made.

NEP Interpretation

For Question #1, it is interesting to note that new students tend to agree that we are at the limit of our ecological footprint. In contrast, the large value of variance and lower mean is apparent in the responses of old students. This reflects the fact that a lot of Catholic educators with religious background tend to teach and agree that the Philippines is not overpopulated, and with that reasoning, so is the planet. This is passed on to the students. This disagrees with what educators with a scientific background believe.

Question #2 refers to an anthropocentric standpoint, and this view is reflected in the large variance, with those in agreement and disagreement with the statement balancing each other out. Human interference with nature (#3) is a statement that both groups more or less agree with, with the older students having a larger value of variance, indicating a wide variety of opinions.

Question 4 is a statement concerning human ingenuity and how it will transcend current environmental problems. Although anthropocentric in nature, it is a testament to hope that current problems will be addressed by technology. For both groups, a low value of variance indicates that both groups are in agreement, with the old students showing little difference in their answers.

The abuse of the environment (#5) is a view shared by both groups, but has a relatively large value of variance. The belief that there is still plenty of resources (#6) is something both groups agree with, against the better judgement of environmental scientists. Question #7 is coming from an ecocentric paradigm, and it is encouraging that both groups share this opinion (although variance is relatively high).

Question #8 acknowledges the fact that industrialized nations bear the brunt of ecological responsibility, and students are in agreement that these countries should do more for the environment because the balance of nature is not strong enough to unaffected by anthropogenic activities (though variance is high). The subjection to laws of nature (#9) is a view shared by both groups.

With a high degree of variance, most new students do not agree that the "ecological crisis" (#10) is greatly exaggerated. Old students tend to be neutral

about it, with a wide variety of opinions. The Earth as a spaceship (#11) is a view that the Earth has finite resources and there is no other "spaceship' to transfer to. Most students, both old and new, agree with this (although variance is high).

Question #12 "humans are meant to rule "can reflect a dominion model or an anthropocentric model of creation. This is a view that most students do not agree with. Nature's equilibrium (#13) is easily upset is something that most students agree with. The low variance means that the opinion is predominantly shared among both groups.

Human controlling nature eventually (#14) is an anthropocentric view that most students agree with. But with a low variance, students from both groups agree that the environmental status quo (#15) should be acceptable or else we will be heading to an environmental catastrophe.

Taken as a whole, an F-test analysis will give the following result:

F-Test Two-Sample for Variances

	old	new
Mean	3.67619	3.734426
Variance	0.384014	0.291903
Observations	15	15
df	14	14
F	1.315552	
P(F<=f) one-tail	0.307397	
F Critical one-tail	2.483726	

Since the F value is less than F critical, the null hypothesis is accepted, that there is no significant values between the two groups. The even numbers of the scale represent the dominant social paradigm (DSP) which is an anthropocentric viewpoint. Doing an F test will result in these values:

F-Test Two-Sample for Variances

	old	new
Mean	3.316327	3.393443
Variance	0.373907	0.36612
Observations	7	7
df	6	6
F	1.021268	
P(F<=f) one-tail	0.490136	
F Critical one-tail	4.283866	

This table again shows that there is no significant difference between the two groups. Since this shows the anthropocentric paradigm, environmental education efforts should be intensified to address these opinions.

The odd numbered questions were analyzed, and using an F test once again:

F-Test	Two.	-Sample	for	Variances
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	new	old
Mean	4.032787	3.991071
Variance	0.051983	0.204719
Observations	8	8
df	7	7
F	0.253923	
P(F<=f) one-tail	0.045502	
F Critical one-tail	0.264058	

The results show that there is no significant difference between the two groups, and an ecocentric world view was predominant among both groups of students.

Conclusion & recommendations

In conclusion, this study finds that there is no significant difference between the environmental attitudes between transferees (new) and continuing (old) students in Saint Paul University Quezon City (Philippines). This may indicate that there is no need to modify environmental activities and education about SPUQC environmental advocacies. The more important question is how does pro-environmental attitude translate to pro-environmental behavior? Besides, further studies are being done to measure environmental attitudes among employees, parents of the students and other stakeholders in the university to fulfill the Laudato Si mandate.

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Animal rights and animal cloning

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Interdependence of life

Now the whole world is aware of overuse of advances in science and technology resulting in environmental degradation that is destroying living organisms. Today almost all countries are experiencing how their cultures and practices have been ignored, and their ancient philosophies which valued Nature, ecology, conservation and preservation of all living organisms, have been set aside. This has disturbed the ecological balance and safety of humans and Earth. This realization means that the nutrient cycles, energy cycle and Bio-Geo-Chemical Cycle are now considered more important by all countries (Sivakami, 1998).

The awareness of Ecology's importance for agriculture has been realized from experiencing the importance of richness of soil which when deleted produces different kinds of plants in different seasons. Effectively all organisms, except humans, are dependent only on resources which are renewable. Humans are also a special consumer of non-renewable resources. Like other animals, our chief source of food is potentially renewable through growth of plants. Virtually, all human food is derived directly or indirectly from plants but some of the energy used to obtain this food is obtained from sources that are not renewable. The most obvious of these are fossil fuels and minerals. We are dependent on these important sources of energy which occur on Earth in a fixed quantity and once it has been depleted there is no way of renewing it. Human consumption of non-renewable resources is increasing exponentially.

People and countries are becoming conscious of the various ways in which organisms are organized into communities, how they exploit the available resources and how they respond to the environment. The restraints imposed by other members of community (plants, microorganisms and animals) and by the environment normally prevent any one species from becoming excessively common.

Communities develop by passing through a series of successional stages and the resulting climax depends on the characteristics of the environment, especially on the climate. If a plant or animal community is disrupted by human intervention, succession begins afresh and the newly established climax eventually will be different from the original. Natural communities are relatively stable and it appears that the more species are present, the greater the likelihood of long-term stability. The relationship between species and non-living parts of environment has to be included in giving importance to acquisition of energy as well as transfer within communities and the ways in which nutrients are obtained and utilized (Owen, 1967).

 $[\]cdot\cdot$ pp. 90-101 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

Table 1: Selected issues of animal rights and conservation

5) Animal Welfare Organizations are PETA, HSUS. 6) We should always treat Animals humanely.

Animal rights: Conservation 1) Concerned with individual Animals and with Animals 1)Focuses on levels above the in General Some people's activities are the antithesis of individual, populations, Species, the approach mentioned in Animal Rights and Bio-Sphere, Ecosystems 2) Refers usually to sentient Animals not necessarily to except when just few individuals all Animals, such as Jelly Fish, Sponges and not to are the only survivors of their **Plants** population or species. 3) Concerned with Animals in areas of Human activity such as agriculture, laboratories, Fur Trade, Zoos & 2) Encompasses all creatures and plants and includes the physical Circuses The question to be asked is are we an exclusive Animal part of Nature, Air, Water and Rightist or Welfarist or Conservationist or for that Energy. matter an exclusive Deep Ecologist. Actually, being one or another may be a difficult course. 3)Not concerned with animals in A better approach may be to see these philosophies not areas of human activity unless as necessarily mutually exclusive but as reinforcing one animals are chosen from another. We can surely be benignly flexible and adopt endangered species. best ideas better and activities from each of them depending on particular circumstances. We certainly can understand the outlook of different cultured people. 1) We should not invariably over rule animal Interests The animal holocaust (annual:) for Human Interests. 300,000,000 Cattle (for beef) 2) We should not inflict pain or death on Animals. 700,000,000 Geese 3) We should abolish harmful animal use. 50,000,000,000 Chicken 4) We should not use animals to benefit only ourselves as 300,000,000 Milk Cows it is morally wrong. 600,000,000 Ducks

The ability of species to fit into an ecosystem and to persist generation after generation depends largely on the quality of individual members who make up the species. The inherited characteristics and genetic makeup of species that enable plants and animals to survive show adaptations to the environment. Adaptations are distinct from adjustments to the environment made during an individual being's lifetime, although in practice it is difficult to separate the two. For example, plants and animals adjust to nutrient supply by attaining maturity at different sizes; for example, cabbages grown in poor soils are smaller than usual as well as starved caterpillars turn into undersized butterflies, but if they provide their offspring with adequate nutrients they become normal size (Sharma, 1999). The continued introduction of new agricultural technologies, insecticides, pesticides and chemical fertilizers, the new strains of crops and domestic animals, and urbanization and industrialization, use of biotechnology (Rifkin, 1998), and so on, have resulted in widespread destruction of natural ecosystems and a growing threat of soil and water pollution and ecological imbalances.

People have understood that countries and cultures which are very different are also different in the deliberate actions of humans in dealing with animals, microorganisms and wild and food producing plants, as well as in the incidence of accidental actions or carelessness, and the desire to control and exploit nature. The

policies and programs of different societies and cultures raise many sociological and political issues. There are contradicting issues between different cultures though we can explore the similarities in ethical and religious philosophies.

Human ecological inequality continues as some rich countries consume more of the world's resources but poor countries suffer with higher birthrate while per capita energy consumption and production is low. Access to food and prevention of infectious diseases are also greater in rich countries when compared to poor countries (Owen, 1967).

The common ecological problems in all countries have made people to realize and follow the common philosophy of religions in all nations. The philosophy of religions has mentioned ethics and encouraged humans to treat other living organisms especially animals with concern on their welfare. The United Nations in 2005 in the Universal Declaration on Bioethics and Human Rights, and also in Cartegenoa Protocol of 1978 of the Convention on Biological Diversity, emphasize bioethics - love between all living beings (Macer, 1998).

Animal rights

Animal rights and conservation of Nature are similar (Table 1) but there are some differences. Both became popular in 1970s and both oppose human centeredness (anthropocentrism) but not all conservationists state the difference. Both believe that wild Animals have intrinsic value (worth or importance independent of human values), though it is not an attitude shared by all conservationists. Both support conserving environment but for different reasons. Animal rights activists say the same for the sake of greater conservation of nature.

Henry Spira states that animal suffering is intense, widespread, expanding, systematic and socially sanctioned by cultures. The victims are unable to organize in defense of their own interests. As an ethical concept, animal rights is close to deontology which Immanuel Kant advocated (Abbot, 1987). Animal welfare advocates believe people should use animals but treat them well. Animal rightists say people should not use animals and we must abolish the causes of animal suffering then there is no need for 'Welfare'. New welfarists take the view to support abolishing the causes of animal suffering but argue pragmatically that it will take a long time to achieve that. Meanwhile they must do all they can support for the idea of welfare of animals.

The question arises as do animals have rights? Do they know it? What do we think of and observe animal rights? What are the rights of animals? What is the ethics of animals?

Our duties to animals are indirect and derive from our duty to respect and foster the ends of humanity. The religious philosophy of all countries and religions such as Christianity, Islam, Judaism, Buddhism, Jainism and Hinduism, have advocated animal rights and animal ethics from ancient times.

Hindu mythology describes animals, including birds as vehicles of gods and goddesses, and some gods and goddesses are pictured as half birds and human body and half animals as human bodies and heads as birds or human heads which are chimeras. Hinduism also states respect for ox and cows and domestic animals and pets like cats and dogs, and tigers, monkeys, elephants. Also, horses are used for carrying woods and people in wooden carts.

The interpretation of the Quran by Alberuni shows concern for bees, butterflies, birds and animals. Judaism also worships trees and rocks and show much concern to animals. Non-violence and non-killing of all living beings can be found in Jainism literature and Buddhist philosophy writers.

In Greece as stated by Aristotle and Plato as well as Asian Societies, animals lived and continued as companions and security forces as well as domestic care takers along with women in the families. Western countries today take even dangerous animals as Pets. In USA, lizards, young crocodiles, pigs, monkeys are taken as pets by many youngsters.

When we see the philosophies from 18th century to the present we can see that the Western philosophers have seriously advocated animal ethics, animal rights and welfare. Let us take some examples:

Immanuel Kant on equality and interest of animals

Kant said the interest of all beings are deserving of equal consideration. If a being suffers, there can be no moral justification for refusing to take that suffering into consideration. No matter what the nature of being, the principle of equality requires that its suffering be counted equally along with like suffering of humans - in so far as rough comparisons can be made of any other being. If a being is not capable of suffering or only of experiencing enjoyment or happiness, there is nothing to consider. This is why the limit of sentient beings is the only defensible boundary of concern for the interests of others. To mark this boundary by some characteristic like intelligence or rationality would be to mark it in an arbitrary way. Why not choose some other characteristic, like skin color?

The capacity for suffering and enjoyment is both necessary and is sufficient to having interests. For Peter Singer, a being has rights if and only if it has interests; it needs not have autonomy but simply membership in a community, the ability to respect the rights of others, a sense of justice and so on. Singer's view seems to be that what matters is not who or what suffers, but the suffering itself. If suffering itself is equal then our concern for that suffering ought to be equal. Suffering is intrinsically bad.

Kant's view on animal rights is the idea in which some or all non-human animals are entitled to the possession of their own lives and that their most basic interests – such as the need to avoid suffering – should receive the same consideration as similar interests of human beings. There are some things in human life that are very important. The first is to be kind. The second is to be kind, and as for the third and fourth and all the rest is – Kindness.

Speciesism is the view that only humans need special consideration. In 1970 Richard Ryder, who is a British animal ethics philosopher and animal welfare campaigner, a psychologist who experimented on animal psychology and speaks for animal rights, denounced Utilitarianism because it justifies exploitation of some animals if there is a net gain in happiness for the majority of other animals (humans are the other animals). He advocated an ethical philosophy of "painism" in 1990, that is all the animals who feel pain should be worthy of rights and that moral worth should be based on reducing the pain of individuals. He coined this term "specisism" while campaigning in Oxford to denote a ubiquitous type of human centered on prejudice which he thought was similar to racism. He objected to humans favoring to

one's own species, while exploiting or harming members of other species. He also spoke about the "Victims of Science (1975) and the use of animals in research.

Ethical views of Peter Singer

Peter Singer (1989) in *Recent History and Development of Animal Rights*, further developed the moral theory of Painism and "putting morality back into politics". Peter Singer popularized the term 'Specisism' and focused on the way speciecism without moral justification favors the humans. The racist violates the principle of equality by giving greater weight to the interests of members of his own race, where there is a clash between their interests and interests of those of another race. Singer concludes that specisism is unjustified, like racism. What follows is not that all animals have the same rights as humans, but that their interests should be given equal consideration because they have different capacities and they are entitled to have different rights (Hursthouse, 2000).

Singer also argued that factory farming is unjust discrimination against animals. It is not merely the act of killing that indicates what we are ready to do to other species in order to gratify our tastes. The suffering we inflict on animals while they are alive is perhaps an even clearer indication of our speciesm than the fact that we are prepared to kill them, in order to have meat on the table at a price that people can afford. Our society tolerates methods of meat production that confine sentient animals in cramped, unsuitable conditions for the entire duration of their lives. Animals are treated like machines that convert fodder into flesh and any innovation that results in a higher conversion ratio is liable to be adopted.

"Since as I have said none of these practices cater for anything more than our pleasures of taste. Our practice of rearing and killing other animals in order to eat them is a clear instance of sacrifice of most important interests of other beings in order to satisfy trivial interests of our own. To avoid specicism we must stop this practice and each of us has a moral obligation to cease supporting the practice."

Peter Singer points out the animal sacrifices including the plight of animals in factory farms which are excluded from coverage of Animal Welfare Act in the USA. He says Federal Statutes regulate transport and slaughter of livestock including humane methods of Slaughter Act 1958,1901-1906, and Twenty-Eight Hour Law of 1877 S USC 49, SUSC 80502. According to Singer the acts have significant deficiencies. These acts he contends are not well enforced and contain substantial loopholes. For example, the Human Slaughter Act does not apply to the largest number of animals killed which are poultry. J. S. Mills philosophy means animals as well as humans are experiencing both pleasure and pain. Singer's debate on utilitarianism discusses on the ethics of people eating animals and experimenting on animals in lucid and compelling language. Singer had also objected to medical experimentation that causes harm to animals.

Peter Singer took part in public demonstrations while he was a student of Oxford University. He inaugurated the Animal Rights Movement through the book *Animal Liberation* in 1975 which questions the human treatment of Animals. The second Edition was translated to 17 languages including, Chinese, Korean and Hebrew. His book gave philosophical basis for animal rights movements, and awoke interest in academic circles on animal ethics and animal liberation. Treatment of animals is one

of the foremost ethical issues of today's toleration for mistreatment of animals which is a prejudice like sexism and racism; mistreatment does not have a rational basis and failure to consider animal suffering means someone is guilty of specisism. "Some scholars say his ethical philosophy is practical following Utilitarian principles and best solution to moral problem, as consequences for the majority concerned would be high." Hence you may be morally justified if you cause relatively little harm to a few beings to minimize great harm to more beings. Thus, you might experiment but not kill some humans or animals to save the lives of many more humans or animals but it would be wrong to kill or cause severe pain to many to save the little distress of the few.

Peter Singer says we should not give greater preference to the interests of humans over animals. He also says some individuals are more valuable than others and deserve high priority in moral disputes. In his view a sentient animal like a rat has higher priority to life as he has more to lose if harmed than a non-sentient being like a worm. Similarly, a being who is more sentient like a chimpanzee has more to lose than a being who is less sentient like a Rat.

Further philosophical writings on animal rights

Lori Gruen of Wesleyan University also in her book *Ethics and Animals: An Introduction* (2004) wrote that it is morally acceptable to kill animals for food if there is no other food that can be got. But she also spoke on pain saying it is instrumentally good like pain that alerts us of ailments. What kinds of pain are bad to cause? Why is it different to cause pain to humans rather than to do so to other animals? The character Ken in the book said 'By what principles we distinguish which creatures have moral worth and which do not '? Dogs and Apes have emotions. Does this influence their moral status? He says only humans have projects and goals in their life, so it is wrong to cause them pain as it interrupts their project.

Tom Regan was Emeritus Professor of Philosophy in American University (Regan, 1983). He was an advocate of animal rights and said animals have intrinsic value. Values in themselves are irrespective of any value that human needs have. By intrinsic value he means animals have feelings, beliefs, preferences, and memories. He calls animals with such features as "subjects of a life" because what happens to them does matter to them. Regan clashes with Singer saying subjective human preferences can outweigh the interests in animals. Regan counters that it is better that animal rights are based on intrinsic value. This will thwart people putting their own interests before animals whenever it suits them and prevent exploitation of individual animal rights for the greater good of humans and stop morality being exclusively for the "human club". All animals are somebody, someone with a life of their own. Behind their eyes is a strong story of their life in this world, as they experience it. Regan sees the animal rights movement as a part of human rights movement and maintains that animals who are a subject of life should have similar rights to life as humans, and interests in animals. He also said people should change their old habits about what they eat, and wear. Only if billions of people change in a deeper, more fundamental and more revolutionary way will animals live independently. They must embrace in their lives they must express a new understanding of what it means to be a Human being (La Follete, 1983).

R. G. Frey is also a utilitarian who is diametrically opposed to granting moral consideration to animals. Singer's arguments for animal liberation is founded on Utilitarianism which fails as moral Philosophy. There are several important issues on which Singer cannot give non-humans (animals) the consideration they deserve. Singer's case for respecting animal interests is theoretically inadequate, says R.G Frey.

Jeff Sebo is a critique of Kant's theory of indirect moral duties to animals. For example, in duties to animals and spirits, Kant has said so far as animals are concerned we have no direct duties. Animals are not self-conscious. And they are merely as means to an end. That end is man. He reiterated his point later by writing "our duties towards animals are merely indirect duties towards humanity." In contrast, animal rights advocates argue that we have direct duties to beings with inherent values whether or not our actions towards them promote the interests of other human beings. Regan (1985) argued that animals have inherent rights for the same reason that we do "we each are experiencing subject of life as a conscious creature having an individual welfare as important to us whatever our usefulness are to others." We may consider this argument direct or intrinsic account of duties to animals, as opposed to the indirect or instrumental account that Kant offers. Kant's contention was that cruelty to animals leads to cruelty to humans. Thus it is in the self-interest of humanity, he says, to treat animals humanely at least most of the time.

The Kantian indirect duties view has been very influential in the development of moral, political and social theory (Heny, 1964). In fact we can still realize its impact today. In US for example many State and National Laws continue to regard, "animal ethics issues" not as duties that humans hold towards animals, but as a rule that governs conflicts over the property status and formal legal status of animals. For example, the Texas Animal Cruelty Laws ostensibly intend to protect animals from cruelty and inhumane treatment. It applies only to domesticated animals under the custody of human beings. As a result, they exclude birds, deer, rabbits, squirrels, and all other animals, who have their misfortune not to be owned. Similarly, the Animal Welfare Act, the national law on animal treatment excludes pet stores in state and country fairs like stock shows, rodeos, pure bred dogs, and cat shows and any other fairs or exhibitions intended to advance agricultural arts and sciences. The US Department of Agriculture interprets animal welfare as excluding cold blooded animals and warm-blooded animals which are not used for research, teaching, testing and experimentation, exhibition purposes or as a pet and farm animals that are used for food, fiber or production purposes. In the eyes of the law, animals have no intrinsic value at all. They are important solely as property bought and sold as resources for human benefits.

Unfortunately, animals will never gain the moral or legal status they deserve if we continue to operate within the parameters of Kantian views (Abbot, 1987). Therefore, if we are to progress towards the goal of animal liberation, we must first amend the principles on which the animal cruelty laws are based. To this end, Sebo writes:

"I will challenge the validity of the indirect duties view by arguing that Kantian ethics not only permits but entails the inclusion of Animal Rights. Like this many Philosophers have challenged Kant by pointing out that his argument rests on the assumption that Animals are non-rational, whereas we all know now that many Animals possess significant rational capacities. Recent Studies in cognitive Ethology indicate that Chimpanzees and Bonobos have intellectual abilities similar to if not greater than those of a normal human child. They can form mental representations of themselves and other minds, communicate through language and symbols, discern cause and effect relationship, solve simple logical and mathematical problems and much more. Furthermore, even though not all animals are able to perform higher cognitive functions they are none the less able to set needs based on inclination and pursue the necessary means for achieving them, often creatively. This research suggests that the argument for the universal moral superiority of Human beings is true because no matter what criteria we select. But some Animals always outperform some Humans. Therefore, we have good reason to reject the simplistic view of an animal mind that Kant describes in his book and to blur the moral line he forges between humans on one hand and all other Animals on the other."

This response has meant there is no need to develop this life, like that of reasoning any further, as it is an empirical argument that tries to fit animals into the Kantian view, not an analysis of the view itself. Instead for the sake of argument we can propose that all animals are irrational or non-rational in order to argue that the low moral value Kant extends to animals poses significant problems for his ethical theory.

Specifically, the Kantian formula of the categorical imperative as presently understood commits Kant to claiming that humans have an indirect moral status even though he asserts they are ends in themselves. We can conclude that we solve the problem only by extending the moral radar and that our only means for doing so will incorporate animals into it. We can argue that Kantian ethics in order to protect the vulnerabilities of human beings can also protect animals as well; then it is meaningful about Kant's philosophy.

Branham (2015) speaks about Rene Descartes, Kant, J. S. Mill, Tom Regan, Steven wise and Peter Singer. In brief summary, Descartes says that humans are merciless to those who remind us as humans are not always loving all. Peter Singer and J. S. Mill are agreeable in stating adamantly that many of the ways we use animals today are not ethically permissible under utilitarianism. She also states under Animal Welfare Act in 7USCA S 2132(g), some animals are explicitly exempted from protection offered by the Animal Welfare Act. Such "non-animals" include some horses, rats, mice, all species of birds and all cold-blooded animals. The exclusion of rats, mice and birds are the result of statutory amendment in 2002. We should know that such an exemption is wrong as birds are also capable of sign language and their voice is understood by their own species and they act mostly as a group, and not as a single bird.

There was also a discussion whether animals, small and big, have souls. Plato said souls live in ultimate reality. Many societies absorbed this idea when the early church adopted this concept. What about the souls of other animals, not humans? How can an incorporated soul connect with its material body? The most compelling answer is as the atheists said the soul is purely an idea. Can we think that an animal explores human feelings and non-spoken thoughts? The question of cloned animals having soul is contradictory with some as they are not born by nature. Many

cultures do animal and bird cloning as they require protein from the meat, for example, hens, ox and cows.

Gaia philosophy has mentioned all living beings are earthlings. We say concord and conflict are sanguine as all earth has warming features that is why we rejoice being earthlings. The greatest threat to people is ignorance and the greatest threat to animals is ignorant people.

Taylor (2003) also says animals are like us, human beings. He traces the debates on animal rights back to Aristotle and Darwinism and also examines the relevant contemporary theories. Mary Midgely also talks about "equality of animals like humans", but against Tom Regan's views on animal equality. She criticizes Peter Singer's argument on 'specisism' saying it depends on the situation (Hursthouse, 2000). Francione Gray says: "Leave them alone"; he means animals must not be slaves of humans (Garett, 2011). The Oxford Handbook on Animal Ethics edited by Beauchamp and Frey gives account of 17th and 18th century philosophy and reflects deeply about animal welfare and animal rights. Frey also speaks about "Specisism". Robert Boyle spoke about moral duties to animals. It describes the steady movement towards both rejection of Boyle's view and towards the view that we have moral duties towards animals. There is the argument that this historical trend has led the Scottish moral philosopher Francis Hutcheson to the idea of "invention" of animal rights.

Mark Rowland in his book on animal rights says animals are like us humans. The book includes a combination of moral theory (contractualist orientation) and a detailed discussion of practical issues, including using animals for food, experimenting on animals, hunting, companion animals and zoos. There is also discussion of the harm of death as it applies to humans and animals.

About the moral status of animals, the Stanford Encyclopedia of Philosophy makes distinctive statements about the moral status of humans. Many philosophers have argued that little humans are different in a variety of ways from each other and other animals these differences do not provide a philosophical defense for denying non-human animals moral consideration. In the law courts, all humans and some corporations are considered "persons" in the legal sense but all animals, infants and adults are not legal "persons", but rather under the law they are considered as property. The explanation on "personhood" shows it is not coextensive with humanity when understood as a general description of the group to which human beings belong. Another problem is if there may be some extra-territorials or deities who have rational capacities, when many humans are not intrinsically autonomous "persons". Some human infants, children, people with advanced forms of autism or Alzheimer's diseases or other cognitive disorders, do not have the rational selfreflective capacities associated with personhood. The problem unfortunately is known in the literature as problem of marginal cases and poses serious difficulties for 'personhood'.

According to the animal rights position, to treat an animal as a means to some human ends, as many humans do, when they eat animals or experiment on them is to violate that animal's right. The animal rights position is an absolute position. Any being that is a subject of a life has inherent worth and the rights that protects such worth and all subjects of life have these rights equally. Thus, any practice that fails to respect the rights of these animals by eating animals, experimenting and hunting

and using animals for entertainment are violating their rights. It is wrong irrespective of human needs, context or culture.

There have been few attempts to change the legal status of some non-human animals from property to 'person'. The non-human rights Project (NhRP) founded by Steven Wise has filed a series of cases in New York courts seeking to establish legal 'personhood. For chimpanzees being held in the United States, with the goal of protecting their rights to bodily integrity and liberty and allow them to seek remedy through their proxies when their rights are violated. Chimpanzees are a good test case for establishing non -human legal 'personhood' as they are according to the documents filed by NhRP, autonomous beings, with sophisticated cognitive abilities including episodic memories, self-consciousness, self-knowing, self-agency, referential and intentional communication, mental time travel, numerosity, sequential learning, meditational learning, imitation, mental state modelling, visual perspective talking, understanding the experiences of others, intentional action, planning, imagination, empathy, metacognition, working memory, decision making, initiation, differed imitation, emulation, innovation material, social and symbolic culture, cross model perception, tool use, tool making cause and effect; Petition of NhRP VS Samuel Stanly. Some other philosophers also speak about the moral significance of animal moral claims; that non-human animals can make moral claims on us does not in itself indicate how such claims are to be assessed and conflicting claims adjudicated. Being morally considerable is like showing up on a moral radar screen-how strong the signal is or where it is located on the screen are separate questions. How one argues for the moral consideration of non-human animals will inform how we are able to understand the force of an animal's claim. According to the view that an animal's moral claim is equivalent to a moral right. Any action that fails to treat the animal as a being with inherent worth would violate that animal's right and is thus morally objective.

Animal welfare in Japan

In Japan, animal welfare has taken small steps. There are some campaigners against fur. Some campaigners domestically and internationally forced some clothing brands to announce that they will no longer use fur. Compared to 10 years ago import of furs into Japan is down by 80%. In Japan, still some 1.6 million pelts are imported till 2016. In 2012 the Japan Anti-vivisection Association JAVA won an Award in LUSH Prize in Consumer Awareness category for its boycott campaign against Japanese cosmetic giant Shiseido. It was unusual for Japan to have street protests which led the company to announce an end to animal testing program for the product. Nevertheless, unlike the European Union animal testing ban there are no laws proscribing the practice on the horizon of Japan or even rules setting welfare standards for animals in laboratories like U.K.

Despite the history of Buddhism in Japan, the prevailing food culture is dominated by fish and shrimps which makes it difficult for people to become vegans. Around 5% of people in Japan follow meat free diets which is roughly the same as most of the countries in the world. Japanese animal campaign groups are small when compared to U.K RSPCA. According to campaigners even the world organization for animal health codes are often ignored. The World Animal Protection Organization rates Japan as "D" in its animal protection index, the lowest

in G8 apart from Russia. Shintoism in Japan has established statues of animals in shrines. In 32,000 Inari shrines some individual shrines are dedicated to God of rice, fertility and tea along with agriculture and industry. Foxes are regarded as messengers of Inari so statues are commonly spotted in and around the shrines acting as guardians and replacing the Komainu of other Shrines. Live foxes were also kept in certain shrines in the past. Komainu are like creatures who like live guarding gods in Shinto shrines guarding multiple deities as statues spotted in pairs (yaeyama shrine).

We can also see unusual Komainu (lion dog) in Hachiman. About 25,000 individual shrines worship Hachiman god of war, protector of Japan and Japanese people. Doves are regarded as messengers of Hachiman – Hachimangain. Oita Perfecture has Hato or dove statues in shrine. Shintoism is an ancient religion in Japan. 100,000 shrines are across areas in Japan. Animals are often believed to be messengers of Shinto gods or are believed to be guardians that ward off evil spirits. As such statues or motifs are often found in shrines.

Japanese Environmental Philosophy by (Callicolt, 2017) speaks about human nature and environment, environmental aesthetics, nature in Japanese tradition of thought and nature and Japanese culture. Takao Takahashi (2018) has also written on disaster prevention as an issue in environmental ethics.

Carl Becker states the great culture gaps between China, Japan and America today are not so much different when we compare Shanghai, Tokyo and New York. The ecological concept of nature as an organization of novel aesthetic perspectives articulated in Whitehead's mode of thought can be regarded as a prolegomenon to a new metaphysics of morals and to environmental ethics in particular. Kozuka (2014) noted that animals like cats and dogs are now treated and kept in houses in Japan as pets. 70% of Dogs and 90% of the cats now live indoors. About 35 % of households have pets. The number of pets in Japan is put at 21.3 million.

Conclusions

In India vegetarianism is popular but only 30% of the population has taken vegetarianism seriously. In many countries all around the world animals are used for medical experiments in avoiding certain diseases. Despite all philosophies reviewed in this paper, most of the countries across all cultures continue to eat different dishes made of animals (legs, body, heart as well as the whole meat).

Bioethics as well as philosophies and the legal acts of preventing and prohibiting killing of animas are often ignored making the animals as good and tasty dishes. People in many countries do not consider the well-being of animals. If the people start respecting ethics and equality of animals and consider the need to stabilize our global ecological balance, we will keep all living creatures alive. There are many issues, such as urbanization, industrialization and use of technologies and fertilizers in agriculture and farming.

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Healthcare and health problems in Thailand

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Summary

This paper discusses health in Thailand, including some of the key epidemiological indicators, and challenges of the health system facing an aging population. The purpose of this paper is to introduce healthcare in Thailand, how it is managed and some of the problems. The second half of the paper is to introduce my own experience to promote ideas of prevention of sickness rather than cure.

Introduction

Since 1970 the Thai government planned for health and social services to respond effectively to demographic and epidemiological transition. The whole population is now protected from financial hardship when they need to use services by the Universal Health Coverage of the country. The country now is facing the challenges of ensuring effective services for a rapidly ageing and increasing urban population, as well as reducing adult mortality, and to ensure efficient delivery and equitable benefits policies. In 2015, *Thailand Health Systems in Transition* was published and is being practiced as such for the development of heath infrastructure: primary health care facilities to ensure the functioning of health systems across the whole country.

The poor rural populations, stateless people and the migrant workers are at services free at the point of health care for all, to minimized catastrophic health-care expenditure and impoverishment. There are three public insurance schemes:

- 1. Civil Servant Medical Benefit Scheme (CSMBS) for civil servants and their dependents.
- 2. Social Health Insurance (SHI) for formal sector employees.
- 3. Universal Coverage Scheme (USC) for the remainder of the population.

The three schemes have changed the way health care was financed, and have become much more practical and widely covered all population.

 $[\]cdot\cdot$ pp. 102-107 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J..Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

Table 1. Characteristics of the three public health insurance schemes in Thailand

	Civil Servant Medical Benefit Scheme (CSMBS)	Social Health Insurance (SHI)	Universal Coverage Scheme (USC)
Population Covered (2015)	5 million (8%)	10 million (16%)	48 million (75%)
Beneficiaries	Civil servants and their dependents	Formal sector employees but not dependents except maternity benefits	Those not enrolled in CSMBS and SHI
Source of finance (2015)	General taxation Expenditure US\$ 400 per capita	Tripartite: employees, employers and government. 1.5% of salary up to a US\$ 500 ceiling Expendtiure US\$ 106 per capita	General taxation Expenditure US\$ 84 per capita
Managing agency	Comptroller General's Department, Ministry of Finance	Social Security Office, Ministry of Labour	National Health Security Office (NHSO)
Provider choice	Free choice of public providers; private in emergency	Annual choice of contracted public and private hospitals (>100 beds and other required facilities are eligibility criteria as contractor hospitals	Limited choice: Annual registration with Public and private contracting unit for primary care, mostly district hospital and its network of health centers in their domicile district
Benefit package	Comprehensive curative and rehabilitation, no prevention and health promotion services	Comprehensive curative and rehabilitation, no prevention and health promotion services	Comprehensive curative and rehabilitation services, Prevention and promotion was managed by NHSO for all Thai citizens
Payment	OP: Fee-for-service, reimbursement to providers IP: DRG since 2009 no global budget applied for IP Cannot apply hard budget	OP: Capitation inclusive for OP and IP where IP has additional pay for high DRG weights Hard budget was applied	OP: Age adjusted capitation IP: DRG + global budget Hard budget was applied

Health outcomes

Thailand has better performance than many other low and middle-income countries in terms of maternal and child health. However, adult mortality rates are not significantly lower than in neighboring countries, but higher than many countries in Central America.

Many causes of adult mortality are road accidents, homicide and alcohol related diseases. Heart disease and cancer are also major causes of death. Thailand was a leader in tobacco control before the 2004, ratification of the WHO Framework Convention on Tobacco Control, yet the level of smoking is high even with the prices of tobacco have been increased. Another problem is the adolescent pregnancies and AIDs are also increasing. The country needs great change and action from many sectors and different parts of society to improve the significant change in adult mortality.

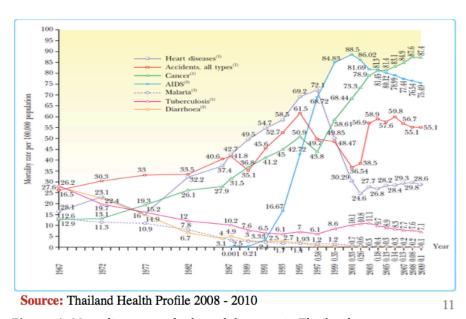


Figure 1: Mortality rates of selected diseases in Thailand

Future of Thai healthcare

- 1. Financing and service-provision policies for elderly people: Thais are facing an ageing society, need long-term care policies. Have to develop more effective mechanisms for communities and social services.
- 2. Large gaps in urban and rural primary health Care (PHC): the differences between the urban and rural health systems are hospital-oriented care, private clinic and government hospitals, and a lack of effective primary health care systems especially to treat chronic diseases. There are needs to develop the family care teams, qualified clinics to provide health promotion and preventive services.

- 3. Need of improvement in financial support to finance health care: at the moment general taxation is the main source of funding may have shortfalls, such as economic downturns and structural adjustment: there are needs for new sources of funding to services and continuity of treatment for chronic conditions.
- 4. The role of Minister of Public Health (MOPH) in a more complex system for future health governance: there are needs for MOPH to be engaged in effective intersection actions, service provision and management of financing health services in order to achieve the national health goals and fulfill its policies. There are subjects to be discussed amongst the personals of health care which will involve all units in the society, both private and public.

Suggestions for the improvement of Thai Health

According to the Greeks, "Sound mind is in the sound body", how can we balance and create healthy mind and body?

- a. Need for health education, through media, television, Line, FB etc. Roots of most sickness are from intake into the body. How to eat healthy food? Traditional Thai foods are very healthy, full of herbs and no fat. But with modern globalization trends, Thais are consuming Western food, fast food or junk foods. Obesity is a main problem for children and adults. Thais need basic knowledge of how to protect ourselves in terms of food.
- b. How to control ourselves in using modern technology? We cannot deny that mobile phone, television, computers are part of our life. We have to learn to protect ourselves from being slaves of technology, which means technology controls us rather than we control technology. Are we the victim of invention or can we control the tools we use?
- c. There are needs to have good sex education for teens and more knowledge about AIDS. Adolescent pregnancies are one of the problems we have, knowledge and education are needed. But how to have well designed course in sex education: samples and problems solving are essentials. The problem is so dishearten and brought so much suffering to all.
- d. Need for training program for better understanding of healthy living. Government should provide more parks and strict rules to control pollutions in water and air.
- e. Reduce stresses in working place rearrange office for better environment.
- f. Lead people learn to think about life, what is a good life and try to follow King Rama IX's efficient economy.
- g. Government should provide television channels for health education and useful information for the people.

Problems of Humankind in the 21st century

What we are facing in this century had never been experienced before in the last 100 years, as newly developed technology makes our life faster and hope to be better. We tend to have less patience and became more violence through all the news,

media and games that can be received at any time and place in the world. Man became hollow, no time to introspection, no perspective in values and cannot find the meaning of life only to amuse oneself through all the media one can get. Man moves into directions that all kinds of propagandas led them to. Every day news and media only led man sees the outer, not the inner self, life then become meaningless, not able to find the essence of life. Nietzsche said, "...Those who have a reason to live, can bare almost anyhow." Which means without reason to live, life has no meaning, one just drifts through it. There is no need to fight for anything that he or she believes in. The failure of modern education is unable to lead man to find the self, only for finding job.

The good, truth, and beauty in the 21st century

What is good? Success, wealth, fame and fortune...if these qualities are what we desire what will become of our live? We will enslave ourselves to have the above mentioned not knowing what is really good for ourselves. We only aim at the end products not knowing or enjoy life at the present moment. Or one cannot see the beauty in life through everyday work or walking the path, but only want to reach destination. One is not really living in the present moment.

What is truth? Present and future technologies have techniques leading man to see and feel virtual reality, man cannot distinct of what is real and what is not. One cannot really perceive the truth directly. How can we know then what the truth is? We live in the world of illusion and make believe, and cannot perceive what is real. What kind of education to be able to create awareness, questioning and answering may help us to get out the rabbit hole or knowing how far we can go.

What is beauty? One cannot sense the beauty in nature, but in propagandas through media. No judgment of what is beauty.

Some suggestions for taking care of oneself

Energizing exercise: by Paramahansa Yogananda, Indian sage who went to the United States about 100 years ago, and set up several centers around the US, called Self Realization Fellowship. The method of energizing exercise is to exercise and learn to make tense each part of the body (from feet up to the head) and then letting go of the part, which enables each organ to function well and full of energy at the end.

Qigong: Chinese methods of slow movements in balancing oneself, left and right side of the body which effected the mind and body. The Qigong exercises strengthen and harmonized organs of the whole body through breathing and slow movement. It brings health to those who practice and stimulate immune system of the body as well; and is very suitable to the elders.

Andrew Weil's 'rules for well-being':

I. Physical well-being:

a. *Values of Food*: take food that is most natural, slowly chew with mindful and know what you are eating, there are many books telling how to cook good food.

- b. *Exercise*: there are three kinds of exercise. First, building up muscles. Second, balance the muscles (Yoga). Third, balance and create strength for the body at least 30-45 minutes, 3-4 times a week (swimming, Qigong, etc.)
- c. *Sleeping:* essential for a good life, one needs to find how to rest well and have a good night sleep.
- d. *Hugging, touching:* Loving and kindness are good to the soul.

II. Mental well being

- a. Learn to be positive: any night if one lay down with anger or with kinds of worry or even think about one's life, what one needs to do is to write down all the happiness and great moments in life. These can ease the problems one has. There are studies indicate good attitudes make life better and able to fight sickness effectively.
- b. Support: Many studies also showed that with support from those around one, such as spouse, friends, and relatives do help to overcome sickness and obstacles in life.
- c. Opening the door of your heart: Learn how to have deep breath, breath in deeply, knowing that you are able to overcome any obstacles or problems. This breathing enables you to have strength and see the beauty in life.

III. Spiritual well being

- a. Work: Choose the work that helps you develop your mind and body. There are all kinds of work you can choose, but think of what you can contribute to others and yourself, the work will make you live life worthwhile.
- b. Play: If you only work without playing, what will become of your life, enjoy life while you can and make the best of it. Make the living like playing.
- c. Loving and kindness: This attitude leads one to sympathize to others more, as we all are in the same boat, why do not we help one another. The helping hands always bring strength and cheerfulness to one's life.
- d. Sense of humor: One should not pass a day without laugh. Laughing is a medicine, read funny books, tell funny stories, watch funny movies, and see the funny side of life.
- *e. Death:* Learn this fact of life, know and accept death in order to live fullest and enjoy this precious life, instead of afraid and worry about it. Do not die in spirit before the actual one.
- f. Training the mind, or being mindful of one's own breath: To be with one's breath, enable one to lift up one's spirit and expand one's perception- in seeing reality or see things as they are and become part of the whole.

Prevention is more important than curing. Knowledge and practice are the key to health.

Revisiting parental rights and medical and judicial paternalism: The Charles Gard dilemma

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Introduction

The case of Charles Gard (also known as Charlie), caused an uproar among advocates of the sanctity of life and right to life and at the same time a tension between the law and medical bioethics. The case became a turning point not only in European ethics protocol on conflict between parents and medical team in the field of pediatric end of life care but also in decisions related to futility and reasonable hope of benefit to patient.

In this case paper we shall examine the events and conditions that led to the conflict between the medical staff attending to Charles Gard, his parents, and the court. We will also scrutinize the grounds used by the medical team in petitioning the court to allow them to end treatment and put Charles in palliative care until he dies. Conversely, we shall also examine the reasons of the parents and their advocates in contradicting the medical team's decisions and recommendations, and the court's arguments.

Documents from the court and the hospital will be used in presenting the situation and conditions surrounding the case of Charles Gard, including press releases from the parents, the advocate for Charles Gard and other relevant commentaries of bioethicists and legal experts. Our objective is to present a comprehensible ethics protocol that can help us decide objectively on matters related to futile pediatric treatment and parental right and hospital paternalism conflicts.

We shall first examine the medical condition of Charles Gard, followed by an examination of the conditions that gave rise to the conflict between the parents of Charles Gard and the hospital medical team. We will then analyze the court proceeding and weigh the reasons and theoretical and practical foundations of the decisions of the magistrates as well as the counter-arguments of the advocates of Charles Gard's right of life. We will then identify the ethical issues and concerns raised by the case and finally, propose a protocol that can possibly help in resolving similar cases in the future.

The Charlie Gard case

Charles Gard was a patient at Great Ormond Street Hospital (GOSH), born 4 August 2016 and died 28 July 2017 (age: 11 months & 24 days). He was brought to GOSH's intensive care unit (ICU) in October 2016 because of a condition that is exceptionally rare that made it difficult for him to breath unaided. He had inherited mitochondrial

^{··} pp. 108-132 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

disease called infantile onset encephalomyopathic mitochondrial DNA depletion syndrome, also known as MDDS. He had two mutated versions of the gene coding for the RRM2B protein which are necessary for generating nucleosides that are used to make DNA in mitochondria and for normal DNA repair, mtDNA synthesis in non-proliferating cells, and cell division. Because Charles Gard lacks a functional version of this protein, he eventually suffered from brain damage, muscle weakness (including muscles used to breathe) and organ failure. These conditions usually lead to death during infancy (England & Wales High Court 972, 2017, hereafter EWHC 972; El-Hattab & Scaglia, 2013).

He was in the GOSH ICU for several months, with his condition rapidly deteriorating and was kept alive through life support system and mechanical ventilation. The GOSH medical team attending to Charles Gard's case believed that treatment is already futile and recommended palliative care and withdrawal of ventilator. His parents objected to the recommendation because of a possible treatment in the United States called nucleoside therapy and requested that Charles be moved to there. The GOSH disagreed and the case was brought to the court. The court decided in favor of GOSH, and after a long legal battle, Charles Gard was finally given palliative care and his ventilator withdrawn leading to his eventual death.

The futility of the medical condition

Mitochondrial diseases occur when the mitochondria fail to function well. Mitochondria are "specialized compartments present in every cell of the body (except red blood cells)" that are responsible for producing more than 90% of the energy needed by our bodies so that life can be sustained, and organ function supported. When it produces less and less energy, cell injury and even cell death can occur, and when this is repeated throughout the body, the whole organ system fails which leads to death (United Mitochondrial Disease Foundation, 2017).

Patients with encephalomyopathic mitochondrial DNA depletion syndrome (MDDS) exhibits the following clinical features: hypotonia (state of low muscle tone), encephalomyopathy (brain dysfunction with muscle weakness), psychomotor delay, sensorineural hearing impairment, lactic acidosis (life-threatening fast buildup of lactic acid in the bloodstream), and neurological dysfunction (Bourdon, et.al., 2007). Charles had two mutated versions of the gene coding for the RRM2B, a protein responsible for de novo conversion of ribonucleoside diphosphates into the corresponding deoxyribonucleoside diphosphates that are crucial for DNA synthesis (Bourbon, et.al., 2007). When there is RRM2B mutation, an infant, other than the effects mentioned above, may fail to thrive and develops renal tubulopathy (kidney disfunction). Patients may also develop microcephaly (smaller than normal head size).

Other effects include difficulty controlling head movement, delayed development of other motor skills, such as rolling over or sitting; serious breathing difficulties resulting in life-threatening respiratory failure; gastrointestinal dysmotility (muscles and nerves of the digestive system do not move food through the digestive tract efficiently and may lead to swallowing difficulties, vomiting, and diarrhea and can contribute to a failure to thrive; seizures that may cause greater brain damage

¹³ For a diagram of Mitochondria and its parts see: http://www.umdf.org/what-is-mitochondrial-disease/

(Genetic Home Reference, 2017).

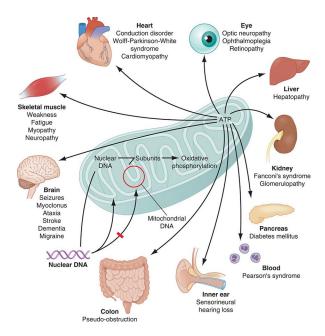


Figure 1: Effects of RRM2B-MDDS (Source: https://www.genpharmservices.com/wp-content/uploads/2017/03/mitohondria-myopathy.jpeg)

Because of the severity of the signs and symptoms, patients with RRM2B-MDDS usually live only into early infancy. There are approximately 15 affected infants on record and there is no available treatment for MDDS (El-Hattab & Scaglia, 2013; Pfeffer, et.al., 2013). According to GOSH, "one of the leading experts in the world with a special interest in mitochondrial diseases has concluded that Charles has infantile onset RRM2B deficiency which is the most severe form" (2017).

GOSH vs. Charles Gard's parents

The Great Ormond Street Hospital (GOSH) in London is United Kingdom's largest pediatric center in pediatric intensive care, cardiac and neuro surgery, cancer and nephrology, and UK's only academic Biomedical Research Centre specializing in paediatrics. It's reputation as an international center of excellence in child healthcare is well recognized around the world (GOSH, 2017). It is then obvious that a case like Charles Gard will knock at its doors.

When Charles Grad was brought to GOSH, he already exhibited the life-threatening symptoms of MDDS. The GOSH medical team explored various treatment options but were not producing observable benefits to the patient. Because of the fast deterioration of the patient's condition, GOSH recommended that Charles Gard be given palliative care and that his ventilator be withdrawn since his condition is already futile since Charlie's brain was shown to be extensively damaged at a cellular level (GOSH, 2017). His parents disagreed! The disagreement was triggered by a proposed experimental treatment – nucleoside therapy in the United States.

Nucleoside bypass therapy was developed by Dr. Michio Hirano, chief of the Division of Neuromuscular Disorders at Columbia University Medical Center. In nucleoside therapy the missing building blocks in the mitochondria are supplemented through the process of turning nucleosides into nucleotides which are then used to build DNA, thus restoring the energy-making processes of the The nucleosides are used because research found that "the mitochondria. compounds turning into the four DNA letters, called nucleosides, are better to use for treatment . . . When given orally, they pass the gut without being degraded, and find their way to the body's millions of mitochondria" (Kegel, 2017). Nucleosides are the basic building blocks of ribonucleic acid (RNA) and deoxyriboneculeic acid (DNA). Nucleotides, on the other hand, are phosphate esters of nucleosides and are important in the formation of the nucleic acid strand (nucleotides are the four letters of the DNA — G, C, A, and T). "Both are key structural elements of genetic material as they encode all the information required for a cells survival, growth, and reproduction" (BiologyWise, 2017). A dysfunctional nucleotide leads to cellular damage, and produces severe conditions in the body.

In Charles Gard's case, the gene (RRM2B) that is involved in making G, C, A and T inside the mitochondria is mutated. This condition causes mitochondrial depletion syndrome. Since they produce energy for the cells, less energy means less chance of survival, thus the nucleoside therapy was a possible treatment option that is hoped to provide benefit to Charlie. The problem is it was never tried on a patient with RRM2B mutation and it has not received clinical trial yet. Although it was used in 18 children, their condition is not related to RRM2B mutation but with the gene TK2 which is also involved in making DNA building blocks (Kegel, 2017). Because of this specific similarity, Dr. Hirano said there was a "theoretical possibility" that the treatment would provide some benefit (EWHC 972, 2017), and the parents are banking on this dim light of hope.

Based on GOSH record dated 9 January 2017, the medical team had the intention to attempt the nucleoside treatment in the next few weeks. The GOSH's ethics committee scheduled a meeting on the proposal on 13 January 2017 and Charles was provisionally scheduled for a tracheostomy on the 16th of the same month. GOSH invited Dr. Hirano to examine Charles in January, but was not able to do so until July. From 9-27 January 2017, Charles had epileptic seizures that were deemed likely to have caused epileptic encephalopathy (brain damage). Because of these, the ethics committee hearing for the nucleoside treatment was postponed, and on 13 January 2017, the GOSH Medical Team informed the parents of Charles that the experimental treatment is already futile because of the extent of the brain damage. Dr. Hirano also opined that the experimental treatment was unlikely to help if there was already irreversible brain damage. The GOSH team then withdrew their support for the treatment considering the risk that Charles was suffering, but Dr. Hirano is still willing to do the therapy if the parents would like it.

Because of the declining condition of Charles, the GOSH Medical team held a family conference to discuss ending life support and providing palliative care. By this time, the relations between the doctors and the parents have already deteriorated because of disagreements on the experimental treatment and accusations of GOSH delaying it. Moreover, the issue has become a worldwide topic in social media with influential people expressing support and rejection of the GOSH

decision. With words of support from Pres. Donald Trump of the US and Pope Francis, the parents were firm in their decision to bring Charles to New York and raised more than enough fund through crowdsourcing. Intervention of the Court was sought by GOSH for ending life support and providing palliative care.

The case goes to the court

On 24 February 2017, GOSH requested the High Court to exercise their inherent jurisdiction over the conflict and sought the tribunal to declare that: "Charlie, by reason of his minority, lacks capacity to make decisions regarding his medical treatment; that it is lawful, and in Charlie's best interests, for artificial ventilation to be withdrawn; that it is lawful, and in Charlie's best interests, for his treating clinicians to provide him with palliative care only; and that it is lawful, and in Charlie's best interests, not to undergo nucleoside therapy provided always that the measures and treatments adopted are the most compatible with maintaining Charlie's dignity" (EWHC 972, 2017).

The case was heard on 3-11 April 2017. Mr. Francis, the High Court judge, said "The long and the short of Dr. (Hirano's) evidence is that there is no scientific evidence of any prospect of any improvement in a human with RRM2B strain of MDDS. While there were some reasons to be hopeful that it might make a modest difference to life expectancy, it almost certainly could not undo structural brain damage" (EWHC, 2017). The High Court acceded to the arguments of GOSH.

The parent's disagreed and filed an appeal at the England and Wales Court of Appeals (EWCA) on 2 May 2017 on the following grounds: that the High Court doesn't have the right to interfere with the parent's right and responsibility to decide in matters of medical care for their children; that the Court erred in preventing a second medical team to examine and treat Charlie; that the Court erred in deciding what is for Charlie's best interest; and, that the parents and their legal team were disadvantaged (EWCA, 2017). The Court of Appeals dismissed the parent's appeal and upheld the High Court's decision.

Not content with the EWCA's decision, they appealed their case to the Supreme Court (SC) on the grounds that "the hospital can only interfere in the decision taken by the parents if the child is otherwise likely to suffer significant harm and that decisions taken by parents who agree with one another are non-justiciable; that parents and parents alone are the judges of their child's best interests. Any other approach would interfere with their status their rights under Article 8 of the European Convention on Human Rights" (SC, 2017). The SC, however, believed that the welfare of the child should be the paramount consideration. "So, parents are not entitled to insist upon treatment by anyone which is not in their child's best interests. Furthermore, although a child can only be compulsorily removed from home if he is likely to suffer significant harm, the significant harm requirement does not apply to hospitals asking for guidance as to what treatment is and is not in the best interests of their patients. . . it is in any event likely that Charlie will suffer significant harm if his present suffering is prolonged without any realistic prospect of improvement. This was found by reference to the judge's conclusions on the evidence" (The Supreme Court, 2017). The SC dismissed the parent's appeal and upheld the High Court and Court of Appeals' decisions. On 19 June 2017, the parents went to the European Court of Human Rights (ECHR) but their appeal was declared inadmissible on 27 June 2017 (Bowcott, 2017; ECHR 39793, 2017). The ECHR "does not see any element suggesting that those decisions could amount to an arbitrary or disproportionate interference" and that the decisions of the UK courts are in accordance with European laws and thus to be upheld (ECHR 39793, 2017).

On 7 July 2017, GOSH went to the High Court again for another hearing on the parent's submission of new evidences as follows: "the Bambino Gesu Children's Hospital in Rome is willing to accept the transfer of Charlie; Dr. Hirano and the associated medical centre in the USA remain willing to accept the transfer of Charlie; on the basis of new laboratory findings, Dr. Hirano considers: the likelihood of a positive effect and benefits to Charlie of the proposed nucleoside therapy to be markedly improved compared to the views expressed in court, and the likelihood that the proposed nucleoside therapy will cross the blood brain barrier to be significantly enhanced" (Justice Francis, 2017; Forster, 2017). Justice Francis waited until Dr. Hirano has examined the patient personally. Dr. Hirano, the GOSH medical team and even the parents agreed "that Charlie is beyond any help even from experimental treatment and that it is in his best interests for him to be allowed to die." Justice Francis then affirmed, with finality, the earlier decisions he made on 24 July 2017. The Court denied the request of Charlie's parents to bring him to the US or to Rome for the nucleoside treatment as well because it was not in his best interest.

The statement made in court by the parent's lawyer revealed the breadth of the gap between the hospital and the parents who accused GOSH for unnecessarily delaying the treatment that could have saved the life of their son. They then requested that their son be moved to private care and spend a week or so with him before they end mechanical ventilation, but GOSH objective because Charlie needed intensive care and that mechanical ventilation must be ended soon (Mendrick & Boyle, 2017; Cambridge, et.al., 2017). The case again returned to the court (Mendrick, 2017), and after failing to arrive at an agreement between GOSH, parents and the guardian appointed by the court, the judge ruled that: Charlie stays at GOSH for a period appointed by the court; Charlie is to be transferred to an agreed hospice; and, artificial ventilation will be withdrawn at the court appointed period. On 28 July 2017 the mechanical ventilator was finally withdrawn, and morphine was given to relieve any pain, until at 6:30 P.M. Charlie died (Mendrick, 2017).

The ethical issues

There are three ways to view the case: legal, medical, and ethical. Of the three, the ethical is the most debated and argued not only in the halls of justice but also in the unbounded spaces of social media and the web. In the eyes of the law, at least in the UK and European legal system and tradition, Charlie's death is "legal" and thus admissible. Medically, Charlie is as good as dead since there is no beneficial treatment available for his futile condition, and that the most reasonable and merciful interventions are palliative care, withdrawal of ventilator, and morphine to alleviate pain before death.

The case brought to the fore of secular and religious public discourse and bioethical debates issues such as futility and best interest of patient, parental right and autonomy in pediatric end-of-life cases, paternalism and justice, the Court and medical decision-making, withdrawing and withholding treatment, ordinary vs.

ordinary means of treatment, proportionate or disproportionate means of treatment, withdrawal of hydration and nutrition, and right to life and sanctity of life. It is not our objective to discuss all these issues or else we will be writing a book. We shall focus our discussion only on parental right and medical and judicial paternalism and their attendant issues of best interest, futility, and withdrawing and withholding treatment.

Is parental right to decide for their children's medical care absolute?

While the principle of autonomy requires that individuals have the right to self-determination, there is a qualifying condition, that is, the individual must be reasonable. If autonomy is seen vis-à-vis self-determination, then it can be said that a defect in reason is a defect in autonomy. One cannot authentically determine his or her future as well as make good decisions if his or her reason is affected by natural defects or constrained by psychological or cognitive abnormalities.

If autonomy is seen vis-à-vis respect for persons, then it is an absolute right. But respecting a person does not necessarily require absolute respect for his or her decisions. This condition arises when the other dimension of autonomy, as explained in the previous paragraph, is considered.

Parental autonomy extends to their minor children, unless the minor has already been emancipated. That is why parental consent is required for minor children. But this parental consent must be coupled with assent from the child who is not an infant or toddler. We accord children a certain degree of autonomy by asking them their assent whenever they are about to be subjected to an invasive medical procedure and when they are involved in research or experimentation. This is also a recognition of the principle of autonomy's requirement of respect for persons.

The right to decide for oneself, right to non-interference, and the right of parents to decide for their minor children are also protected by the principle of autonomy. Being an infant, Charlie doesn't have the capacity to decide, consent or assent, so it is the primary responsibility of his parents to decide on the medical treatment he is to receive, and they are to be free from interference. These parental prerogatives are protected and promoted by Art. 5 of the United Nations Convention on the Rights of the Child (OHCHR, 1989):

"States Parties shall respect the responsibilities, rights and duties of parents or, where applicable, the members of the extended family or community as provided for by local custom, legal guardians or other persons legally responsible for the child, to provide, in a manner consistent with the evolving capacities of the child, appropriate direction and guidance in the exercise by the child of the rights recognized in the present Convention."

But does this provision in the Convention (CRC) grant parents the absolute right to decide in medical cases involving their minor children? The answer is no – parental right to decide for their children's medical care is constrained by two factors: overzealous treatment and undertreatment, and negligence and irresponsibility. The first is determined by the medical team, the other is determined by the court (if disagreement between parents and the medical team cannot be resolved in the hospital level). Both factors are to be taken within the best interest principle.

Best interest of the child. Article 3 of the CRC provides that "In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration" (OHCHR, 1989). This was the primary basis for the GOSH and the Court's decision to forego life-sustaining interventions and the nucleoside therapy for Charlie. According to GOSH and the High Court, "it is not in Charles' best interests for artificial ventilation to continue to be provided to him and it is therefore lawful and in his best interest for it to be withdrawn; it is not in Charles' best interests for artificial ventilation to continue to be provided to him and it is therefore lawful and in his best interests for it to be withdrawn; it is lawful and in Charles' best interests for his treating clinicians to provide him with palliative care only; and, it is lawful and in Charles' best interests not to undergo nucleoside therapy" (EWHC 972, 2017).

The problem is the CRC did not say anything about the meaning of best interest, how to determine the child's best interest in medical situations, nor did it give any norm or guiding principles on how can it be assessed when conflicts arise between parents and medical service providers. Hammerberg (2008) believes that "the principle should be understood to define a procedural requirement" obliging decision-makers to critically examine a proposed solution first whether it is consistent with the best interest of the child before making a decision that affects them. States parties to the CRC are left to devise guidelines and protocols for their own countries, and interpretations may vary because of cultural differences.

According to the United Nations High Commission for Refugees in its Guidelines on Formal Determination of the Best Interest of the Child, "best interest" is a difficult concept to conclusively define since it is dependent on a variety of circumstances like age, sex, level of maturity, presence or absence of parents, environment of the child, among others. To understand it, the other provisions of the CRC must be taken into consideration (UNHCR, 2006). Even the Committee on the Rights of Children of the UNHCR recognized the complexity of the principle and that "its content must be determined on a case-to-case basis" since the concept is "flexible and adaptable" (CRC-OHCHR, 2013).

Ordinarily, decision making in pediatric care is uncomplicated, and normally agreement is easy to arrive at. Through family conferences, parents and medical staff engage in an open and amicable dialogue covering the medical, social, ethical, economic, religious, etc., implications of a child's condition and, as partners in the healing process, they examine various alternatives, their benefits and risks, and determine the best course of action. In this way, with full disclosure and compassion, difficult pediatric cases are avoided, and legal battles are shunned.

But there are cases where there are more disagreements than agreements. Such condition is caused by conflicts of interest – those of the child, the parents, and medical staff. In the case of Charlie, these conflicts were very apparent. Since the case happened in the United Kingdom, one needs to understand 'best interest' according to how it is conceived in British and European medical and legal practice, and see why it is incompatible with the American way of looking at the principle.

Best interest in European and British medical and legal practice.

The European understanding of best interest "include every kind of consideration capable of impacting on the decision. These includes non-exhaustively, medical, emotional, sensory (pleasure, pain and suffering), and instinctive (the human instinct to survive) considerations" (ECHR 39793, 2017). The best interest principle is applied without prejudice to the welfare of the child, which is the court's paramount consideration. While parental responsibility to consent, and determine the upbringing of the child, but such right can be overridden by the court, exercising its independent and objective judgment, in the child's best interest. This is based on the Universal Declaration on the Rights of Child Art. 3 which says: "In all actions concerning children, whether undertaken by public or private social welfare institution, courts of law, administrative authorities or legislative bodies, the best interest of the child shall be a primary consideration" (CRC, 1989). This does not, however, mean that the best interest of the child must be the only consideration, but should be among the first aspects to be considered and be given considerable weight in all decisions affecting children (Hammerberg, 2008).

In the case of Charlie Gard, there were four conflicting interests at work. First, Charlie's interest, second, the parent's interest, third, the interest of GOSH, and fourth, the interest of science. Of course, we will never know what Charlie wants as a patient since he has no capacity to decide. This condition creates a conflict between what is judged by the medical staff and the court as Charlie's best interest and that of his parents. Since the differences are irreconcilable, the court, vested with the power and authority to settle disputes like this, must intervene. Charlie's parents are willing to try anything just to keep Charlie alive so that he can be with them and them with him for some time. But who will benefit more from the "theoretical benefit" promised by nucleoside treatment? Charlie or his parents? Are the parents fighting for Charlie's best interest or their own best interest? Whose interest is of greater value, Charlie's "theoretical" survival but of no significant change in his quality of life, or the parent's desire to be with him for some time?

And there is also the interest of GOSH and science. GOSH must protect its integrity and fame, being one of the most respected and highly capable pediatric hospitals in the world. The idea of having a patient subjected to an experiment with no or very minimal hope of benefit is not good for public trust, marketing and promotion. And what if the nucleoside therapy will work on Charlie? Then that would a discovery and achievement worthy of Nobel Prize. The proposed therapy is very interesting to science, and very tempting to do. There is also another issue raised during the hearings, the economic interest, considering the prospect of financial gain when the therapy is successful, but this was denied by the proponents of the treatment.

When principles are in conflict, the best interest of the child must guide action. But one must keep in mind that this principle is adaptable and flexible. Its application must also take into consideration cultural and religious factors. This is the reason why the Convention on the Rights of the Child hesitated to provide a definitive understanding of the principle. But care must also be taken not to succumb to a too subjective, liberal, and relative interpretation.

When GOSH brought the case to the High Court, one of their arguments is that it is the best interest of Charlie that life-sustaining treatment be withdrawn, that

nucleoside therapy be withheld, and palliative care be given. The High Court, the Court of Appeals, the UK Supreme Court, and even the European Court of Human Rights all agreed that GOSH is justified to act according to their medical and ethical judgments based for the best interest of Charlie. It must also be noted that decisions on best interest of the child has as a starting point the "strong presumption of the sanctity of life, and of course action which will prolong life" (ECHR 39793, 2017). But the European Court on Human Rights believed that the principle of sanctity of life and the prolongation of life are not absolute, and that the objective approach or test is the best interest of the child rather than sanctity of life. This idea was expressed by Justice Francis in his decision: "Considerable weight must be attached to the prolongation of life... But it is not absolute, nor necessarily decisive; and may be outweighed if the pleasures and the quality of life are sufficiently small and the pain and suffering and the burdens of living are sufficiently great" (EWHC 972, 2017).

When life is no longer a good to be pursued one is not morally obliged to preserve it. While deliberately ending someone else's life is a moral evil and should never be an option in medical practice, which is considered euthanasia, the Vatican's Pontifical Academy for Life affirmed John Paul II's teaching in Evangelium Vitae, which says: "when death is clearly imminent and inevitable, one can in conscience 'refuse forms of treatment that would only secure a precarious and burdensome prolongation of life, so long as the normal care due to the sick person in similar cases is not interrupted". Certainly, there is a moral obligation to care for oneself and to allow oneself to be cared for, but this duty must take account of concrete circumstances. It needs to be determined whether the means of treatment available are objectively proportionate to the prospects for improvement. To forego extraordinary or disproportionate means is not the equivalent of suicide or euthanasia; it rather expresses acceptance of the human condition in the face of death" (EV, no. 65). The judgment of the British and the European Court may appear consistent with the Vatican's position on the matter, but there is a little difference, that is, the latter insists all possible options must have been exhausted. This concern will be dealt with in the succeeding sections of this paper.

It can then be inferred that the best interest of the child in relation to health care does not only consider the medical benefit derived by the child from treatments and experimentations, but must include all relevant factors mentioned above, with the overall welfare of the child as paramount consideration. In this case, the fundamental question is whether the nucleoside therapy, an experimental treatment meant for TK2 patients and with no scientific evidence to prove that it may benefit RRM2B patients, and has never been tried in clinical trials, can be performed on Charlie and that this is for his best interest.

Justice Francis of the England and Wales High Court of Justice Family Division (EWHC 972, 2017) made the following best interest decisions with strong presumption to sanctity of life. These decisions resulted from "a child-focused, court-led evaluation of the baby's best interest" (ECHR 39793, 2017):

1. "Medical science may benefit objectively from the experiment, but experimentation cannot be in Charlie's best interests unless there is a prospect of benefit for him."

Considering the testimonies made in court by known experts in DNA and pediatricians from around the world, including those of Dr. Hirano, and Charlie's attending physicians and nurses, nucleoside therapy is not in his best interest. "Theoretical possibility" is for the interest of medical science and not of Charlie. The proposed treatment is futile, meaning, "pointless or of no effective benefit."

2. "The question is not whether it is in the best interests of the patient that he should die. The question is whether it is in the best interest of the patient that his life should be prolonged by the continuance of this form of treatment."

The High Court cited the UK Supreme Court's criteria for best interest judgment as follows: look at the patient's welfare in the widest sense, not just medical but social and psychological; consider the nature of the medical treatment in question, what it involves and its prospects of success; consider the outcome of the treatment; put oneself in the place of the patient; and consult others who are looking after him or interested in his welfare. These the High Court did, and concluded that it is in Charlie's best interest "to let him slip away peacefully and not put him through more pain and suffering," and "it must follow that it is lawful and in Charlie's best interests for artificial ventilation to be withdrawn and for his treating clinicians to provide him with palliative care only."

Withholding and withdrawing treatment in futile cases

While the Courts recognized every human persons' very strong instinct and desire for survival and expressed belief in and asserted the sanctity of human life, they, however, reiterated that these are not absolute. When can treatment be withdrawn or withheld? The short answer is, when it is futile. But when is a treatment futile? For one, if you have Charlie Gard's case. Let us clarify futility first and then see how this is the most important consideration in withholding or withdrawing life-sustaining treatments.

Futility. Futility is plainly understood as "pointless or of no effective benefit" (EWHC 972, 2017). England and Wales Court of Appeals made the following conclusion on futility:

"In relation to the judge's use of the word "futile" it is argued that there is a distinction between the medical definition of futility and the concept of futility in law Medicine looks for "a real prospect of curing or at least palliating the life-threatening disease or illness from which the patient is suffering", whereas, for the law, this sets the goal too high in cases where treatment "may bring some benefit to the patient even though it has no effect on the underlying disease or disability" In the present case, tragically, this is a difference without a distinction in the light of the judge's finding that the potential benefit of nucleoside therapy would be "zero". It would therefore be, as the judge held at paragraph 90, "pointless and of no effective benefit."

Based on this judgment, it was held lawful and of Charlie's best interest to withdraw aggressive treatment, withhold nucleoside therapy, and provide palliative care.

It appears that futility is the demarcation line between overzealous treatment and undertreatment. In intensive care, decisions to withdraw of withhold lifesustaining treatments are common, and it is in these cases that conflicts between parents and medical practitioners occur because of the "failure to reach agreement about the definition of futility or the criteria for judging treatment to be futile." This also had "led clinicians and ethicists to lose hope that the concept would help resolve conflicts about end-of-life care" (Wilkinson & Savulescu, 2011).

Some scholars even suggested different terms in substitution of futility. Terms such as nonbeneficial treatment (ACEP, 2010), not clinically appropriate (General Medical Council, 2010), not medically indicated (McCabe & Storm, 2008), clinical futility (Doukas & McCullough, 1996), and medically inappropriate or inadvisable (Fine, 2009; Texas health and Safety Code, 2002) have been used but the reality remains, determining futility in treatment is a subjective judgment, and often, based on the doctor's values. Besides, futility in medical treatment can be judged, sometimes, based on financial capability of the patient especially in countries where socialized healthcare is not well in place.

Wilkinson & Savulescu (2011) identified five (5) subtypes of futility. The treatment that cannot achieve its physiological aim is called physiological futility, and the treatment that has less than 1% chance of succeeding is called quantitative futility. On the other hand, treatment that cannot achieve and acceptable quality of life, or that merely preserves unconsciousness or fails to relieve total dependence on intensive medical care is called qualitative futility; an intervention that will not change the fact that the patient will die in the near future is called imminent demise futility; and, if the patient has an underlying condition that will not be affected by the intervention and which will lead to death within weeks or months is called lethal condition futility.

If we evaluate Charlie Gard's condition using these subtypes of futility we can say that indeed, his condition is undoubtedly futile and the court and GOSH is right to suggests that mechanical ventilator be withdrawn, nucleoside therapy be withheld, and only palliative care be provided. The court testimony of the Consultant in Paediatric Intensive Care at St. Mary's Hospital expressed the same conclusion when he said: "sadly, Charlie's life is therefore limited both in quality and quantity and there is no reasonable prospect for recovery" and, in his view, the severity of his condition is such that it could be argued that Charlie would derive no benefit from continued life. His view is that it would be reasonable and in accordance with current Royal College of Paediatrics and Child Health guidance to withdraw life sustaining treatment" (EWHC 972, 2017).

It appears then that judgment on the futility of a treatment rests upon the following factors: actual physiological benefit, considerable degree of success (by considerable we mean acceptable, that is, it can reasonably achieve intended results), improvement in quality of life, and ability to prolong life. When these are not met, treatment is considered inappropriate. Wilkinson & Savulescu (2011) prefers the term "medically inappropriate" over "futile" for two reasons: "First, 'medically inappropriate' makes it clear that these are value judgements made by medical professionals. It avoids the pseudo-objectivity that is sometimes implied by the term 'futile'. Second, referring to the inappropriateness of treatment highlights the importance of being clear about what treatment is appropriate for. Whether or

not a treatment is judged appropriate depends crucially on the goals of treatment." It is to be noted, and quiet interestingly, that the two authors, after studying cases from a pediatric ICU in The Netherlands, Austria, Switzerland, Germany, and California, concluded that mechanical ventilation cannot be regarded as futile. This supports the position that mechanical ventilation should not have been denied to Charlie Gard until finally death has claimed him.

Withdrawing and withholding of treatment. Ultimately, the decision to withdraw or withhold treatment rest on futility. Withdrawal of treatment means the treatment has already been given and, because of its futility, it is now being withdrawn. When the treatment is achieving its intended end, it cannot be withdrawn since it would not be to the patient's best interest. Withdrawal of life-sustaining treatment when such is necessary and beneficial, or when the basis of judgment to withdraw is to end suffering and pain, it would be active euthanasia.

The withdrawal and withholding of life-sustaining treatments (LST) in life-limiting and life-threatening conditions in children is always decided based on best interest of the child. The Royal College of Pediatrics and Child Health (RCPCH) published a framework for practice in 2015 on making decisions to limit treatment in life-limiting and life-threatening conditions in children. This framework was "sets circumstances under which withholding and withdrawing life-sustaining treatments might be ethically permissible – not circumstances under which such treatments must certainly be withheld or withdrawn. The document describes situations in which individual children should be sparred inappropriate invasive procedures – not types of children to whom appropriate procedures should be denied" (Larcher et.al., 2015).

According to RCPCH, there are three sets of circumstances when treatment limitation can be considered ethically permissible because it is no longer in the child's best interest to continue since it can no longer provide overall benefit. These sets are (Larcher et.al., 2015):

- 1. When life is limited in quantity if treatment is unable or unlikely to prolong life significantly it may not be in the child's best interest to provide it. These comprise brain stem death (approved professional criteria appropriately applied), imminent death (physical deterioration is occurring irrespective of treatment), and inevitable death (death is not immediately imminent but will follow and where prolongation of life by LST confers no overall benefit)
- 2. When life is limited in quality includes situations where treatment may be able to prolong life significantly but will not alleviate the burdens associated with illness or treatment itself. These comprise burdens of treatment (the treatments themselves produces sufficient pain and suffering so as to outweigh any potential or actual benefit), burdens of the child's underlying condition (the severity and impact of the child's underlying condition is in itself sufficient to produce such pain and distress as to overcome any potential or actual benefits in sustaining life), and lack of ability to benefit (the severity of the child's condition is such that it is difficult or impossible for them to derive benefit from continued life).

3. Informed competent refusal of treatment – for older child with extensive experience of illness may repeatedly and competently consent to the withdrawal or withholding of LST.

The RCPCH is also quick to remind that "decisions to limit LST do not constitute withdrawal of care. Treatments, including palliative care, that are intended to relieve suffering of the child . . . are ethically justified" ((Larcher et.al., 2015). In the case of Charlie Gard, the attending clinicians ordered palliative care and pain reliever so that he will die "with dignity," but ordered that LST be withdrawn.

The quest to quantify and qualify life is not bereft of controversy. Quantification of life is less controversial than qualification of life. The former is easier to determine since there are signs and symptoms that can be quantified using technology and intelligent medical diagnosis and prognosis, and these quantified data can be objective basis for decisions on ending LST. On the other hand, judgment on the quality of life is rather more problematic since it is a judgment on quality of life during and after treatment.

Quality of life is determined based on comfort and satisfaction, convenience and pleasure, health and happiness, and other domains of well-being such as job security, education, social acceptability, social relations, psychological health, etc. Moreover, determination of quality of life can also be influenced by spirituality, value system, and other cultural factors. Because of these factors, it is really difficult to define quality of life, much more, make it a basis for decisions on withdrawing or withholding LST. The Center for Disease Control and Prevention also observed that "Quality of life (QOL) is a broad multidimensional concept that usually includes subjective evaluations of both positive and negative aspects of life. What makes it challenging to measure is that . . . individuals and groups can define it differently" (CDC, 2016).

Attempts to make judgments on QOL objective by identifying the specific aspect of life being evaluated, such as health-related QOL, ignores the multidimensionality of the concept. This necessarily ignores the other dimensions which may be more of value. In the case of pediatric patient, a child may judge his or her quality of life based on his ability and chances of playing with friends and functioning normally like other kids so that a child with bone cancer in his right foot may choose not to have it amputated even if further spread of the cancer cells is likely to occur, or even death. An athlete diagnosed with lupus erythematosus may judge her life to be on no quality and choose euthanasia rather than live with the disease. Bankruptcy may be a compelling reason for another to commit suicide or succumb to euthanasia if financial stability is the most important factor for his quality of life.

In the case of Charlie Grad, for example, it was decided that LST must be withdrawn because it is no longer beneficial to his quality of life. It was a decision based on medical diagnosis and futile prognosis. In the statement released by GOSH on 25 May 2017, they evaluated Charlie Gard's as "with exceptionally low quality of life." Ms. Butler Cole, the guardian appointed legally to represent Charlie in court also testified that the proposed therapy is "a purely experimental process with no real prospect of improving Charlie's condition or quality of life," and even the High Court Judge recognized that 'it is putting it far too high to say that there is an available treatment with potential materially to improve Charlie's quality of life" (GOSH, 2017). Considering the circumstances of Charlie Gard, "quality of life" here is

understood as those factors that would establish that his life is no longer worth living.

Using the circumstances identified by RCPCH, we can surmise that Charlie's life is limited both in quantity and quality. As with the third set of circumstances, it was not a matter or refusal of treatment in the part of the parents, it was, rather, a matter of refusal to accept the health provider's decision, or the subscription to futile and overzealous treatment. Since the Court has already overridden the parent's decision, and with all the circumstances satisfied, the withdrawal of LST appears to be justified and ethical.

Beneficence and non-maleficence. The issue on withdrawal and withholding of treatment is tied to other principles in bioethics, that of the principle of proportionate and disproportionate treatment, and the principles of beneficence and non-maleficence.

The principle of beneficence, in the context of medicine, exhorts everyone involved in the treatment of the patient to always do what is good for the patient. The "good of the patient" here is understood always as "beneficial to the patient," and in the case of end-of-life situations, it refers to the over-all benefit of the patient. In the case of Charlie, the nucleoside therapy has been judged to be non-beneficial to him, so it must be withheld. Moreover, the continuing provision of LST was also judged to be non-beneficial to his quality of life, thus it was withdrawn. To alleviate the pain and suffering, palliative care and pain relievers was ordered, and this is beneficial to him as he journeyed towards death.

The principle of non-maleficence, however, exhorts everyone to do no harm, or, close to its etymological meaning, do no evil. One area of contention in the decision to withdraw LST and withhold nucleoside therapy was if Charlie is experiencing pain and suffering. The idea was both treatments will unnecessarily prolong the pain and suffering of Charlie, and that is causing more harm than good. During the court hearings, as noted by the High Court judge, the GOSH medical team testified that "Charlie Gard can probably experience pain, but was unable to react to it in a meaningful way . . . that being ventilated, being suctioned, living as Charlie does, are all capable of causing pain . . . Subjecting him to nucleoside therapy is unknown territory (...) but it may, or may not, subject the patient to pain, possibly even to mutations . . . such treatment would be futile, by which I (the judge) mean would be of no effect but may well cause pain, suffering and distress to Charlie." The judge went on to decide that the only course now in Charlie's best interests is to let him slip away peacefully and not put him through more pain and suffering" (EWHC 972, 2017).

While it is true that pain and suffering has salvific dimension as it was expounded by St. John Paul II in his Apostolic Letter Salvifici Doloris (SD), this may not necessarily mean the same when the one of experiences it is an infant. Charlie is not yet "capable of grasping the sublimity of divine love" and that he is not even aware of divine revelation that allows one to "discover the profound meaning of suffering" (SD, 1984: n.13). While Charlie's suffering "may unleash love in the human person, that unselfish gift of one's "I" on behalf of other people, especially those who suffer" (SD, 1984: n.29), should this be achieve at his expense? Until when must Charlie live to achieve this outcome in others? If in case the therapy has been given and it

prolonged Charlie's life, is the pain and suffering of living with MDDS tolerable and worth the Christian value of salvific suffering? In fact, can we even quantify and qualify the kind of pain and suffering Charlie and his family will endure in the future? Of course, answering these questions are moot and academic now that Charlie is dead, and the therapy was not given.

Proportionate and disproportionate treatment. The principle of proportionate and disproportionate treatment is often synonymously used with ordinary and extraordinary means of treatment. In Catholic bioethics, these principles set limits to treatment and autonomy. Church documents such as *Veritatis Splendor, Evangelium Vitae* and Respect for the Dignity of the Dying are quite clear that individual autonomy is not an absolute. Pope John Paul II applied this principle to medical treatments when he stated: "Certainly there is a moral obligation to care for oneself and to allow oneself to be cared for, but this duty must take account of concrete circumstances. It needs to be determined whether the means of treatment available are objectively proportionate to the prospects of improvement" (EV, 1995: n. 77).

Ordinary means of preserving life are generally understood to mean all medicines, treatments, and operations which offer a reasonable hope of benefit for the patient and which can be obtained and used without excessive expense, pain, or other inconvenience, and extraordinary means of preserving life are all medicines, treatments, and operations, which cannot be obtained without excessive expense, pain, or other inconvenience, or which, if used, would not offer a reasonable hope of benefit (Kelly, 1958; Pollock 2016; Brown, 2014; McCartney, 1980; Wildes, 1996). In effect, a patient it is permissible to withdraw or withhold LST if the method or means is judged to be extraordinary. Pollock (2016) further explained that "Extraordinary means are life-preserving measures that one can legitimately decline without willing one's own death or the death of the person in one's care." Even the Catechism of the Catholic Church (CCC) espoused this idea: "Discontinuing medical procedures that are burdensome, dangerous, extraordinary, or disproportionate to the expected outcome can be legitimate; it is the refusal of 'over-zealous' treatment. Here one does not will to cause death; one's inability to impede it is merely accepted" (CCC, 1994: n. 2278).

In the statement released by the Pontifical Academy for Life (PAV) on the case of Charlie, they affirmed this teaching when they said: "We must do what advances the health of the patient, but we must also accept the limits of medicine and, as stated in paragraph 65 of the *Encyclical Evangelium* Vitae, avoid aggressive medical procedures that are disproportionate to any expected results or excessively burdensome to the patient or the family . . . we do, sometimes, however, have to recognize the limitations of what can be done, while always acting humanely in the service of the sick person until the time of natural death occurs." (PAV, 2017). Although the Holy Father, Pope Francis supported, in a public statement, the parents of Charlie Gard in their fight for their son's right to life, this should not be taken as a reversal of the Church's recognition of the limits of treatment. Defending the sanctity of life and right to life is part of the moral teaching of the Church, but "medical procedures which no longer correspond to the real situation of the patient, either because they are by now disproportionate to any expected results or because

they impose an excessive burden on the patient and his family. In such situations, when death is clearly imminent and inevitable, one can in conscience refuse forms of treatment that would only secure a precarious and burdensome prolongation of life, so long as the normal care due to the sick person in similar cases is not interrupted" (EV, 1995: n. 65).

Artificial nutrition and hydration. When Pope Francis publicly declared his support to the parents of Charlie Gard, the case became not only a medical and ethical issue around the world, but morphed into a moral and religious question. While the position of the Holy Father revolved around defense of life, rejection of euthanasia, and accompaniment of parents of their son in his dying process at home, the issue must be viewed through the lens of withdrawal of hydration and nutrition. While personally the Holy Father supports nucleoside therapy for Charlie Gard to give life a chance, the Church moral teaching, as we have mentioned above, would permit the withholding of such treatment. While to err on the side of life would be noble, it would not be morally permissible to keep Charlie Gard in prolonged state of suffering and pain and subject him to futile experimental treatment that has never been tested in clinical trial.

What the Church is against in the case are the withdrawal of nutrition and hydration, and the denial of the parent's request to accompany their child in his dying process at home, with his family. LST includes artificial ventilation, nutrition and hydration (AVNH). It may be ethical and moral to withdraw artificial ventilation, but for the Church, it is not morally permissible to withdraw artificial nutrition and hydration. This was the dilemma of GOSH, as noted by the UK Supreme Court: "The hospital finds itself in an acutely difficult ethical dilemma: although the stays have made it lawful to continue to provide him with AVNH, it considers it professionally wrong for it to have continued for over two months to act otherwise than in his best interests" (SC, 2017).

This issue has been settled by the Church long before Charlie Gard with the famous Terry Sciavo case in the United States. In 2004, St. John Paul II said: "I should like particularly to underline how the administration of water and food, even when provided by artificial means, always represents a natural means of preserving life, not a medical act. Its use, furthermore, should be considered, in principle, ordinary and proportionate, and as such morally obligatory, insofar as and until it is seen to have attained its proper finality, which in the present case consists in providing nourishment to the patient and alleviation of his suffering." This statement led to the United States Conference of Catholic Bishops (USCCB) to ask the Congregation for the Doctrine of Faith (CDF) to provide clarifications on the matter. In 2007, the CDF, with the approval of Pope Benedict XVI, provided the following responses:

1. Is the administration of food and water (whether by natural or artificial means) to a patient in a "vegetative state" morally obligatory except when they cannot be assimilated by the patient's body or cannot be administered to the patient without causing significant physical discomfort?

Yes. The administration of food and water even by artificial means is, in principle, an ordinary and proportionate means of preserving life. It is therefore obligatory to the extent to which, and for as long as, it is shown to

accomplish its proper finality, which is the hydration and nourishment of the patient. In this way suffering and death by starvation and dehydration are prevented.

2. When nutrition and hydration are being supplied by artificial means to a patient in a "permanent vegetative state", may they be discontinued when competent physicians judge with moral certainty that the patient will never recover consciousness?

No. A patient in a "permanent vegetative state" is a person with fundamental human dignity and must, therefore, receive ordinary and proportionate care which includes, in principle, the administration of water and food even by artificial means.

From these responses, it is obvious that it is never permissible to withdraw nutrition and hydration even if they are provided by artificial means. But are there exceptions to this prohibition? The USCCB made some clarifications on the responses they received from the CDF. First, there are medical situations in which it is moral to withhold nutrition and hydration, for example, "a patient in the last stages of stomach cancer is already dying from that condition. Such a dying patient, or others who can speak for the patient, may decide to refuse further feeding because it causes pain and gives little benefit. The administration of nutrition and hydration in this case would pose a burden on the stomach cancer patient that is disproportionate to its benefit. By contrast, the "vegetative state" is not in itself a case of imminent dying, and the reception of nutrition and hydration itself does not generally constitute a burden for him or her" (USCCB, 2007).

Second, there are possible cases when it would be moral to withhold or withdraw nutrition and hydration from the patient in a "vegetative state". "They could be withheld if the available means for administering nutrition and hydration were not effective in providing the patient with nourishment (for example, because the patient can no longer assimilate these), or if the means itself constituted a burden (for example, because the feeding tube is for some reason causing persistent infections). The Commentary notes that such situations are rare. It also notes that the obligation to provide artificially assisted food and fluids may not bind in situations of extreme poverty or in the absence of a modern health care system, because one is not held to do what is impossible" (USCCB, 2007).

In application to the case under study, Charlie, considering his medical condition, is in a vegetative state, and that death is, "at most, six to nine months away" (EWHC 972, 2017). Considering the clarificatory note issued by the USCCB as mentioned above, it is worth asking if Charlie is in a state of imminent death or in a vegetative state. When death is imminent or impending, it means it is so proximate that it may occur in hours or even days, but not months. In Charlie's case, the administration of nutrition and hydration is not in itself burdensome, and it should have been provided until it has achieved its finality.

The judgment of Justice Francis of the England and Wales High Court of Justice Family Division only declared "lawful and in Charlie's best interests for artificial ventilation to be withdrawn and for his treating clinicians to provide him with palliative care only" (EWHC 972, 2017). However, in the Supreme Court decision, it was mentioned that "Every day since 11 April 2017 the stays have obliged the

hospital to take a course which, as is now clear beyond doubt or challenge, is not in the best interests of Charlie. The hospital finds itself in an acutely difficult ethical dilemma: although the stays have made it lawful to continue to provide him with AVNH, it considers it professionally wrong for it to have continued for over two months to act otherwise than in his best interests" (SC, 2017). It is then safe to assume that AVNH were withdrawn prior to Charlie's death. It is not also clear, which was withdrawn first. The palliative care was the reason for not allowing Charlie Gard to be brought home since such can only be provided in a hospice facility. What is clear is Charlie Gard died in minutes after his life-support system was withdrawn a day after he was moved to a hospice facility.

Overriding parental decisions

In Europe and in the United States, it is common that conflicts between parents and hospital staff on matters of pediatric care are settled by the court. "A child's parents having parental responsibility have the power to give consent for their child to undergo treatment, but overriding control is vested in the court exercising its independent and objective judgment in the child's best interests" (EWHC 972, 2017). In such case, the hospital and the court assume the role of a "father" and decides in the best interest of the child: "The right and power of the court to do so only arises because the patient, in this case because he is a child, lacks the capacity to make a decision for himself" (ECHR, 39793, 2017).

While medical paternalism is a controversial when the conflict is between an adult patient and a medical doctor, it is less so in pediatric cases. Medical ethics advocates respect for patient's decision and that primary consideration must be given to such in deciding treatment. In the case of pediatric patient's such power to decide is given to parents, or when the parents are judged to be incapable of deciding in the best interest of their child, it is given to the court upon request by the hospital. But when is paternalism permissible in medical cases?

Rosalind | McDougall and Lauren Notini (2014) made a systematic review of normative literature on overriding parent's medical decision for their children and found nine ethical frameworks that would justify such override. First of these is the harm principle which ethically justifies a health professional to seek state intervention when the parents' decision significantly increases the likelihood of serious harm as compared to other options. Diekema (2004; 2011), the proponent of this framework, identified eight conditions that 'must [all] be met before considering the use of state intervention to require medical treatment of children over parental objections: the refusal puts the child at 'significant risk of serious harm'; the harm is imminent; the refused intervention is necessary to prevent the harm; the refused intervention is 'of proven efficacy'; the projected benefit to burden ratio of the refused intervention is 'significantly more favorable' than that associated with the parents' preferred option; no other option would prevent serious harm to the child in a way that is more acceptable to the parents; the state would intervene in 'all other similar situations', regardless of the nature of the parents' reasons; and, most parents would agree that the state intervention was reasonable.

The second framework is constrained parental autonomy, which suggests that parental autonomy is contingent on whether parents or guardians respect their

child's fundamental needs. Ross (1998) argued that parental right to decide is restricted when they fail to provide for their children's needs. She then proceeded to endorse three specific criteria that need to be fulfilled for state intervention in parental decision-making to be justified: 'medical experts agree that the treatment is non-experimental and appropriate for the child; denial of that treatment (which is of proven efficacy and has a high probability of success) would result in the deprivation of the child's basic needs; and, the anticipated result of treatment gives the child a chance for normal healthy growth or a life worth living as evaluated from the child's own perspective'.

The third framework is best interest. Kopelman, a leading advocate of the best interest standard in the pediatric context, argued that best interests is the fundamental concept guiding intervention in parents' medical decision-making (1997; 2007). Kopelman (1997) further explained that the appropriate threshold for overriding parental decision by the state is not the parent's failure to choose the treatment option that is in child's best interest. Rather, it should be the parents' choice of a harmful or unreasonable option.

The fourth framework is medically reasonable alternative. Buchanan and Brock (1989) believed that the treatment choices must be within the range of medically reasonable alternatives as determined by appropriate medical community standard. When the choice is not supported by medical science and reason, then it should not be viewed as an alternative.

The fifth framework is responsible mode of thinking. According to Shoeman (1985), a mode of thinking is sufficiently responsible unless the parental decision would seem from most perspectives as shockingly reckless or negligent. When the child is in imminent danger because of parental decision based on gross ineptitude in moral resolution, state overriding power must be invoked.

The sixth framework is reasons that other reasonable people could refuse, put forward by Rhodes and Holzman (2004). According to this framework, parental decision should be overridden when their choice is based on idiosyncratic personal reasons, reasons that others can reasonably refuse. The seventh framework is closely related to the previous, and this is rational parent. This framework requires that a parent must demonstrate the ability to prioritize options for her child within the context of her own value system. This implies that parents should not be permitted to choose so low a level of care that it not only increases risk of harm but also guarantees that harm

will occur (Kooper and Koch, 1996).

The eighth framework is balance of costs and benefits. This framework supports the idea that 'the best interest of the patient be…overridden if marginal costs…are greater than marginal treatment benefits when the costs to third parties are considered' (DeMarco, et.al., 2011). This takes into consideration both the interest of the parents and the child.

The last framework is decisional capacity of the minor. Kipnis (1997) argues that when a child agrees with the parental decision to refuse a treatment, and if there is 'grounded confidence that the child will still own the decision later in life', this agreement should be given great weight in medical decision-making. On the other hand, if the child's refusal 'made sense against a background of what appeared to be

reasonably stable personal values', clinicians are not justified in overriding a parental refusal of treatment.

In Charlie Gard's case, the overriding of his parent's decision appears to be ethically and legally justified considering the frameworks identified and explained above. There is a consensus among bioethicists that parental right to decide is limited by harm and benefit, and quality of decision-making ability. While the case is not refusal of treatment but subscription to a treatment that is judged to be non-beneficial to Charlie, the conditions and criteria described above are applicable.

Conclusion

The Charlie Grad case is a landmark issue in bioethics. It made clear the implications and applications of bioethics principles to cases involving conflict between hospital and parents, the power of the court to override parental decisions, application on experimental treatments to pediatric patients, best interest of the patient against the interest of the parents, withdrawal and withholding of proportionate or disproportionate/ordinary or extraordinary treatments, among others.

Was it legal to withdraw LST and withhold nucleoside therapy from Charlie Gard? In British and European law, yes, with best interest and futility as primary basis for judgment. Was it ethical? In withholding nucleoside therapy, it may be ethical since it is futile (no reasonable benefit, may cause further harm than good). In withdrawing LST, it may not be ethical, considering the arguments posited in Catholic bioethics.

Was the withdrawal of LST a case of euthanasia? If the withdrawal of LST was intended to cause the death of Charlie, then it is active euthanasia. I would like to believe it was not. It was a case of acceptance of the inevitable – that life is no longer worth living, that is, nature has decided that life is ending. To err in the side of life is consistent with the noble goal of medicine, but even life itself knows boundaries and limitations. In cases like this, emotions may cloud reasonable judgment and decisions, thus the need for sound advice and guidance.

While parents have the right to decide in cases involving their minor children, such right is not absolute. It can be overridden by a court of law when their decisions are judged to be not in the best interest of their child. In case the parent's whishes are not granted, care on their part should be taken in such a way as not to complicate the issue by appealing to the people via social media network, or appealing for mercy and compassion in public forum. These acts contributed to the delay in the administration of the nucleoside therapy to Charlie.

Finally, two principles must be kept in mind in any medical case. One is *licet corrigere defectus naturae*, meaning, defects of nature can be corrected. To assist nature in the remedy and restoration of its proper functioning is in accordance even with common sense. It means to say that it is ethical and legal to employ scientific and medical methods to uphold right and sanctity of life. This implies that we can employ medicine and science to correct as defect that can be corrected, and such correction or intervention offers an over-all benefit to the patient. The nucleoside therapy could be a corrective treatment, but with Charlie's condition, it does not offer over-all benefit.

But this principle may seem to allow the use of anything to correct defects of nature. That is why a second principle limits correction of defects of nature, that is, nemo tenetur ad impossibile, meaning, no one is obliged to the impossible. When the defect is irreparable, one is not morally obliged to that which is impossible, or to employ that which runs counter to nature and use it to substitute its irreparable defects does not, per se, solve the problem. Considering the absence of known treatment for MDDS, Charlie's case is impossible to correct. Although there is a theoretical possibility that nucleoside therapy may offer benefit to Charlie, one cannot simply rely on a theoretical possibility. The alternative must be accepted – death can no longer be prevented to claim Charlie's life.

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Exploring a holistic peace model for a sustainable world

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Summary

This research examines a holistic peace model. It is the mixture of physiological and psychological peace, social and structural peace, epistemological peace, and spiritual peace. Physiological and psychological peace refers to the satisfaction of basic human needs whilst social and structural peace means the achievement of social justice and construction of participatory system wherein citizens take initiatives to promote dialogical and bottom-up approach to policy making. Epistemological peace denotes the practice of non-dualistic thinking and reflective self-awareness, which empowers us to appreciate multiple knowledge systems that are constructed by different cultural and social contexts and to engage in constructive and creative dialogue with those having different perspective, values and thought patterns to coconstruct new ideas and values according to different circumstances. Spiritual peace is the awakening to inherent and universal humanity and dignity of all human beings and fundamental interdependent and interconnected relationship while acknowledging diversity of human beings and the practice of compassion to embody the interdependent and interconnected nature of our well-being and peace and others'. The research claims that when each of us achieve and enjoy the proposed holistic peace, we can become a critical and transformative agent to contribute to a sustainable society and globe.

Introduction

This research explores a holistic peace model for a sustainable world by interconnecting different aspects of peace. Especially, it examines four aspects of peace. They are physiological and psychological peace, social and structural peace, epistemological peace and spiritual peace.

Physiological and psychological peace means to gratify the basic physiological and psychological human needs while social and structural peace refers to overcoming structural violence and achieving social justice that guarantees equal opportunity of all citizens for political, social and economic activities and access to basic education. Enacting multiple ways of thinking and knowing and reflective self-awareness or the practice of detachment from social or cultural frame of reference for conscious critique constitute the cores of epistemological peace. The recognition of interdependent and interpenetrating nature of different conceptual thoughts of frames of references shaping distinct views of reality and appreciation of different thought modes will empower us to learn the difference or opposition of views, perspectives or values not as a cause of threat or justification for discrimination or violence but as an opportunity to glean new insights or inspirations to expand the purview of our thinking. And the development of such epistemological stance

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enables those having different or opposing views or values to co-construct new ideas and values creatively according to changing circumstances. Spiritual peace is an awakening to inherent and universal humanity and dignity of all human while acknowledging racial, cultural, or religious diversity. The practice of compassion also forms spiritual peace, which inspires us to feel others' both suffering and wellbeing as our own and to act together to promote mutual well-being and happiness.

This research concludes that those four dimensions of peace are interdependent and interconnected and that each of us can become an active and transformative agent to contribute to peaceful world when those external and internal aspects of peace are realized and enacted in an integrative manner.

Why is holistic peace examined?

Although arguably achieving peace is one of the highest virtues for human beings, it is an elusive and broad concept. Peace is a subjective or intersubjective concept as different individuals or groups of individuals define it in distinctive ways (Richmond, 2008). There is no ontologically pre-determined peace; rather, it is a contested concept with no single fixed meaning (Richmond, 2008). As the world condition continues to change, it is also clear that the concept of peace also continue to evolve over time (Groff, 2008). It is always our responsibility to define and enact peace based on unique social and global conditions we live in.

Why does this research explore a holistic peace model? One of the main reasons is the increasingly complexity and multi-faceted nature of conflict and violence in terms of both the cause and dynamics. Since its beginning, peace research has continuously deepened the understanding of conflict and violence by presenting variety of its causes and dynamics including basic human needs (Burton, 1990), social inequality (Azar, 1990 and Galtung, 1969), the 'in-group' and 'out-group' division because of the construction of social identity (Brewer, 2003) to name but a few. Contemporary conflicts have presented themselves as complex and multi-dimensional phenomena that require us to integrate different dimensions of peace to resolve and achieve a sustainable human relationship and society. Peace needs to be enacted as a multileveled and multi-factor process, dealing with multiple levels in the external and internal aspects.

This research defines holistic peace as the mixture of physiological, psychological, social structural, epistemological and spiritual aspects. The proposal neither denies nor downplays distinct ideas of peace including negative peace and positive peace (Galtung, 1996) that have been proposed by variety of scholars. However, contemporary social and global conditions require each human being to achieve and enjoy peace on multiple dimensions.

First aspect of building a holistic peace model: Physiological and psychological peace

The first aspect of holistic peace is physiological and psychological peace. Here, physiological and psychological peace refers to the satisfaction of basic human needs – both physiological and psychological ones. Though since its beginning, psychology has shown significant development in studying human psyche, this research will confine psychological peace to the gratification of psychological basic human needs.

As generally acknowledged, basic human needs theory is one of the core elements in peace and conflict studies. Abraham Maslow developed a hierarchy of needs: "physiological needs", "safety needs", "belongingness and love needs", "esteem needs", and "need for self-actualization" (1970: 36-46). He also claimed that a conflict or violence is not always a pathogenic phenomenon. Rather, human being tends to resort to force or physical violence when the satisfaction of basic needs is threatened (Maslow, 1970). The physiological needs are those such as food, water, shelter, access to medical services when health conditions are in danger (Maslow, 1970). These needs are fundamental for us to survive as a biological being. Unless those physiological needs are gratified, it is impossible to maintain our lives.

Equally important to physiological basic needs are psychological basic needs. As widely recognized, John Burton, who had been inspired by Maslow's basic needs thesis, introduced basic human need theory to peace and conflict studies. Burton argues that among various psychological basic needs, most essential to understand conflict and violence are those for identity, recognition, security and development (1986). In his view, those basic needs are universal motivations and they will be pursued by all means available since from an ontological point of view, individuals or groups are conditioned by an intrinsic drive to pursue those needs (1990). As they are primordial drives for survival and developments, those needs are nonnegotiable (Burton, 1991).

Jeong claims that in basic human needs there are primary emotional perspectives, represented by fear, anger, depression, and happiness as well as physiological dimensions (2000). Sites argues that animals including human beings inherently possess the need for conditions that will reduce the negative emotional states of fear, anger and depression and enable them to achieve the positive emotional state of satisfaction (1990). Emotions and corresponding needs are present in humans though they are intertwined and very complicated as they are related to the survival of the self as well as survival of the physical organism (Sites, 1990). Therefore, it can be assumed that emotions and corresponding needs are present in humans in all societies, and consequently, the satisfaction of basic needs becomes essential for human beings since fulfilling basic needs plays the critical role for them to grow in society.

Further, according to Dunn, the adoption of basic human needs theory has revealed "a progressive move away from the conventional wisdom of international relations as a discipline" (1995: 199). Traditionally, in international relations, the central actor has been state. For example, Dunn claims that although Realists and Idealists approach the implications differently, they share the fundamental paradigm of state-centricity (2001). Further, according to Broadhead, the traditional argument of International Relations maintains that states are central entities, the world is as it is, and should be sustained. (1997). Burton also states that throughout history, philosophers, social scientists and policy makers seem to have prioritized the need for order and stability and the preservation of the institutions of society over the lives and the needs of the individual person (2001). In other words, there is little possibility envisaged for transformation of the existing order based on state sovereignty as its center. (Broadhead, 1997). On such a view, human beings both as individuals and as groups, are subordinate to state.

However, on basic human needs view, such thesis needs to be problematized. Rosati et al insist that since individuals strive to satisfy basic needs, social systems must respond to individual needs if they are to keep their legitimacy and survive in the long term (1990). They also claim that human social relations, including international relations, will remain incomplete unless human needs are recognized as an essential source of political and social interaction in world society (1990). Their view, as Dunn (2001) mentions, demonstrates that the adoption of basic human needs reflects the recognition of the shift to human rather than institutional priorities.

This does not mean that states or other social institutions are no longer needed. Rather, as Wedge argues (1990), from a basic human needs perspective, the manner of operation of the national and international levels of human organization including states ultimately hinges on the participation or consent of the individual persons whose aggregated behavior constitutes organized actions including conflict and war.

Rosati et al insist that there is a dialectic interplay between individual human needs and larger social values and interests that society promotes (1990). Further, they emphasize that there are strong links between the pursuit of human needs and the conventional concepts of power, values and interests (1990). While the human needs viewpoint acknowledges the importance of power and the related concerns of traditional political Realism, it analyzes the concepts within a larger framework that directs attention to the underlying sources of human motivations (Rosati et al, 1990). Accordingly, the focus should be not on the features, capabilities and interests of states, but on human beings themselves because they act as agents of or in the name of states (Dunn, 2001). Thus, the primary level of analysis, or the starting-point for examining peace is the human being. Preserving the existing social order and system that fails to meet the basic human needs of citizens does not guarantee a lasting peace. Rather, achieving sustainable peace can become a possible reality only when basic human needs are placed at the center of the analysis.

Second aspect of building a holistic peace model: social and structural peace

Social structural peace refers to overcoming structural violence and achieving social justice. Structural violence is defined as "the cause of the difference between the potential and the actual, between what could have been and what is" (Galtung, 1969: 168). The potential level of realization is what is possible with a given level of insight and resources (Galtung, 1969). Accordingly, if insight and resources are dominated by a group or class or used for other objectives, there emerges an incompatibility between the potential and the actual and violence is present in the system (Galtung, 1969). Concretely, unjust accesses to resources, to political power or decision-making, to education, to health care, legal standing and so on are good examples. Put another way, the condition of structural violence can be referred to as social injustice.

How people behave and live their lives are shaped by larger social circumstances in which they find themselves (Duke, 1999). Therefore, conflict or violence needs to be analyzed in the context of a larger framework of social structures. Conflict is the outcome of an asymmetric structure that fails to treat citizens equally in terms of political, social and economic opportunities (Rubenstein, 1999). From structural

perspectives, the cause of violent conflict can be attributed to the mismatch between social values and the social structure of the society, that is, unequal distribution of political, economic and social goods between/among different groups (Mitchell, 2005). In other words, conflict is a structural phenomenon that requires structural confrontation with marginalization of any other effort. Therefore, the failure to consider the structural transformation results in perpetuating the status quo characterized as inequality and prolong violent and antagonistic human relationship (Botes, 2003).

A central concern of social justice is to address overcome grievances such as unequal distribution of and access to political and economic resources (Mani, 2002). The critical first step in social structural transformation is the belief that there is nothing sacrosanct about a status quo since it is the source of conflict, so that the process of transformation begins with an inquiry into and critique of the existing system (Mitchell, 2005). As Jabri insists, human conflict is "a social continuity sustained by deeply embedded discursive and institutional structures existent in patterned social systems" (Jabri, 1996: 146). Since unequal power relations between/among those who live in a society are located within a society itself, its effects can be understood as being spread around the social structure (Jeong, 2003). Asymmetric power relations are embedded in a complex web of structural and material elements, which constructs the fabric of everyday life itself (Jeong, 2003). And so, existing social structures should be subjected to critical analysis and eventual transformation: any status quo based on an existing dominant social structure should be problematized and transformed into new one since social structure itself is a source of conflict.

Constructive conflict handling requires the society's confidence in its civic institutions, culture and capacity to manage conflict peacefully and productively, which lies in the hands of people in its society. Therefore, as Francis argues, the development of good governance and political participation, including pluralism and the public expression of various points of view on public policy, can be recognized as essential for the foundation of stable and prosperous societies in which conflict will be dealt with in non-violent and constructive way (2002). Empowerment, participation and the idea of fair-minded relationships can be acknowledged as cardinal elements in social structural peace. By making socio-political structure more inclusive to give voice to those who have been marginalized in decisionmaking and economic structures, social justice seeks to empower all citizens beyond different group boundaries to gain equal access to both material and non-material resources in order to satisfy their basic needs (Christie, 2001). As Montiel states, structurally peaceful social systems are marked by equally-distributed decisionmaking powers in the production, allocation and utilization of economic, political and cultural resources (2001).

Thus, dynamic changes of social structures marked by asymmetric power relations should be included as the core of resolution of conflict in the long run (Bachler, 2004). It should be recognized that the existing state of affairs does not exhaust all other possibilities: our human world is a product of human action and therefore it should be acknowledged that it is the product of some actions among wide varieties of possibilities (Calhoun, 2000). Consequently, existing social structures are not what will last eternally; rather, since they have been constructed

by human beings themselves, they can be transformed even if it takes time to carry out the transformation to help all those in the society to enjoy humane lives.

Third aspect of building a holistic peace model: Epistemological peace

Why is epistemology important to holistic peace model?

The third aspect of holistic peace model is epistemological peace. In this research, epistemology is defined as our ways of knowing and viewing the reality. Or more specifically, it can be understood as our way of understanding and enacting conceptual thought or frame of reference shaping our view of reality and world.

Why is epistemology crucial in developing holistic peace model? A pressing environment surrounding human beings is that many challenges such as conflict, violence of any form and environmental problems have global impact as well as local ramifications, which requires us to assume active roles to manage and address them in order to achieve a more just, humane, inclusive, and sustainable world. However, it must also be recognized that many of major problems facing us are human-caused (Elgin and LeDrew, 1997). While social injustice, inter-group antagonism, discrimination and violence are our targets to tackle, they are actually created and sustained through our own thoughts (Todd, 2008). Though external causes and conditions must not be ignored, the most fundamental problem is an epistemological one—our way of knowing and viewing the world. As the shape of global conditions rests with our thoughts or way of thinking, it is of great importance to make critical analysis of our mind that causes problems since the world changes when our thoughts and perspectives on the world change (Nicolescu, 2006). Human thinking that leads to constructive and sustainable society and human relationship needs to be explored.

Epistemology and conflict dynamics

Though conflict or violence entails variety of causes and factors, in line with epistemological peace analysis, one of them is our belief and enactment of our value, worldview or perspective as absolute or complete. From time immemorial, human beings have developed conceptual thought or linguistic knowledge as the main tool to make sense of the world of experiences and to communicate with fellow human beings (Ichimura, 1997). As collective beings, our minds are inevitably shaped by socially or culturally embedded assumptions and habitual ways of interpretation to respond to a given life-world (Gunnlaugson, 2007).

We inhabit socially constructed and historically evolved and succeeded lifeworlds that form certain cultural patterns—identities, beliefs, values and norms—as scaffolding for meaningful experience (Reysen and Katzarska-Miller, 2013). Getting our minds socially conditioned means that we build and accept certain frame of reference—pattern of worldviews, cultural values, political orientations and ideologies, religious doctrines, moral-ethical norms and paradigms in intellectual enterprise—to construct conceptually framed reality to lead a meaningful life (Mezirow, 2003). Culture or society of any kind molds us to conform to certain norms, limits the types of experience or categories for experience available to us, and determines the appropriateness or acceptability of a given state of awareness or communication in the collective setting (Goleman, 1993).

Further, constructing or accepting certain frame of reference is connected to an expression of our eagerness for psychological security in the face of the uncertainty of practical life (Gordon, 2006). According to Loy, security refers to "the conditions where we can live without care, where our life is not preoccupied without worrying about our life" (2002, 8) and that entails stabilizing ourselves by controlling and fixating reality with certain attributes (Mipham, 2002) as the fragility or instability of constructed views or presuppositions is seen as a threat to security.

However, while constructing certain frame of reference is essential to us to make sense of reality and lead a meaningful life, the fundamental problem with the construction lies in our propensity to privileging our frame of reference as absolute or complete and in the reification of our understanding of reality and the objectification of the other (Zajonc, 2006). When we build particular thought and claim universality and completeness for the perspective constructed, it causes us to be dogmatic and exclusive of other views or thoughts (Ramanan, 1978). The extreme attachment to our own views tends to elapse into polarity or negation of other views, values, and ultimately of people who are different from us. Once frame of reference socially conditioning us is seen as complete, we are prone to feel threat, anger, or hatred to others with distinct frames of reference, which provides us with iustification for discrimination and impedes self-serving constructive communication with those having different views and perspectives (Der-lan, 2006).

What should be further discussed is the mode of thinking that predominates in building and absolutizing certain frame of reference. Though becoming conditioned by social or cultural frame of reference is natural and essential to us, as Wade insightfully claims, it is fundamentally of dualistic nature of thought (right/wrong, good/bad, black/white, to name a few) and divides the world into "in-group" and "out-group" (1996). Dualistic thought is informed by the principle of the excluded middle (Nicolescu, 2006) or "either-or" stance (Nagatomo, 2000). When frame of reference conditioning us becomes absolutized as universal, the dualistic or binary thinking comes to be believed as the only way of thought. As the dichotomous relationship between in-group and out-group becomes sharpened, an imbalanced attitude invested by extreme in-group self-interest, desire, and needs are favored and promoted at the expense of others' (Nagatomo, 2000).

Once we see and treat others as something disconnected from us as a consequence of the establishment of conceptual boundary based on dualistic or dichotomous thought, it becomes easier to propagate violence of any form upon them outside the boundary (Hart et al., 2000). In dualistic logical and epistemological structure, we tend to project negative qualities upon the outside and see them objectively belonging to them (Wilber, 1993), which promotes self-righteousness to take discriminatory attitude to them. Further, the mind in dualistic stance swings from extreme to extreme, and sticks to dead-ends, whereby values, ideas, or norms of our own group are not viewed as one of many alternatives, but the only right one: Other possibilities are dimly conceived or denied as wrong or inferior (Wade, 1996).

Building a provisionally coherent thought system is an inevitable part of everyday human life. However, when dualistic thought mode exerts exclusive control on our understanding of reality, it causes us exaggerate differences between people and create supposedly firm and fixed boundaries between in-group and out-group by imputing intrinsic and insurmountable differences (Waldron, 2003). Forming the sedimented and habitual ways of seeing the dynamic and complex reality with fixed perspectives restricts the patterns of awareness and limits our intentional range and capacity for meaning-making commitments (Hershock, 2006), which impedes a constructive communication between those having different frames of reference to address complex global problems including conflict and violence that requires those having different values, perspectives, and norms to cooperate for joint-solution (Nicolescu, 2006). In short, whereas social or cultural frame of reference and dualistic logic foundation is a natural phenomenon and useful in some circumstance, it becomes the crux of the problem for its very nature (Wilber, 1993).

Non-dualistic thinking and knowing

Based on the critique of our tendency to absolutize our frame of reference and dualistic or dichotomous thinking as the predominant thought mode, non-dualistic thinking and knowing is proposed as the core of epistemological peace. Non-dualistic thinking and knowing means to understand the interdependent and interpenetrating nature conceptual thoughts that frame different views and understandings of our reality. While the logic of the excluded middle staticizes and fixates differences or oppositions, non-dualistic thinking and knowing sees them as dynamical relationality and temporal phenomena (Hershock, 2012), whereby prima facie opposing views and perspectives are not seen as hard and fixed pair of opposites but as inter-relational and interpenetrating constructs. This refers to neither total erasure of difference nor demise of all distinctions into all-frozen sameness. Rather, it means to transform how we view differences and oppositions beyond dualistic understanding.

With the recognition of the dependent-originated nature of conceptual or linguistic frame of reference, we learn to understand that any form of symbolic knowledge shaping dichotomous relationship cannot be seen as existing outside of the purview of interdependency (Muller, 1998). In other words, non-dualistic thinking and knowing is the consciousness of the total and interminable conflict in conceptual thought or frame of references claiming its absolute and complete status and the consequent recognition that the harmony of the world is a harmony of opposites and contradiction. The transcendence of dualistic thought empowers us to appreciate that the opposite of a deep truth is another deep truth and to hold multiplex and complementary both/and thinking (Braud and Anderson, 1998). Consequently, capacity for synthetic, integrative or holistic thinking and appreciation for the diversity of values and perspectives can be sharpened.

However, the proposition of non-dualistic thinking and knowing does not aim to reject the logic of the excluded middle. Rather, the relationship between non-dualistic thinking and knowing and dualistic thinking is a complementary one and not mutually exclusive one. What needs to be known through the proposal of non-dualistic thinking is that dualistic "either-or" thinking, though important in some circumstances, is only one function of human thought modes. Of course, this research does not claim non-dualistic thinking and knowing is a panacea. Rather, what it wants to suggest is that by enacting both dualistic and non-dualistic thinking according to different environments, we can hone flexibility in our thinking and creativity in managing differences.

Reflective self-awareness

While non-dualistic thinking and knowing forms the core of epistemological peace, the practice of reflective self-awareness also assumes the central role. They are complementary and the latter is crucial to develop and sharpen the former. Reflective self-awareness entails the practice of stepping back from our current frame of reference to critically examine our particular pattern of thought, values and logics that shape our experience (Park, 2008). Human beings need a solid philosophical framework to live a meaningful life, engage in intellectual enterprise and address social and global problems. However, when completeness or universality is claimed for certain frame of reference, it causes us to be dogmatic, excluding other views or thoughts. Dissemination of certain philosophical framework as absolute or complete in the life-world becomes a constitutional power of institutional violence in human social and global arena (Park, 2008).

Reflective self-awareness helps us to recognize that all ways of thinking and knowing are socially/culturally constructed, contextual and contingent. And the awareness will empower us to know that alternative ways of thinking and knowing are available and to be open to others' views, values, and norms to explore more inclusive and ones. The development of self-knowledge through reflective selfcritique of one's frame of reference generates pliability and flexibility with thoughts (Schliz et al, 2010), which breaks through an attachment to any specific philosophical underpinning. Consequently, we can sharpen the capacity to simultaneously hold multiple perspectives and patterns of thought that depends on an awareness that embraces all perspectives without adhering to a position in any form as complete to approach the reality (Hart et al, 2000). The practice of metacognitive awareness like reflective self-awareness stimulates worldview transformation since it can bring us back to square one, from which revision of our model of the world becomes possible (Schliz et al, 2010). Learning to hold belief as the best working hypothesis we have at the moment, and being consciously willing to change belief system or thought mode according to different circumstances, enhances the ability to appreciate and explore multiple viewpoints and to find comfort in unfamiliarity (Schliz et al, 2010). Thus, by integrating reflective selfawareness into our intellectual and practical enterprise of peace and raising the conscious awareness present in them to engage in constant critique of our assumptions, the possibility of transcending particular belief system and approaching phenomenal world from various perspectives will be a viable reality.

Meaning of epistemological peace

Undergirded by non-dualistic thinking and knowing and reflective self-awareness, peace involves continuous, relationally-expanding and interdependent-enriching improvision, which allows us to experience differences or even oppositions as an opportunity to mutual insight and inspiration to explore something new. Improvising, the ethos of which is the lived enacted activity of being different in the world (Hershock, 2012) is the ongoing development of new views and meanings from within things as they have come to be. Improvision is not the abandonment of social and cultural values, worldviews or norms that we develop and accept. It is their meaningful revision and reorientation so that we can draw inspiration from those having different or opposing ideas or norms.

At the heart of epistemological peace lies the promotion of human capacity for qualitative differentiation and transformation that broadens the meanings of reality, which opens up new knowledge within our world. It is an exploratory ongoing and everlasting process that explicates or unfolds new values and meanings to achieve and sustain interdependent and mutually liberating and transformative relational dynamics between those involved in peacebuilding. Peace is not the suppression or elimination of differences or disagreements, but rather the readiness to accord with differing situational dynamics, responding without exclusive reliance on any fixed views and principles, in order to amplify and accelerate relationally manifest mutual appreciation (Hershock, 2012). Encountering diversity ultimately means valuing creativity, that is, significant innovation and relational transformation in the direction of unprecedented and yet meaningfully enacted capacities for appreciative coordination (Hershock, 2013).

Truly, valuing diversity and participating in mutually transformative activities beyond the purview of our social and cultural frame of reference is not an easy task. However, since nothing is absolutely destined or fated to be, there is no warrant for us to claim any situation in which we find ourselves to be intractable (Park, 2008). Rather, human beings and social and cultural frame of reference are complex system that keeps incorporating the histories of their constitutive dynamics into the continuously ongoing process of their own environment and contextually responsive self-transformation and evolution (Hershock, 2013). As there is no closure of meaning-making, changing our values, visions and actions is a possible reality to embody transformative relational dynamics.

Fourth aspect of building a holistic peace model: spiritual peace

The fourth aspect of holistic peace is spiritual peace. Though there is no single view of 'spirituality', this research defines it as universal respect for inherent equal dignity and divinity of human being (Reardon and Snauwart, 2011). It is the recognition of each human being as a morally equal member of the human moral community (Reardon and Snauwart, 2011).

Religion is to be understood as an organized set of creed and practices shared by certain community for spiritual concern (Harpviken and Roislien, 2005) and so spirituality and religion are interconnected. However, religion can turn into a cause of violence and division. Though religion is essential to many, it can become a cause of violence when the different religious group boundaries are fixated and essentialized as categorically incompatible based on the absolutization of the creed as universal and complete (Der-lan, 2006). The presentation of the danger of religion does not mean to reject religion itself. Rather, it needs to be kept in mind that religious teaching is subject to interpretation and can be exploited to give selfserving justification to sharpen exclusive identity and destructive political programs (Ramsbotham et al, 2016). Therefore, self-reflective contemplation must be enacted to raise consciousness and capacity to be aware of and courageously respond to the inherent dignity and divinity of every human being across community boundaries. When both social identity (religious boundary) and transcendental identity are appreciated along with certain common value underlying distinct religions, we can achieve unity in diversity and build a harmonious relationship.

To touch transcendental identity based on the recognition of inherent dignity and divine nature of all human beings, the practice of compassion is essential. Deriving from Latin *co-suffering*, compassion is an acknowledgement of shared humanity and the commonalities in both suffering and aspiration among those with different

identities (Pruitt and McCollum, 2010). It is a capacity to feel others' pain, sorrow, despair, or suffering as our own, but at the same time, an ability to have clear awareness of interdependent origination of phenomenon of any kind (Hoyt, 2014). Compassionate mind inspires the development of a quality of loving kindness, a universal and unselfish love that extends to ourselves, to friends and family, and ultimately to all people (Pruitt and McCollum, 2010). Extension of compassionate mind to all sentient beings regardless of whether are strangers, opponents, or those whom we disagree with leads us to realize that our well-being and others' are inseparable and to act on this recognition (Vaughan, 2002).

Based on the practice of compassion and recognition of dignity and divinity of human beings, how can spiritual peace be understood? It is to be proposed as peace based on unity-based worldview. The unity-based worldview is characterized as the consciousness of the oneness of humanity (Daneth, 2006). It is the awareness that the well-being of us and others are interdependent and interpenetrating; our own peace of any kind would be impossible to achieve without considering and acting to promote others'. It is a transition from self-centered and dichotomous tensions of ingroup and out-group process to an all-inclusive state of awareness of our fundamental interconnection.

The awareness of our fundamental interdependence does not refer to denying the uniqueness or individuality of each of us; rather, it is a qualitative transformation of viewing the nature of identity. Instead of seeing our identity as independent and fixed entity with firm boundary, we effect a perspectival shift to understand it as the interconnected web of life with no fixed nature (Loy, 1993). Realizing identity as an open and dynamic living system within a larger interdependent and interconnected system inspires us to experience an ultimate non-dualistic relationship between ourselves and others, whereby we come to see that we cannot discriminate ourselves from the inter-relational web of life without damaging both others and ourselves (Loy, 1993).

The recognition of interconnected nature of any human relation affords individuals the opportunity to construct more inclusive superordinate identity with integrative or holistic view and way of thinking and a sense of responsibility to act in interdependent and interconnected relations, which drives us to try to gratify basic needs of all beyond group boundaries and promote social justice for others with different identities as well as for ourselves (Daneth, 2006). This does not mean that all of us achieve qualitatively same well-being, basic needs and justice. Rather, it emphasizes that we become conscious of interdependent and interpenetrating nature of different ideas and goals of peace, basic needs and justice and make a mutual contribution to help achieve each other's ideas of peace.

Conclusions and research implications

This research has explored holistic peace model. As shown below, all four aspects of holistic peace are interconnected and complementary to each other to pave the way for sustainable society and human relationship. Put different, when we penetrate into peace on biological, social, philosophical and spiritual levels in an integrative way, we can make optimal development of our potential to become a critical and transformative agent for peaceful world.

However, there is certain question that needs to be examined in order to make the proposed model viable in real world. First, how holistic peace model presented in

this research can be universally applied needs to be examined. Peace is a contested concept and defined distinctively by different cultures and social groups who live in respectively unique circumstances (LeBaron, 2003). On the other hand, the holistic peace model is a generic model and does not reflect each cultural and social environment per se. Therefore, although it is not an easy task, how the proposed holistic peace model can be creatively modified and utilized in each distinct cultural and social context needs to be explored so that we can achieve sustainable peace in complex and multi-faceted dynamics of peacebuilding.

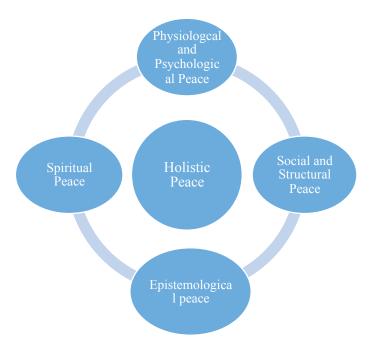


Figure 1 Holistic Peace Model

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Systems thinking and constructivism; the philosophical background of practical bioethics

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Summary

This paper makes a philosophical framework for bioethical practice in not only expert level but non-specialist level, thereby giving shape to an actor network of bioethics. In present time bioethics has generally become the preserve of experts and simultaneously it requires expert information, but some ethicists in Korea are suggesting some supplement points for such expert centered bioethics based on East Asian traditional thoughts, i.e., Confucianism and Buddhism.

The points are two: One is a kind of virtue ethics that asks for practical competency of not only experts but also non-specialists, and the other asking all people for practice to save the whole living system of the world from downfall. These points should be understood as raising practical competency in experts' practices with sincere and authentic virtue and as need of extension of such practice to non-specialists. However, in order to position the traditional ideas into modern theoretical ecology, even though their ideas are themselves very meaningful, we need theoretical linkage that supports the traditional ones to be accepted as modern ideas. Thereby, systems thinking and constructivism are well supposed to do such a work.

These theories have short history in their development in comparison with philosophy, ethics, or other Asian traditional thoughts, but nowadays they are very authentic to observe the real world we feel and understand. And reason why we need the two very modern theories, in fact, lies in our needs to narrow a gap between theory and practice and another one between experts' activities and ordinary people's everyday living attitudes. Systems thinking and constructivism, in fact, has the same origin, but each of them is useful in each different approach to our observation and supplementation of the gaps; systems thinking supplies us with observation of the whole system of the world including people and constructivism does with observation of how to enable people, experts and others, to raise such virtue.

The system thinking shows the experts' activities for bioethics are going along in a huge network of actors that includes all ordinary people. Even their all activities are results and causes in the whole network. The constructivism in this presentation means enactivism defined by Francisco Varela that counts embodiment as main way of enhancing virtue. But the more significant meaning of the enactivism is found in the fact that F. Varela proposed the embodiment of morality in order to overcome problems of nihilism in contemporary moral philosophy that came from groundlessness of objectivism in searching for truth. According to him the nihilism should be overcome mainly by embodiment of virtue. The embodiment also

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according to him should be the powerful method to convince anybody of validity in morally doing even living. In other words, the embodiment is generating such confidence in him/herself and leading him/her to be virtuous. That is an enaction of moral self by him/herself. However, we undertake some special task from his idea of embodiment. The task is how to design the way of embodiment.

In this presentation, it is closely related to recursive practice of norms or rituals in everyday life. In that sense the recursiveness in practice of rituals or norms is discussed. This recursiveness is necessary for not only professionalism of experts with authenticity but also spontaneity of non-specialists with true faith. Therefore, how to enhance performance of bioethics in the whole network with the two theoretical approaches is the main discussion of the presentation.

Hyper-connected society and worry about bioethical practice

In thirty years in the future in Korea it is supposed that a huge network that links people-things-space-systems into a whole ecology will come true. That is now called as a hyper connected society that is based on a more advanced technology that realizes Internet of Everything (IoE) and intelligent IoE over Internet of Things (IoT). In reality, practical use of Big Data with cloud computing and substantial improvement of real-time processing facility of large scale data are just basis of such change. In the hyper connected society physical world and cyber world are linked in real time.

On the point of coming into a new age, so called the 4th Industrial Revolution (IR), many insights are pointing at a big change of social structure that might become more flexible but hyper-connected one depending on high technologies. The hyper connected networks are partly being realized in many fields of present society. In such a hyper society, humans and all things are supposed to be connected each other complicatedly in organizing diverse networks.

Billions of people connected through mobile devices around the globe are now securing unprecedentedly rapid processing speed, tremendous storage capacity, and easy information accessibility. For those reasons, human potentiality will be extended limitlessly. In fields of artificial intelligence, robotics, IoT (Internet of Things), autonomous vehicle, 3D printing, nanotechnology, biotech, material engineering, energy condenser technology, quantum computing, etc., emergence of new technologies and breakthroughs might enlarge the potential.

The hyper-connected society is supposed to be moving this civilization to another one, convergence civilization that is a super complexity system/convergence system. The convergence system makes a voyage towards a fresh stage in which new definitions, roles, functions, and meanings of things that have been objectified or even excluded under anthropocentric society are rising from the ashes. Asymmetry between human and non-human living things or between human and things that have been divided into the subject and the object collapses and thus existing way of thinking based on the anthropocentrism changes revolutionarily. As a great change in view of time and space gives addition to such revolution, a new world view that realizes a principle of universal convergence will soon be prevalent. That is, a convergence system emerges from complex system.

This hyper connected society should be accepted as the stream of time that escapes from restriction of time and space that has obstructed society development,

brings a new opportunity of growth to human society, and functions as a platform to create new values. The new values must be related to rethinking and reorganizing of our ethical being and living. Before discussing about the ethical being and living, appearances of a new civilization should be checked. According to a sociologist in Korea the new civilization should be called as a convergence civilization in which diverse systems of converged and thus society will be changed into a society of higher flexibility. The society of higher flexibility is based on universal communications, universal cooperation, universal sympathy, and universal convergence. These four figures of universality are in reality backed up by a huge convergent system that keeps super openness, multiplicity, a-linearity, and coproduction as its fresh features. The openness means alliance and the multiplicity does many local networks overlapped in a great sphere network. The a-linearity does distortions, intertwining, splash, etc. are rampant. The co-production does humans and things contribute to each other's re-organization. In the co-production, autopoiesis, namely self-organization/self-production, should also be extended to the world of things or any people realizes the autopoiesis in the system. The convergence system keeps its convenient properties always on, readily accessible, information rich, interactive, IoT, always recording, and so on.

What practical bioethics means: actor network of bioethics

There might be, however, an evil omen that the hyper connectivity could ultimately lead a society to disorder and result in an omnishamble in the super complexity revealing as super openness, liquidity, hybridity, and compatibility. Substantially in the hyper connected society people might suffer from critical situation of loss of authenticity, faith, justice, etc., in spite of much more convenient and useful things. Of course, such predicted sufferings might root in the changed social system that could bring about 3Ds (dissonance, division, displacement) as unbalances in resources and power caused in blind area of civilization and besides another 3Ds as omnishambles (disorder, disconnect, discard). People who will have been cast away in the situations of both group of 3Ds's won't be easy to take shelter.

Thought calmly, causes of the situation are not out of the society. As the hyper connected society is now being developed by technologies of a society, the predicted situation of unbalances and even omnishambles are coming naturally to us as byproducts that might be unavoidable. As if every hill has its valley, higher technologies also have been extending dark shadow into human society as much as increasing conveniences. Probably the higher technologies are supplying society with more contingencies or possibilities for better or worse to raise wealth, break away from existing norms and rituals, and consequentially ask for reaching a new set of norms and rituals. It is, however, very slow or insignificant in discussing or preparing the new set of norms and rituals, and even people living commonly in the situation will be suffering from critical problems, i.e., loss of authenticity, faith, justice, etc. It might be a serious worry that convergence civilization might bring about extreme disorder and drive crisis of sustainability by bringing an unheard-of new chapter of life that will be very different. Forecasting such serious situation, it might be necessary for us to give a question of ethics because much part of the problem may be closely related to way of not only human living but also human coexisting with non-human being as autonomous machines. What's countermeasure of ethics against such phenomena?

As the loss of authenticity is counted as the crisis of the hyper-connected society, it is not hard to forecast similar problems in the field of bioethical practice. In present time, the subjects, experts and non-experts, of bioethical practice are comparatively simple, but in the hyper connected society those subjects could involve many kinds of autonomous machines (AM) with various functions supplied with artificial intelligence (A.I.). And they all together form a very complicated network. Until now most actor networks consist of human subjects, that is, experts and non-experts. But the actors' networks are supposed to become more complex and complicated because in the existing networks new and different kinds of actors, AM, will join. It is said that even programmer cannot exactly know inner workings of AM's intelligence, although AMs are programmed to function according to technologies of artificial intelligence. As we see in many films that show future of A.I., robots made by A.I. technology could develop their intelligence by process of embodiment and show intelligence that are superior to human intelligence as AlpaGo did. Because actor networks used to be full of contingency when only connected with human actors, it is natural to expect the new actors' networks that consist of human and AMs will be more complicated. Therefore, it will be more significant work in the future to question: "how to build a harmonious and stable society in the increasing contingencies?" And this question is necessarily connected to sustainability of the globe and human beings, and answer to the question must come from bioethics.

Actors' network in hyper connected society requires at least three responses to keep the performance of bioethics in higher level of its efficacy. Among them two responses are for experts and non-experts and their networks that have been regarded, but a new one is for networks that consist of humans and AMs together. Even though the AMs well programmed by A.I. and will make themselves function as humans normally think, decide, and act, it might be a serious task to control the machines to function properly to keep harmony with others of people and machines. The task must be linked to the way how to make such networks emerge together towards co-existence and co-development and result in a desirable situation that the whole society or the globe keep its sustainability. The whole society including diverse networks of humans and machines is bound to be autopoietic, because not only human beings but AMs are developing themselves in the process of embodiment in their interactions with environment and the society that includes both of them must be autopoietic in its lasting. In that sense, not only actors but the society should be an autopoietic things. That's why we should approach to the way how to establish a sound basement on which the autopoietic system functions well. If so, the tasks are split to three directions.

Basically, the three directions mean to remedy shortcomings of the expert group and of the non-expert groups, and additionally to develop new programs that control the AM groups to absolutely cooperate humans with high performance. Purposefully those directions should commonly meet for well self-organization of the society. In that sense, we can imagine a more stable and harmonious hyper connected society with Intelligent & Ethical Internet of Everything (IoE). In fact, the hyper connected society based on kinds of Intelligent IoE is supposed to give us

cooperative evolution. However, in order to secure authentic sustainability of the hyper connected society ethics must join in the intelligent IoE.

Systems thinking and enactivism

In systems thinking the most significant thing is to design a virtuous circle to sustain a co-evolution that all things and humans should perform. For this, we need to keep attention to feedback loops that stimulate and regulate members of actor network to stay in the virtuous circle. And yet the preparations to each member are not the same. Expediently, actors' network should be classified into three different groups; expert group, non-experts group, and AM group.

The experts group includes kinds of scientists, engineers, medical doctors, nurses, ethicists, lawyers, judges, prosecutors, clerics, etc., the non-experts group does whole people keeping everyday living regardless of job, and the AM group does whole autonomous machines, robots, that carry on jobs not only concerning human lives but also in the ecology of the globe. What are nice measures for their cooperative evolution that continuously effect harmonious global society or local society keeping from 2 groups of 3Ds mentioned before? Even though measures to the AM groups are discussed on trial, it could/should be meaningful to do.

The three groups are, in fact, the main constituents of the actor network that operate as self-organizational system. They commonly and continuously perform the autopoiesis of the whole system. But because every system inside of each constituent is not the same with others, it is necessary to separate them in controlling their inside system. Firstly, in the expert group, kinds of experts keep very special knowledge and know-how to cope with problems, but they are humans who easily become corrupt by greed. In the non-expert group, non-experts have little special knowledge and know-how, but they could do monitoring and accusation against experts' illegality. And their everyday living substantially influencing to the whole living system. In the AM group, most machines are not confused by desire or greed as humans are, but they have another problem of malfunction. Although to input ethical program into robot is causing debates, it could be an available topic to give programming of ethics and validation of ethics to the autonomous machines. In the future, we are living together with many kinds of AMs and generating a system that consists of not only humans but machines. The actor network with humans and machines need a harmony between the two different characters of humans and machines that might think and decide as human beings do.

If we focus on experts' ethics, first of all special knowledge of bioethics and training bioethics in the routine are very necessary. But around the specialists, there always exists much temptation to easily money-make with new technology beyond the law and ethics. How to (make them) overcome such temptation? Or how to train them to have such firm attitude against the temptation and greed. These questions are linked to expectable two different sorts of feedback loop; positive and negative. The positive could enlarge constructive functions of the expert group for sustainable society, and the negative could prevent the group from corruption and strengthen the autonomous inspection and regulation. The positive loop could be organized at least with three conditions; working with special knowledge and technology, special knowledge and technology combined with ethics and law, and continuous training in

real situation according to ethics and law. The continuous training is the enactive process of authentic experts. On the other hand, the negative loop could be realized by at least three works; case studies of unjust and illegal affairs and troubles, fully aware of penalty clauses and examples of punishment, and usually bringing up negative attitudes against any kind of illegal and unethical doing. The positive feedback and negative one work in shift and result in making an expert or expert group go consistently ahead on the bioethics and laws related to bioethics. That means a sound autopoietic system protects the expert or the group from corruption.

If we focus on non-expert ethics, first of all to bring up sound consciousness of bioethics and practical living attitude with loving lives of all things are very important, because the firmer such consciousness and attitude are, the wider the non-experts participate in bioethics. In this group, it is worth observation on its positive and negative feedback loops. The positive loop could be organized with at least three conditions; daily living with principle of life protection and environment protection, enlightenment of bioethics and law in education, and ritualization for practical bioethics in daily living. The negative could, on the other hand, be realized by at least three works; sensitive self-check against illegal or unethical troubles, fully aware of danger of environmental destruction, climate change, etc., and usually bring up negative attitudes against any kind of illegal and unethical doing. The positive feedback and negative one work in shift and result in making a non-expert or such group go consistently ahead towards keeping sound life of the society or the globe. That means a sound autopoietic system in ordinary people functions to guard expert group from corruption and to form public opinion towards keeping the globe sustainable.

If we focus on AMs, character of machine is the first consideration. Even though they are told to develop themselves by AI programming as the Deep Learning made by Google, it is not easy for them to escape from the machine character. I think human should play a leading role in such hyper connected society or in convergence civilization. How to control the smart machines? Answer to this question is also comprised of feedback loops of positive and negative regulated by expert groups. The positive loop could be realized with at least three works; programing of bioethics and law for exact performance, setting the machine into proper positions to work with people, and continuous and regular enforcement of efficiency tests. On the other hand, the negative could be worked with at least four things; minimization of malfunction rate, development of machine bioethics quotient and application of it to products, enactment of machine bioethics law, and throwing out unqualified machines according the law and bioethics quotient. The positive feedback and negative one work in shift and result in making a machine or such group go consistently ahead on sound performance of the society or the globe. That means a sound autopoietic system in AMs functions to support people to do high performance.

How to set a direction of autopoiesis

Focusing on how to handle conflicts especially among the three kinds of actor group, we can find that human world, actors network, has been drifting together with the whole system of the world. The actors network works as a big filter that gives the whole system contingency and often increases instability of the system. The

network is not a hard and fixed stuff but a flexible and easily changeable collection of all individual governments, institutions, communities, persons, machines, etc.. If contingency of the network increases depending on the serious and diverse conflicts, the sustainability might be threatened much more. As are many kinds of them, causes of the conflicts are not simple. But the most basic and common cause must be the human beings themselves. They, as other participants into the whole circulation of the world, have great influence to all others, people as well as all things.

Granted that the universe as a huge system according to a system view, the actor network including human and AMs in the hyper connected society is structurally paired with the universe as environment of the actor network. The feedback loops are existing not only inside the network but also in the whole universe. According to this idea, reactions of the universe to the human society is in fact feedbacks to the society. In this case, as observed before, the positive feedback and the negative one must function. In other words, every time the human world is influenced by the environment and is coping, by its habituated way, with the environmental influence. The coping is in fact the way to respond to the universe and inversely influence to the universe or its environment. In that sense, there exists a huge circulation between the universe and the human society or the actor network as shown in Figure 1 below.

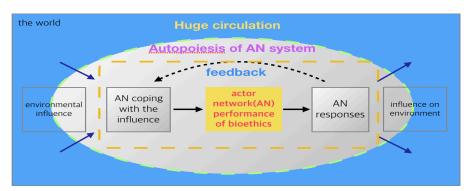


Figure 1: Diagram of the Circulation

We should reflect the way to cope with and influence to the universe. What is our most adapted way? How is the situation of the huge circulation between the universe and the actor network changing over time? In the circulation, how important is our collective or personal bioethical performance? In figure 1, AN coping with environmental influence, AN performance, and AN responses are in fact a series of actor network actions and reactions in micro level analysis with the universe as the environment. The series of AN's coping and responding is in fact a part of the huge circulation and substantially contributes to keeping or worsening of its sustainability. That's why to stress on the AN's bioethical performance as an absolutely significant and necessary one. What's more important, the performance is continuing in every day and everywhere on the globe. I think the autopoiesis, mentioned above, as the self-organizing process of the whole universe or even only the actors' world is rising in the process of the continuous performances. The

autopoiesis is absolutely different from self-destruction. Therefore, the autopoiesis needs to continuously look for its direction to sustain not only the human society but the universe in the middle of so many and various difficulties, which have been and will be coming from so many conflicts between actors or between social systems, or between actors and systems.

Many kinds of conflicts highly raise up contingency that threatens the world peace and sustainability of the globe. In fact, the conflicts are results from fortuities coming from discordance or disharmony between actors and in addition the conflicts themselves are running at a bigger scale or a higher-level contingency that threatens the world. The actor network as a huge system has a task to make itself sound in the whole universal system in order to minimize the conflicts. Bioethics can and should contribute to strong construction of such autopoiesis. If it is reasonable to be accepted, what is bioethical way of the contribution? That's just to construct a sound self-organizing system and to purport higher bioethics performance by AN itself. Of course, it is not the total solution but a very basic one.

Considering on how to raise up bioethical performance to higher degree, we need focus on human's instability rather than machine inefficiency because it is not so difficult to control machine as to do to humans and because humans normally include more complexity in their biological and psychological organization than machines. So human instability substantially come from its inner complex system. Should humans control the complexities in their inside, to handle the machines won't be so a hard problem.

Strategies for securing stability and better performance of bioethics are, hereby, required. We can figure out over five strategies as follow: to make behavior system structured in consistency rather than philosophical thinking, to organize whole activities directing legally and ethically proper path in every situation, to intensify emotional power to resist greed that easily makes experts deviate from law, to bring up wisdom that keep balance in every performance along with law and ethics, to embody proper activities that keep the network in harmony, and so on.

Practice of bioethics in everyday life

Substantially practice of bioethics in everyday life means ritualization of bioethics. The ritualization is useful and helpful for not only non-experts but experts. Of course, the ritualization for each group should be different as what each group does every day is different. Nevertheless, what is important is the ritualization is the basic way to bring virtue to the actors.

Reasons why ritualization is necessary in bringing virtue could be explained with some inferences. First of all, a human is itself a complex system that consists of multilevel complexities. Every level of complexities has its own autopoietic activities that we cannot easily check or sense. Human actions appear as emergence from harmony or mismatch of multilevel complexities. Harmony could give consistency to the whole system but mismatch couldn't. The consistency in the whole system brings virtue to its actor. The virtue qualifies experts/non-experts as sincere and unerring practical-minded person. The consistency and the virtue as result from the consistency makes substantial basement of stability. In this process, what makes the consistency in actor's everyday life? Is it philosophical thinking? So called philosophical thinking might look for a constructive direction, but cannot yet be a

substantial drive force that keeps one's living in a constructive way. Because thinking is one of numerous inner activities of an actor, it is usually interfered and distorted by many other inner factors as feeling, emotion, desire, greed, etc. That's why we are necessarily looking for the way how to bundle up such various inner factors and open their common and constructive way to get to virtue. In view of East Asian traditional instructions of self-cultivation, ritualization is just the way to generate and fix the virtue in not only an actor but the whole society. Why ritualization is important lies in the fact that daily repeated performing of rituals substantially regulate all the inner factors and give them a new stage on which all of them could be harmonized and combined. And the substantial power of ritualization to regulate and harmonize the inner factors comes from recursiveness that includes positive and negative feedbacks.

The ritualization means to establish a bio-ethically sound lifestyle in an actor. This establishment gives an actor power to regulate and harmonize its life that is in fact a complex of mental complexity and physical complexity. Lifestyle that consists of innumerable micro level ritualization could be an comprehensive passage to cope with the society that involves multi-orders of social complexity and thus is always bound to fluctuate and drift. In fact, as the society is always fluctuating and drifting because of its complexity, every actor is doing so because of its mental and physical complexities. Therefore, what is important is as follow: From view of an actor, how to get balanced with and open mind to others, and from view of the whole society, how to keep stability and recover it from conflicts and their shocks; see Figure 2.

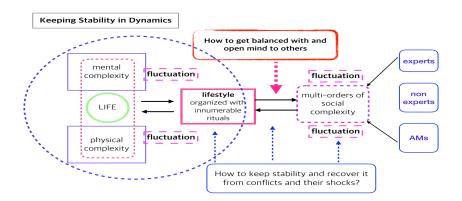


Figure 2: Keeping Stability in Dynamics

The ritualization must adopt the bioethics as its essence of rituals. Only then will practical bioethics successfully take root in our society. And it will be the way to keep stability in dynamic circulation between actor network and the whole society or even the universe.

Conclusion

The actor network should be considered to involve not only experts and non-experts but also many kinds of autonomous machine in near future. In so called hyper connected society will have more complex social system in which communications between not only people to people but also people to machine/machine to machine will be frequent. In this article, the actor network of bioethics that consists of experts, non-experts, and AMs is focused for discussion about how to secure stability of the network. It is a unique point of the presentation to involve the AMs in the actor network. Even though AMs are important constituent of the network, humans are supposed to hold the key to harmony or high performance of the network in realization of bioethics. The key is the ritualization of bioethics in everyday life with training and education.

Background theories are introduced in five categories. Firstly, the idea of ritualization is made on basis of Asian traditional Confucianism and Buddhism that provide each effective methodology of self-organization of authentic character. Secondly, idea of feedbacks and systems is depending on the recent cybernetics systems theory. Thirdly, this article adopted idea of enactivism that is now developing in field of cognitive science. Fourthly, actors network theory is holding the main basis of conception of this article. In addition, in order to consider the way to establish practical bioethics an attitude of constructive realism and social systems theory were mainly applied.

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An ethical view on the clinical application of preimplantation genetic screening of embryos in Japan

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Summary

On 28 June 2016, Dr. Toshiki Matsuura, Director of Act Tower Clinic in Hamamatsu City, announced that his clinic had been performing preimplantation genetic screening (PGS). On 2 November 2016, the Japan Society of Reproductive Medicine (JSRM), whose Chairperson of the Executive Board was Dr. Minoru Irahara at the time, revoked his title as a "reproductive medicine specialist", due to the reason that his actions were inconsistent with the high ethical standards demanded of this role. Setting an antecedent, on 11 July 2012, the Yomiuri newspaper had already published an article on a new and effective cure for miscarriage thought to be caused by aneuploidies as well as the Japan Society of Obstetrics and Gynecology (JSOG)-unauthorized implementation of new-style preimplantation genetic diagnosis (PGD) in aneuploidy examinations for the prevention of abortion by Dr. Tetsuo Otani. This paper covers the following points:

- 1. An investigation into the ethical standards that both the JSOG and JSRM require of reproductive medicine specialists when applying PGS to fertilized embryos in clinical settings;
- 2. Ethical discussion related to the gap between the high ethical standards required of reproductive medicine specialists by the JSOG and JSRM and the realities of daily clinical practice.

What are the "high ethical standards" required of JSOG-certified reproductive medicine specialists who use PGS in clinical practice?

Responses of the JSOG and JSRM to Dr. Matsuura's clinical application of PGS:

On 28 June 28, 2016, Dr. Toshiki Matsuura, Director of Act Tower Clinic in Hamamatsu City, announced that his clinic had been performing preimplantation genetic screening (PGS). This technique, a way to comprehensively screen for chromosomal numerical abnormalities¹⁴, had not been approved by the JSOG. He had performed PGS for 47 willing women in their 30s since July 2015. As a result, 12 women had fertilized ova transplanted, of whom 1 gave birth in April 2016, and 6 are currently pregnant (*Mainichi Shimbun*, 29 June 2016). Dr. Matsuura was summoned for official questioning by the JSOG's Ethics Committee on 25 July 2016.

^{··} pp. 157-165 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

¹⁴ Chromosomal numerical abnormality is also called aneuploidy. Healthy humans have one pair of each chromosome, a state called disomy. Having only one chromosome of a pair is called monosomy, while having three is called trisomy. Aberrant somatic chromosome number is associated with mental and physical developmental disorders and deformities, while aberrant sex chromosome number is associated with disorders of gonadal development. For example, chromosome 21 trisomy causes Down syndrome.

There, he testified that he had performed PGS because of an earnest desire to "save women troubled by habitual miscarriage or the inability to carry a pregnancy to term" (*Shizuoka Shimbun*, 29 June 2016). He also submitted a written apology to Committee Chairperson Dr. Minoru Irahara, in which he stated: "I deeply regret my actions, and I will no longer perform PGS". Upon receiving the findings of the fact-finding interview, Dr. Tomoyuki Fujii, the JSOG's Chairperson of the Executive Board, decided on a "serious reprimand" as Dr. Matsuura's punishment. Moreover, the same Dr. Irahara was the Chairperson of the Executive Board at the JSRM, and on 2 November 2016, the organization decided to revoke his title as a "reproductive medicine specialist", a certification administered by the JSRM itself. The reason given was as follows:

Certification [as a reproductive medicine specialist] is contingent on a doctor's compliance with the JSOG's *Opinions on Preimplantation Genetic Diagnosis* (published June 2010, revised June 2015). [Dr. Matsuura's actions] are incompatible with the high ethical standards demanded of this role.¹⁶

In short, the JSRM's decision to revoke Dr. Matsuura's certification as a reproductive medicine specialist can be broken down into two primary reasons:

- 1- Dr. Matsuura's unilateral decision to adopt PGS in his clinic, a technique with as-yet unproven effectiveness, was in violation of the JSOG's *Opinions on Preimplantation Genetic Diagnosis*.
- 2- Dr. Matsuura gave no consideration to the serious ethical issues associated with PGS

My view on the JSOG and JSRM's treatment of the case as a violation of JSOG guidelines

Dr. Matsuura was condemned for the reasons above by the JSRM. However, a mere three months later on 14 February 2017, the JSOG—essentially the JSRM's parent organization—independently declared its intention to cease discussion on the murky bioethical issues posed by PGS, and to begin researching how PGS could be used with fertilized ova in clinical practice, with the goal of examining the method's effectiveness at preventing miscarriage (NTV News 24, Nippon TV, 15 February 2017). In other words, discussions on clinical research on PGS, a technique fraught with serious bioethical issues, were recklessly postponed until after its effectiveness could be confirmed (Dahdoub et al., 2015; Rubio et al. 2017). The JSRM had publicly claimed that Dr. Matsuura, as a certified reproductive medicine specialist, was obliged to hold high ethical standards. Given the stated importance of ethics, it would have made more sense for the JSOG, a parent organization with more authority, to courageously deliberate the serious matter of embryo selection prior to announcing the start of PGS-related clinical research using fertilized ova. The JSOG's failure to set an example by adopting the public rationale given by its daughter organization to condemn Dr. Matsuura is a double standard.

The two organizations' public stances were confusing, and invited the public's misunderstanding. However, there is no question that Dr. Matsuura's condemnation by the JSOG and the JSRM, who called into question his ethical standards, reflected

¹⁵ Minutes to the 2nd JSOG Executive Board Meeting in 2016, p. 2.

¹⁶ ZUU Online, 5 November 2016.

the sincere positions of both groups, who have grappled with bioethical issues for many years. This leads to a new question: what exactly are the high ethical standards that both the JSOG and JSRM require of reproductive medicine specialists to perform PGS?

What high ethical standards are required of doctors to perform PGS in clinical settings?

At this point in time, it is unclear what specific qualities constitute the "high ethical standards" required by the JSOG and JSRM of reproductive medicine specialists. However, if we trace the discussion back to 1996, when the JSOG began considering an older type of preimplantation screening (i.e. "old-style preimplantation genetic diagnosis (PGD)")¹⁷, the bioethical concerns surrounding PGS can be distilled into two major complaints:

- 1. It gives humans the power of life and death over embryos—i.e., it amounts to *the selection of life.*
- 2. It denies people with disabilities the right to exist: i.e., it amounts to *denying the disabled the right to exist*.

These two criticisms are borne out in an interview-style article¹⁸ published in the 8 July 2012 edition of the magazine *AERA*, between Dr. Tetsuo Otani and Dr. Yasunori Yoshimura, former JSOG Chairperson of the Executive Board and Keio University Professor Emeritus. Thus, the "high ethical standards" required of reproductive medicine specialists by the JSOG seem to overlap with concerns that PGS of embryos could lead to the selection of life and denying the disabled the right to exist.

Ethical discussion of the gap between the high ethical standards required of reproductive medicine specialists by the JSOG and JSRM and the realities of daily clinical practice

In this section, we discuss the fears that embryo selection, the step in PGS that so troubled both the JSOG and JSRM (i.e., "new-style PGD"), could lead to two major bioethical issues: the selection of life and denying the disabled the right to exist. Thereafter, we continue by discussing the gap between the high ethical standards required of reproductive medicine specialists by both the JSOG and JSRM and the realities of daily clinical practice, and associated ethical issues.

¹⁷ "Genetic diagnosis of embryos is discrimination against people with disability or illness." (Junko Tsutsui, Network Against Eugenics Representative. Letter to Dr. Yoshihiko Takeda, JSOG President. 18 February 1997.)

[&]quot;PGD is discrimination against people with disabilities." "PGD turns biology into something to be manipulated, and fertilized embryos into things." (Keiko Yano, Network Against Eugenics Representative. Lecture program distributed to attendees of the JSOG public symposium *On Preimplantation Genetic Diagnosis*. 14 June 2004.)

On February 5, 2004, members of the Hyogo branch of Japanese Cerebral Palsy Association's "National Green Grass Federation" delivered a written protest to Otani Ladies Clinic, which had publicly announced it was performing PGD. In it, they wrote: "[PGD] fosters discrimination...and is a dangerous idea that can lead to the selection of life. We call on other disability organizations, hoping to give strength to our protest movement." (6 April 2004, *Kobe Shimbun*).

¹⁸ The 8 August 2012 Asahi Shimbun Weekly AERA, 13-20, 70-72.

Fears that PGS (new-style PGD) could lead to the selection of life and denying the disabled the right to exist

First, what is PGS? It is a test to comprehensively screen for chromosomal numerical abnormalities without targeting specific genetic abnormalities.

A reproductive medicine specialist may choose to use PGS to test embryos for chromosomal numerical abnormalities, in order to prevent miscarriages due to them. This is because irregularities in chromosome number occur more frequently than in chromosome structure, and more often as the egg donor increases in age (Figure 1). Moreover, the most likely fate of aneuploid embryos is to be naturally screened out by the uterus itself (Figure 2). Thus, a reproductive medical specialist who performs PGS does so with the aim of selectively rescuing the few embryos that can be rescued from among the multitude of others with chromosomal numerical abnormalities, whose likelihood of being naturally selected out in the uterus is extremely high. No such doctor uses PGS with the intention of "selecting life" in mind.

Figure 2 shows Munné's data on success rates of embryos with aneuploidy of different chromosomes. Embryos with chromosome 1 aneuploidy fail to implant with a 100% probability. However, there is a non-zero possibility of embryos with numerical abnormalities of other chromosomes resulting in a natural pregnancy. The likelihood of an embryo with trisomy of chromosome 13 (Patau syndrome), 18 (Edwards syndrome), 21 (Down syndrome), or the sex chromosomes ¹⁹ (XXX/XXY/XYY) being carried to term is slim, but not zero.

On the other hand, embryos with trisomy of any other chromosome, or with monosomy of any chromosome except X, are not carried to term. If they survive, embryos with X monosomy are born with Turner syndrome, but 99% result in miscarriage: even then, contemporary theory suggests that the surviving Turner syndrome patients are not pure X monosomics, but rather mosaic individuals. To put it simply, few defective embryos survive this "natural screening" process, but there is a non-zero possibility of aneuploid embryos being carried to term, which are highly likely to have severe congenital abnormalities. Given this difficult reality, it is hard for me to disagree that PGS treatment to prevent miscarriage with the aim of screening out aneuploid embryos, regardless of the feelings of the reproductive medicine specialist, effectively "selects life" in the strict sense.

Medical centers that perform PGS such as Munné's lab, and Otani Ladies Clinic do so at the behest of patients who have suffered miscarriages. How then should they handle this "power of life and death"? For example, let's imagine a scenario where PGS detected trisomy 21, which causes Down syndrome, in a fertilized embryo. Who decides whether to transplant it or not? Doctors do not have the right to make that decision: the patient does. Doctors in Munné's lab and Otani Ladies Clinic never chose to discard fertilized embryos with chromosomal abnormalities of their own volition. In Munné's lab, one patient even made the decision to transplant a trisomy-21 embryo anyway.

If all doctors without exception adhere to the same protocol used in Munné's lab and Otani Ladies Clinic, this should more or less alleviate our fears that using PGS to screen for defective embryos could lead to the selection of life and denying the disabled the right to exist. Why? Because the embryos' parents, who have primary

¹⁹ XXX (triple X syndrome)/ XXY (Klinefelter syndrome)/ XYY (XYY syndrome[supermale])

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responsibility to care for the child once born, hold the power of life and death, not the embryo itself, which is unable to make any such decision about its own survival. This is true of both PGS and prenatal diagnosis (PND). Once this point is fully understood, the fears below—once articulated by former JSOG Chairperson of the Executive Board Dr. Yoshimura Yasunori—seem no more than needless worry.

FEMALE AGE AND PROPORTIONS OF BLASTOCYSTS HAVING ABERRATIONS IN CHROMOSOMAL NUMBER (AMERICAN DATA)



Few fertilized embryos with observed chromosomal numerical abnormalities reach clinical pregnancy; nearly all are aborted

[RED] Embryos that fail to implant or end in chemical abortion [GREEN] Embryos that reach clinical pregnancy (incl. abortive cases after impregnation)



"In the case of prenatal diagnosis, for example when a chromosomal abnormality has been diagnosed, there are people, however few they may be,

who will choose to give birth. In PGS (new-style PGD), basically, when an abnormality is diagnosed, the embryo will be discarded."²⁰

It is patients that have the right to decide whether or not to transplant a defective embryo. Yet, the safeguards of the Munné lab and Otani Ladies Clinic are unpersuasive to some anti-PGS extremists, who assert that the selection of embryos must be entrusted to the natural workings of the uterus. (Never mind that by their own logic, they should reject medical advances in fighting disease, also a 'natural' phenomenon.) It is only such doctrinaire reactionaries who cannot be dissuaded from their criticism that PGS amounts to the selection of life and denying the disabled the right to exist.

Ethical discussion of the gap between the high ethical standards required of reproductive medicine specialists by the JSOG and JSRM and the realities of daily clinical practice

The analysis above makes it clear that the "high ethical standards" required of reproductive medicine specialists by the JSOG and JSRM overlap with concerns that PGS of embryos could lead to the selection of life and denying the disabled the right to exist. In that case, what criteria are the JSOG and JSRM using to pass ethical judgment on the clinical practices of the obstetricians and gynecologists they oversee?

First, let's consider the ethical issues with PND. Obstetricians and gynecologists must be certified by the JSOG to perform PND. The number of fetuses aborted each year based on the results of PND and non-invasive prenatal genetic testing (NIPT), or simply due to the circumstances of the parent(s), has been nearly 200,000 since 2012 (nearly 170,000 in 2016).

The selection of life and denying the disabled the right to live are inseparable aspects of these clinical procedures. PGD was developed as a diagnostic technique to spare both mothers and their children the misfortune of miscarriage. Moreover, given that both PND and NIPT can result in abortions, PGD is the preferable diagnostic method. And yet, while PND and NIPT are officially recognized by the obstetrics and gynecology community in Japan, PGD remains strictly regulated.

In *in vitro* fertilization and embryo transfer (IVF-ET), it is standard clinical practice for doctors not to transplant embryos with defects that can be observed microscopically: for example, a triploid embryo has three visible haploid sets of a given chromosome (Figure 3). It is also standard clinical practice, not to mention conventional wisdom, to screen embryos based on appearance ("grade"), not only for genetic defects like triploidy (Figure 4). These criteria are standard because

²⁰"One member of a disability group said it like this. "There is a difference between having the choice for birth and being discarded out of hand. The latter means 'the selection of life', it is the same as if we would be discarded." [*ibid.*] Former JSOG president Yoshimura's publicized position is perfectly consistent with the 27 *July 2012 Declaration on New-Style PGD*: "We have, from the beginning, considered the clinical application and practice of a new technology for reproductive treatment to be a matter requiring cautious progress based upon, whether or not it is beneficial to the client, careful attention to the opinions of numerous people in diverse positions, and our country's natural and cultural background. This Society will hereafter continue to maintain this position." Readers can find the author's criticism of the JSOG's position as argued by Dr. Yoshimura in Kodama (2014).

visually defective embryos are predicted to fail to implant even if transplanted, and to result in miscarriage or early neonatal death even if they successfully implant. No one would believe that today's clinical applications of these techniques, accepted widely, are completely immune from concerns over the selection of life and denying the disabled the right to exist. Accordingly, there seems to be no rational basis for establishing strict regulations that target PGS alone.

Figure Screening for triploidy

3倍体の選別



Figure Embryo screening based on appearance (grade)

外観(グレード)による受精卵の選別



Next, let's consider the ethical problems with old-style PGD. The JSOG lifted the ban on old-style PGD in stages, having recognized its clinical applicability for "serious hereditary diseases" since 1998.

Duchenne muscular dystrophy can be avoided by performing prenatal sex testing, while hereditary diseases can be avoided by performing old-style PGD using polymerase chain reaction (PCR). However, these tests inherently and undeniably involve the process of sorting—i.e., assigning qualitative differences to living entities—for the purpose of eliminating congenital diseases. New-style PGD—specifically, array comparative genomic hybridization (aCGH)-, single nucleotide

polymorphism (SNP)-, and next-generation sequencer (NGS)-based PGS—is used to comprehensively target chromosomal abnormalities: why should we make a sworn enemy of this category alone?

In 2006 and 2010 statements, the JSOG expanded the range of clinical applications permitted for old-style PGD as follows.

"[Old-style PGD] may be applied only to carriers of chromosomal abnormalities or genetic mutations that could lead to children being born with serious hereditary diseases. In addition to screening for serious hereditary diseases, it may be used in cases of habitual miscarriage (including repeated miscarriage) thought to result from balanced structural chromosomal abnormalities."²¹

Let's review this policy here. As described previously, 100% of embryos with chromosome 1 aneuploidy fail to implant. Embryos with numerical abnormalities of any chromosome fail to implant, or otherwise culminate in miscarriage, except for those with trisomy 13, 18, 21, or XY, or X monosomy (Table 1). To put it another way, the only embryos with aberrant chromosome number that survive the uterus's "natural screening" process are those with trisomy 13, 18, 21, or XY, and a fraction of those with X monosomy. However, monosomy-X embryos have a high miscarriage rate of 99%, and trisomy-13 and trisomy-18 embryos have ones of over 90%. Even trisomy-21 embryos, which have the lowest miscarriage rate, self-abort at a rate of 70-80%, and even then, trisomy 21 accounts for just 1% of all cases of chromosome number abnormalities in embryos.

Table Chromosomal abnormalities in total pregnancies: observed incidence and prenatal selection rates Hironaho Numabe Fetal abnormalities and deformities: somatic chromosomal abnormalities Progress in Obstetrics and Gynaecology, vol. 53 771-781, 2001 Chromosomal Incidence in Incidence in Incidence in Incidence of neonates spontaneous (85% of total abortions (15% pregnancies or stillbirth pregnancies) of total pregnancies) 0.12% 3.92% 4.04% 97% 0.10% 0.37% 0.47% 79% 0.21% 0.223% 94% 0.013% Trisomy 18 Trisomy 13 0.004% 0.20% 0.0204% 98% 0.004% 1.42% 1.424% 99.7% 99.8% 0.002% 1.22% 1.222%

Nonetheless, the probability is non-zero that old-style PGD could lead to embryos with trisomy 21, or other abnormalities, being discarded that could have been carried to term. Therefore, we cannot ignore concerns that even the fluorescent *in*

²¹ The July 27, 2012 Declaration of the Japan Society of Obstetrics and Gynecology Regarding Media Coverage Concerning 'Preimplantation Genetic Diagnosis

situ hybridization (FISH)-based, old-style PGD, already approved by the JSOG, risks the selection of life and denying the disabled the right to exist. Accordingly, there seems to be no reason to reject only new-style PGD (that is, aCGH-, SNP-, and NGS-based PGS) out of hand.

An essential component of new-style PGD methodologies—including aCGH, SNP, and NGS in addition to PCR and FISH—is the biopsy of embryos or blastocysts to screen for abnormalities of specific genes or chromosome number. IVF-ET does not involve these various molecular-biology techniques in normal clinical practice, yet doctors always visually distinguish healthy embryos from the defective ones before transplanting them.

To summarize, fears are not completely unjustified that PGS as carried out by Dr. Otani and Dr. Matsuura—i.e., new-style PGD—can lead to the selection of life and denying the disabled the right to exist. However, the same serious bioethical questions that surround reproductive medicine are not being asked at all of procedures in clinical practice. With the blessing of the JSOG, obstetricians, gynecologists, and reproductive medicine specialists under their aegis have been treating patients with other procedures without receiving criticism, despite the fact that they still run into the same two ethical issues. Singling out PGS (new-style PGD) as the only procedure with the potential hazards of selecting life and denying the disabled the right to exist is simply illogical.

Conclusion

The JSOG has struggled with the Achilles heel of reproductive medical ethics. Henceforth, they should make explicit what specific qualities constitute the "high ethical standards" they require of the reproductive medicine specialists under their supervision. Those inquiries may be started after, or in parallel with, the investigation to confirming PGS's effectiveness. The JSOG should raise the bar high for these ethical standards, but still ensure they endeavor to make them consistent with the murky bioethical waters encountered by the obstetricians and gynecologists they oversee in daily clinical practice, specifically the matters of the selection of life, and of denying the disabled the right to exist.

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Circumcision in the Philippines and Kantian ethics

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Summary

This discussion focuses on the ethics of male circumcision (Tuli) in relation to the notion of personal autonomy. I argue that circumcision of male children in the Philippines is morally wrong and should be postponed until such a time that the individual is capable of deciding independently. The paper is pursued first through the discussion of circumcision as a religious rite and socially accepted norm, and then through the discussion of the notion of personal autonomy. It is argued that the procedure has some infractions in Immanuel Kant's "Formula for Autonomy", the third formulation of the Categorical Imperative. In conclusion, it is argued that circumcision of male children is morally wrong.

Introduction

Circumcision or "tuli" is a known tradition for boys in the Philippines. It is considered a rite of passage for manhood (a rite of adolescence), or perhaps a symbol of manhood for Filipino boys. The average age bracket of boys being circumcised in the Philippines is more or less eight (8) to twelve (12) years old. Reports say that more than ninety (90) percent undergo the procedure. The process involves the removal of the foreskin or the tissue covering the head of the penis. The foreskin is the retractable fold of skin of the penile shaft that covers the head of the penis.

Historically, the procedure has been a practice in the country long before the arrival of Christianity in the 16^{th} century. It is said that practice is due to the influence of the Muslim community. Muslims had been in the country way before the arrival of the Spaniards. Traditionally, circumcision is done through pukpok. This is carried out through submerging the boys into the river to soften the foreskin. Boys are made to chew guava leaves for them to be distracted and not to feel the pain of the procedure. The practice has been continued up to date.

"The *pagtutuli* is held near a river, lake or an irrigation system. After bathing in a river or a lake, the boys are asked to chew guava leaves. They are then asked to sit on a *lukaw*, a wooden tool with pointed ends carved from a branch of guava tree. While the boy is seated, one end of the *lukaw* is staked on the ground while his penis is set on the other end. A *manunuli* then uses a *labaha* (barber's blade) to cut the foreskin off of the penis. The *manunuli* then instructs the boy to spit the chewed guava leaves directly on the wound to aid healing and to prevent any infection. After the operation, a piece of cloth is wrapped around the wound to be changed daily. The boys are then asked to jumped into the water by the *manunuli* to speed ure up the healing process (en.wikipilipinas.org., 2017)".

 $\cdot\cdot$ pp. 167-174 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

Nowadays, the procedure involves surgery in hospitals or small clinics. There are claims that circumcision has some health benefits. The World Health Organization and UNAIDS claims that circumcision lowers the risk of cancer, decreases risk of urinary tract infections and HIV.

Circumcision has some religious significance in Islam and Judaism. For the Muslim community, the procedure is based on *Sunnah*, the sayings and practices of the Prophet. Although male circumcision is mentioned in the Quran, the practice is considered to be an ancient tradition. "Circumcision is mentioned in the hadith as one of the signs of *fitrah*, or the natural inclination of humans—along with the clipping of nails, removal of hair in the armpits and genitals, and trimming of moustache (Huda, 2017)".

For the Jewish community, circumcision rite is one of the most ancient practices. Accordingly, unless one is circumcised, one cannot be saved. Circumcision as being defined in Genesis states that it is a symbolic act of the Covenant with God. It becomes a requirement for one to be part of the Covenant Community, thus it is a distinguishing mark of a Jewish male.

On the other hand, for the Christianity, circumcision has no religious significance. As defined by St. Paul the Apostle, circumcision should not be taken to be contrary to the teachings of Christ neither with the whole Christian faith. The covenant with God is nothing but faith and the redeeming grace of Jesus Christ.

The practice of male circumcision in the Philippines is quite prevalent for its cultural implication. In the country, the process of circumcision is a sign of manliness, perhaps the ritual can be considered as a rite for manhood. Painful as it may seem, boys have to go unto the process as to conform with the Filipino custom. There is a stigma for those who will not subject to the procedure, such as they might be called "supot" (uncircumcised male). Other name-call for the uncircumcised male is "bakla" or gay. These pose pressure for males to conform to the cultural practice of circumcision. This might also be one of the main reasons why parents force their children to undergo circumcision.

Is circumcision an obligation?

Circumcision is a religious obligation for the Jewish newborn male babies. The rite is one of the most ancient practices of the Jewish community.

"7 I will establish my covenant as an everlasting covenant between me and you and your descendants after you for the generations to come, to be your God and the God of your descendants after you. 8 The whole land of Canaan, where you now reside as a foreigner, I will give as an everlasting possession to you and your descendants after you; and I will be their God."

⁹Then God said to Abraham, "As for you, you must keep my covenant, you and your descendants after you for the generations to come. ¹⁰This is my covenant with you and your descendants after you, the covenant you are to keep: Every male among you shall be circumcised. ¹¹You are to undergo circumcision, and it will be the sign of the covenant between me and you. ¹²For the generations to come every male among you who is eight days old must be circumcised, including those born in your household or bought with money from a foreigner—those who are not your offspring. ¹³Whether

born in your household or bought with your money, they must be circumcised. My covenant in your flesh is to be an everlasting covenant. ¹⁴ Any uncircumcised male, who has not been circumcised in the flesh, will be cut off from his people; he has broken my covenant." Genesis 17:7-14 (biblegateaway.com, 2017)".

But in the modern times, the Jewish community questioned the practice of this rite. They began to question its inconsistencies to the Jewish law prohibiting harm to living things. They claim that since circumcision procedure produces harm to children, the act must be prohibited.

For the Muslims, male circumcision is one common rite for the community. According to Sunnah, the saying and practices of the prophet, the procedure is something to be performed in between the age of four to thirteen years of the child.

"The main reason given for the ritual is cleanliness. It is essential that every Muslim washes before praying. It is important that no urine is left on the body".²²

Circumcision is not obligatory in the Islam yet is done to purify oneself. Circumcision claims to prevent the accumulation of urine and other dirt that may gather under the foreskin. Thus, the ritual is strongly encouraged. Muslims perceive such a ritual as a symbol of belongingness and an introduction to the Islamic faith. Although some scholars claim it to be not obligatory, some claim it to be a condition before praying. Some Muslims also believe that circumcision is part of "fitrah" or the common sense or natural way for personal deportment and hygiene together with the trimming of mustache, shaving of pubic hair, clipping of nails, and plucking of armpit hair. These are not required but recommended to be done by an individual in the pursuit to perfection.

The Christian community challenges the whole idea of circumcision. Accordingly, Circumcision is in conflict with the Christian faith. There are several passages in the bible that can be read that circumcision is not essential to "receiving of the gift of the holy spirit."

"25 Circumcision has value if you observe the law, but if you break the law, you have become as though you had not been circumcised. ²⁶ So then, if those who are not circumcised keep the law's requirements, will they not be regarded as though they were circumcised? ²⁷ The one who is not circumcised physically and yet obeys the law will condemn you who, even though you have the written code and circumcision, are a lawbreaker." (Romans 2:25-27)²³

"18 Was a man already circumcised when he was called? He should not become uncircumcised. Was a man uncircumcised when he was called? He should not be circumcised. ¹⁹ Circumcision is nothing and uncircumcision is nothing. Keeping God's commands is what counts." (1 Corinthians 7:18-19).

"18 But in fact God has placed the parts in the body, every one of them, just as he wanted them to be." (1 Corinthians 12:18).

²² bbc.co.uk, 2017.

 $^{^{\}rm 23}$ Bible quotes are from New International Version (biblegateway.com, 2017)

What is important then in the Christian Religion is the circumcision in spirit. St. Paul vehemently opposed the act of circumcision and states that circumcision is unprofitable. Thus, in the Christian faith, one is not obliged to be circumcised.

For most Filipinos, if not all, circumcision is carried out as part of their custom. Report says that more than 90% of Filipino males are circumcised. Failure to be circumcised creates stigma and subject the person into public ridicule. Parents usually force their children to undergo such procedure in order to avoid the stigma. Parents find it necessary for their sons to undergo such procedure to be able for them to adapt socially. So in order to gain social acceptance and address social pressure, boys are forced to undergo circumcision. Thus, it would appear that boys are obliged to undergo such procedure.

Other than this social acceptance in the Philippines, parents believe that the procedure is said to have some health benefits, thus needed to be performed to protect their children. Government even provides annual program known as "Oplan Tuli". It is claimed that circumcision can reduce the risk of cancer, other urinary tract infections and HIV. Studies shows, according to the American Academy of Pediatrics (AAP), that circumcision provide protection against the spread of syphilis, also, it is claimed that circumcised males are less likely to become infected with HIV (Covarrubias, L., 2017)". However, the AAP is quite uncertain how circumcision prevent the said diseases, thus further researches have to be made.

The concept of autonomy (third formulation of the categorical imperative)

Thus, the third practical principle follows [from the first two] as the ultimate condition of their harmony with practical reason: The idea of the will of every rational being as a universally legislating will.²⁴

The concept of personal autonomy is central to the ethics of Immanuel Kant. The concept involves self-governance; thus, one is said to be autonomous if one's actions emanate from oneself, independent and free from external control.

In the first two formulations of the Categorical Imperative, namely, "Act only according to that maxim whereby you can at the same time will that it should become a universal law (ibid)", points at the willing of action to become universalized or must be true in all cases, in all conditions and applicable to all rational being, and "Act in such a way that you treat humanity, whether in your own person or in the person of any other, never merely as a means to an end, but always at the same time as an end (ibid)" which refers to treating people as ends in themselves rather than means to ends, implies the recognition or considerations of self-legislation, thus actions must not intrude self-freedom and the freedom of others. Actions, therefore must be set from the point of view of a rational agent who has the freedom to act and to choose.

Kant's categorical imperative posits the idea that humans are entitled to be in control of themselves and their lives. Authority should come from one's own will and not that of the others. It is because each person is a legislator and executor of the moral law. Kant assumes that the very notion of personal autonomy is bounded with the idea that the will is free. Accordingly, "for will to be free is thus for it to be physically and psychologically unforced in its operation, hence, behavior that are

 $^{^{24}\,}$ Immanuel Kant, Grounding for the Metaphysics of Morals (wikipedia.org., 2017)

performed because of obsessions or thought disorders are not free".25 To put it simple, Kant states that the will has to be free to be able to say it is autonomous. With such notion, individual is considered to be authentic that chooses its own actions.

The respect for human dignity is also be paramount in the Kantian ethics. The idea that the individual is autonomous infers the very notion of self-worth and moral respect. Manipulating others to go against their moral right is wrong. Individuals are then obliged to act out of fundamental respect over oneself and that of the others. Respecting one's autonomy is tantamount to respecting one's dignity.

Having presented the concept of circumcision, its religious, cultural and health value; and autonomy, the author wishes to oppose the practice of circumcision in the Philippines. There are some ethical issues arising from male child circumcision, among are the following:

- 1. Violation of Personal Autonomy
- 2. Violation of Physical Integrity

Respect for autonomy

Kant's third formulation of categorical imperative gives emphasis on individual's capacity for self-determination and governance. It is assumed that individuals must will maxims that are universally self-governed. In that manner, actions must not intrude self-freedom and the freedom of others.

By allowing one to decide rationally on their own body, one respects one's autonomy. The idea is to respect individual's autonomy. Intuitively, there seem to be a violation with the act of circumcision of male children for it does not respect personal autonomy.

As rational agents, one has a moral autonomy over one's action. Autonomy is a major principle in making decisions over oneself or another. In the case of children, there is no question that they are not completely capable of judging independently. The capacity to decide is left to their parents. The authority of parents over their children is assumed by virtue of their desire for the best interests of their children. In the case of the circumcision of male children, it is widely known in the country that parents have their full autonomy over their children. And in most cases, in the Philippines, parents force their children to undergo circumcision procedure. Uncircumcised boys end up being labelled as *supot* and teased by their peers. Males who have not been circumcised are made fun and embarrassed by their peers. Yet on the other hand, being circumcised is something that every man should be proud of. To be able to adapt with this social norm, parents find it necessary for their sons to undergo circumcision procedure. Such is for the child's best interest. Other than its cultural implication, health benefits are claimed to be another reason why parents commit their sons to the procedure. Surely, such would presume that parents are into promotion of child's best interest, but reservations have to be made for these kinds of thinking violates the notion of personal autonomy of the child.

Reservations have to be made on circumcision. Accordingly, parents should only be allowed to decide on medical issues for diagnosis and treatment of diseases. "Non-essential procedures should be delayed until the child become mature enough to decide (Smith, J., 2017)". Circumcision is neither use for treatment of some

²⁵ plato.stanford.edu, 2017.

diseases nor mere a diagnostic procedure, (besides, the claim that circumcision has health benefit is still subject for further studies). International Human Rights Law supports this idea. Accordingly, "the circumcision of male children violates provisions of various international human rights instrument and must be considered unethical medical practice (ibid)."

Under these conditions, namely, parents being allowed to decide according to what they think would be better for their children even if it means harm to them, and allowing non-diagnostic and non-medical treatment procedures to their children, parents violate the principle of autonomy for these conditions does not give them authority to decide for their children. Thus, this can be a reinforcement of the argument that circumcision be better postponed until the individual reaches the majority age where the individual will be assumed to have the capacity to decide on its own.

Right for physical integrity

The right for personal autonomy extends to the right to physical integrity. Accordingly, everyone has the duty to respect one's physical integrity. The right to physical integrity emphasizes personal autonomy over one's own body and the protection of one's own body against others. It emphasizes the idea that each person has the right decide what to do with their own self. Any infractions thus, violate one's right to freedom.

Circumcision for male children deliberately violates physical integrity for it does not allow the children to truly decide for themselves. Aside from the fact that children are not fully informed about the whole procedure, together with its consequence or disadvantages. Parents decide for their children. Thus, it undermines individual's capacity to make rational decisions and disregard the autonomy of one's own body. Circumcision thus, is a violation of the right of self-determination of the child.

Yet circumcision is said to be carried out of the child's best interest, what seem to be disregarded is that circumcision is a form of cruelty and inhumane treatment. It does promote a culture of violence among children. It inflicts harm to children. Yet, apparently, parents do not perceive it such. With such, this is another reinforcement of the argument that circumcision has to be postponed until the individual reaches the majority age.

Conclusion

Violation of individual's capacity for self-determination and governance, and the individual's right to physical integrity can be seen in male child circumcision. The procedure undermines child's personal autonomy, thus, rendering the act to be morally wrong. Since the circumcision procedure is not for treatment of any disease nor for diagnostic purposes, the procedure is unnecessary and non-beneficial, thus, parents should not be granted permission to decide for their children. The circumcision should then be postponed until the child reaches the majority age when he is able to make an independent choice so as not to undermine and violate child's personal autonomy.

Recommendation

Stop child circumcision until they reach the majority age where they can really decide on their own and capable of understanding the notion of self-governance. In this case, the person will be given the capacity to decide whether to undergo or not to undergo circumcision.

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Quantified self and personal data protection: confronting the conflict between autonomy and technology-mediated health

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Summary

The influence of information and communication technology to health and medicine has increased in the past decades, with the introduction of "wearable" and mobile applications that allows the user to monitor and assess, even evaluate, his/her health status and health regimen. These technologies allow one to monitor his/her behavior and recording it as numerical data. Once behavior has been "quantified," one can then make adjustments to it and see how the related data changes. This technology-mediated self-tracking movement created the process and condition that is now called Quantified Self. Quantified Self works on the principle that if you can measure it, you can change it! In the field of medicine and healthcare, Quantified Self aims to improve self-sensing, self-awareness and human performance within the digital health industry. This movement is driven by increasing health and fitness awareness, decreasing costs of sensors and wearables, miniaturization of physiological sensors, integration of sensors into consumer-end devices and accessories, rising share of ageing population, increasing incidences of chronic and lifestyle diseases, focus on prevention rather than cure, and increasing mobile and smartphone permeation, especially in the field of medicine and healthcare. While Quantified Self gives the individual the capacity to decide what to do with his/her health and health regimen, it creates problem with autonomy and privacy especially in matters of data access and protection. Quantified Self generates data that becomes the basis for changes or adjustments in health and health regimens. This presents question related to accuracy of data and the capacity of the individual to analyze and interpret data soundly. Quantified Self can also produce conflict between professional diagnosis and personal opinion gained from wearable technologies. This paper outlines ethical conflicts inherent in Quantified Self and presents some recommendations on the its ethical use in light of autonomy and data protection ethics.

Introduction

Self-empowerment has been used and overused in many social, political, cultural, and religious applications. The term generally implies autonomous and informed self-determination – the act of taking control of all aspects of one's life. It is "the capacity of individuals, groups and/or communities to take control of their

^{··} pp. 175-193 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

circumstances, exercise power and achieve their own goals, and the process by which, individually and collectively, they are able to help themselves and others to maximize the quality of their lives" (Adams, 2008, p. xvi). In the context of healthcare, it means enabling patients to take control of their healthcare needs.

One the ways by which patients can take control of their healthcare needs is through quantified self (QS) technologies. These are self-tracking tools in the market, many of them are downloadable applications in smart phones, and many more are being developed to enable people to decide. They gather and record personal data and, based on those data, the user can choose and decide on possible intervention so that they can attain the quality health and life they aspire for. But many are cautious about this new technology. There are concerns of invasion of privacy, protection, access, and control of personal data, compromise of personal autonomy, the danger of personal diagnostics and self-medication, among others.

In this paper, we will examine the pros and cons of QS, the technologies associated to it, its development and prospects, and current legislations and protocols associated with it. We will also scrutinize QS and its relationship to autonomy and current policy proposals for its regulation and control, particularly the Revised "Helsinki Declaration" on Ethical Use of Health Databases, the UNESCO International Bioethics Committee's Report on Big Data and Health, and the proposed Code of Conduct on Privacy for mHealth Apps of the European Union. We will conclude with an identification of bioethics principles that are deemed essential in framing an ethical code of conduct for the use of QS technologies.

Quantified Self (QS)

Quantified self is known in many names: lifelogging, self-tracking, auto-analytics, macroscope, body hacking, self-quantifying, self-surveillance, and personal informatics (Wolf, 2014; Wilson, 2012; Wolfram, 2012; The Economist, 2012; Hill, 2011; Dorminey, 2012; McCLusky, 2009). Quantified self is a collective term given to technologies that allow a person to gain self-knowledge through self-tracking (self-monitoring and sensing) tools. These technologies are sometimes called wearables, quantimetrics, or personal computing devices. The QS aims to provide numeric and quantified data that facilitates the achievement of a desired goal or objective. Most of these wearables are related to fitness and health monitoring. Forrester (2014) described QS is "the process of tracking aspects of a person's behavior and recording it as numerical data. Once your behavior has been 'quantified' in this way, you can make changes to it and see how the associated data changes."

The term quantified self is believed to have been coined by Wired Magazine editors Gary Wolf and Kevin Kelly who ventured to track all the new tracking technologies available and created a company called Quantified Self Labs, "which aims to serve the users and makers of tracking tools. The organization's slogan is 'self-knowledge through numbers'" (Rettner, 2013; Schaffzin, 2017; Lupton, 2017). The QS movement integrates technology in the collection of data regarding some aspects of a persons' life, such as inputs (food, drinks, air, medicine, etc.), physiological and psychological states (blood oxygen or sugar levels, mood and arousal, etc.), and mental and physical performances (exercise, metabolism, mental activities, etc.). Through wearable sensors and wearable computing, a person can

have biometric information of himself with the goal of improving daily functioning and optimizing well-being.

While self-tracking using wearables as a form of self-surveillance already appeared in the 1970s (McClusky, 2009; Rafferty, et.al., 2002), the rise of available and readily downloadable applications of QS is making self-tracking easier, more accessible, and more transparent and in a way invasive to privacy. Unfortunately, as Schaffzin (2017) observed, "these three technologies were also critical to the proliferation of eugenics, that pseudoscientific attempt at strengthening the whole of the human race by breeding out or killing off those deemed deficient."

Quantified self-health applications

The most prevalent application of QS technologies is the area of health and wellness enhancement. Wearable gadgets and health-tracking services is becoming a big business (Hay, 2013; White 2013). Today, self-tracking has become an important aspect of healthcare and personal health monitoring. Clinicians will just have to download data gathered by the patient and make recommendations and diagnosis, including prescription of medicine based on the data sent to them. While "self-tracking has featured as a central practice in health promotion and healthcare for centuries" (Lupton, 2017), the difference today is, tracking is technology-mediated, and healthcare has become virtual. Sharon (2017) believed that "Self-tracking devices point to a future in which individuals will be more involved in the management of their own health and will generate health information that will benefit clinical decision making and research."

The CureTogether application is one of those QS applications with increasing subscription around the world. Through this application, patients from different countries virtually come together to share quantitative information on over 500 medical conditions, either personally experienced by them or by anyone they know. Data are shared on symptoms and treatments are compared to know which works best for a disease. Members track their health and find others with similar conditions. New research discoveries are made based on the patient-contributed data.

The benefit of mobile health, or mHealth as it is called nowadays, is undeniable. Mobile health (mHealth), a term for the use of QS in healthcare, "refers to the use of mobile communications technology and devices (mobile phones, laptops, tablets, wireless monitors, etc.) to provide healthcare solutions, whether this is for prevention, diagnosis, treatment or medical follow-up. The mHealth includes solutions aiming to enhance access to healthcare or health-related information, improve distribution of routine and emergency health services and provide diagnostic services. These solutions are not exclusively used for medical practice, but also for non-medical practice (Morris, 2015).

According to recent studies made by the Department of Health in the United Kingdom, the use of technology as a remote intervention can deliver a 20% reduction in emergency admissions, 14% reduction in bed days and most strikingly, a 45% reduction in mortality rates (UK Department of Health, 2011). In 2017 alone, the mHealth market was forecasted to be valued at around 25.39 billion U.S. dollars, and by 2020, the projection is 58.8 billion U.S. dollars (Allied Market Research, 2018). See Table 1 on the next page.

QS Application	Function
23andMe	generate data on genetic information
Apple Watch	
BACtrack	tracks alcohol intake and its effect on the body
BodyMedia FIT	measures skin temperature and galvanic skin response
Fitbit Aria scale	tracks diet and weight
Fitbit Tracker	tracks steps taken, stairs climbed, distance traveled, calories burned, sleep
Garmin Activity trackers	
Instant App	monitors sleep and fitness
Jawbone UP	monitors steps taken, calories burned, eating habits, sleep quality and sleep
Misfit Wearables	monitors activity and sleep
MyFitnessPal	tracks diet and weight
Pebble	tracks motion and sleep
QardioArm	monitors blood pressure
QardioBase Wi-Fi body scale	tracks diet and weight
QardioCore	does ECG, monitors activity and body temperature
Razer Nabu	sleep, steps you've walked, distance travelled, calories burnt, and active
Runtastic Libra	tracks body weight, analyzes body fat, muscle mass and body water content
Samsung Gear Fit	records heart rate, pedometer, accelerometer
Simband	open source physiological monitoring
SleepBot	Sleep-specific trackers
SleepCycle	Sleep-specific tracker
Technogym	display a "performance index" in conjunction with a heart rate monitor
Thriva	blood test
TomTom's Runner	Tracks run, stride, steps and calorie burned
UBiome	generates personal microbiome
WakeMate	tracks sleep
Weight Watchers ActiveLink	accelerometer-based activity tracking with estimation of calorie
Withings Wi-Fi body scale	tracks diet and weight
Zeo	monitors sleep
Zephyr BioHarness	provides complex physiological monitoring

Indeed, the mobile health business is big, and considering the growth and development of new QS technologies, corporate revenue and income as well as

demand will continue to increase. According to PricewaterhouseCoopers Limited (PwC) analysis, in 2017 the global mHealth market amounted to USD23 Billion.

It is no surprise that regulatory bodies are now formulating guidelines, protocols, and policies on the use of mobile health to guide users and producers, as well as medical practitioners in their utilization of these QS technologies. The need to regulate the industry and the movement is motivated not only by the principles of fair business practices and product safety, but also, and much more, by the principles of consumer protection, privacy and autonomy protection, and management and access of big sensitive data.

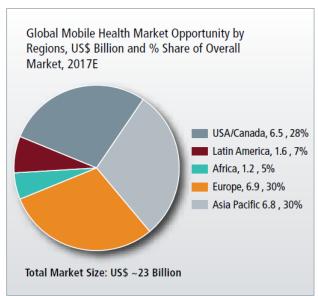


Figure 1: Global mobile health market opportunity by regions, US\$ billion and % share of overall market, 2017E (Source: https://www.gsma.com/iot/wp-content/uploads/2012/03/mHealth_Regulatory_medicaldevices_10_12.pdf)

Generated, stored, and analyzed data from QS apps are a goldmine for big data that can be used for important and transformative purposes. It can personalize our daily activities (Brill, 2014), keep kids in high school (Center for Information Policy Leadership, 2013), aid in more efficient use of electricity, thus helps in conserving resources (Tene & Polonetsky, 2013), provide real-time information in times of crisis or to accident first responders (Wirthman, 2014), prevent infection in premature children (Proffitt, 2012), distribute information to clinicians on bacteria types and resistance patterns in specific communities, and can help in the development of preventive program anticipating the health status of a person (Poremba, 2014).

Understanding autonomy and privacy

One of the most sensitive issues attached to QS technologies is autonomy. Autonomy is generally understood to refer to "the capacity to be one's own person, to live one's life according to reasons and motives that are taken as one's own and not the product of manipulative or distorting external forces" (Christman, 2015).

Simply put, autonomy is independent self-determination. In Kantian ethics, autonomy is understood to be based on the human capacity to direct one's life according to rational principles (Alzheimer Europe, 2009).

Every person is an autonomous individual, and this necessarily implies that he/she can determine his or her future, decide on what to do with his/her life, without interference or undue influence and that his privacy must be respected and protected. The principle of autonomy is the ground of the medical attitude advocating patient primacy in decision-making. Here we see the importance of rationality in the exercise of autonomy. And the same rationality requirement of autonomy poses problems in the use of QS technologies.

Raz's concept of autonomy

One of the influential concepts of autonomy is Joseph Raz's account. In his book, The Morality of Freedom (1986), he wrote: "If a person is to be maker or author of his own life then he must have the mental abilities to form intentions of a sufficiently complex kind, and plan their execution. These include minimum rationality, the ability to comprehend the means required to realize his goals, the mental faculties necessary to plan actions, etc. For a person to enjoy an autonomous life he must use these faculties to choose what life to have. There must in other words be adequate options available for him to choose from. Finally, his choice must be free from coercion and manipulation by others, he must be independent."

We can identify three conditions for autonomy in Raz's account of the concept: rationality condition, adequacy of options condition, and independence condition. An autonomous person must be able to conceptualize and understand the means laid out before him to achieve intended goals and objectives. In Broome's words (2005), we must be able to "intend whatever we believe is a necessary means to an end that we intend" (Broome, 2005). Intention is defined by Merriam-Webster (2017) as "a determination to act in a certain way." Believing, on the other hand, implies that one has understood and accepted the object of belief, and that such belief compels him/her to act in a certain way, or to behave in a particular manner. Minimum rationality requirement for autonomy, then, implies that one has: (1) the capacity to know objects of belief, (2) the ability to determine the certainty of one's knowledge of an object of belief, (3) the capability of deciding that one's belief is necessary for the achievement of intended end, and, (4) the ability to identify an end or goal/objective.

The adequacy of options condition of autonomy implies that one must not only be given the power to choose, but also an adequate range of options to choose from. Raz said (1986): "A person whose every decision is extracted from him by coercion is not an autonomous person. Nor is a person autonomous if he is paralyzed and therefore cannot take advantage of the options which are offered to him."

The third condition is independence. According to Raz (1986), "Coercion diminishes a person's options" and "loss of options through coercion is deemed to be a greater loss of autonomy than a similar loss brought about by other means." Coercion affects freedom and independence since an undue influence is involved in the choice made. Sometimes, a person is compelled to pick a certain choice despite the presence of other options, or options are limited to desired responses. Adequacy of options does not imply number of options but rather a variety of

options. When one is compelled or coerced to respond to an option amidst the presence of others to get a desired result, one's independence is affected, and so is autonomy.

Manipulation is another factor that affects independence, and hence, personal autonomy of a person. Raz (1986) argued that "Coercion and manipulation subject the will of one person to that of another. That violates his independence and is inconsistent with his autonomy." This is the reason why manipulation and coercion are considered as intentional acts, that is, they are not accidental to a choice but are consciously intended by the choice provider. This is tantamount to invasion of autonomy and the person is treated like an object rather than an autonomous subject.

While not all influences are considered invasion of autonomy and reduction of independence, those done with the purpose of directing a person to a desired end or choice without the benefit of variety of options nor independent decision-making is always considered as violative of autonomy. Sources of manipulation or coercion are not only external factors, they may also be internal to the person. Fear, doubt, ignorance, carelessness, indecisiveness or inability to make reasoned judgment, etc., may negatively influence one's choice or capacity to understand options given.

Of course, the rationality condition may limit independence. Persons with defective rationality may not be able to make a reasoned choice among options given, thus, a responsible other may lead him/her to a particular choice judged to be for his/her best interest. In this case, autonomy is reduced, options are limited, and independence is mediated.

Privacy. Privacy is viewed as a kind of shield protecting individual autonomy. This view has been espoused by Westin (1967) and Benn (1984) in their works on individual rights and claims of collectivity. Mokrosinska (2017) explained: "Privacy protects the individual interest in autonomy because it carves out a space around individuals in which they can direct their lives as they see fit irrespective of social and political pressures: informational privacy restricts access to an individual's personal data by setting limits to the acquisition, possession and spread of information about her; decisional privacy removes personal commitments and choices from interference by the state and society at large." Solove (2008) also associated privacy with other individual interests that are essential to autonomy, such as, human dignity, material well-being, reputation, self-development, bodily integrity, and capacity to pursue intimate relations.

Privacy is a social withdrawal, a political value, and an ethical prerogative. Privacy is a self-imposed withdrawal from social scrutiny and influence. When one claims right to privacy, he/she is actually telling everyone to leave him/her alone and such must be respected. Even those holding public offices or roles are entitled to some degree of privacy. Such condition is an effect of autonomy – the power and ability to direct one's life according to one's will or volition. Privacy is deemed inviolable and it is even protected by law. But privacy is also a political value, that is, it can be a form of social control or expression of political power. The withholding of information for privacy's sake, for example, may prevent someone or a group from access to relevant knowledge. Inadequate disclosure in the name of privacy can manipulate personal and social perceptions or decisions. According to

McFarland (2012), "The degree of intimacy in a relationship is determined in part by how much personal information is revealed." As a political tool, it can determine the quality of relationship we build with other persons or with a group.

Privacy is also an ethical prerogative. The right to unsolicited and undue surveillance, observation, scrutiny, and examination is violative not only of autonomy but also of human dignity and justice. McFarland (2012) believes that "Reverence for the human person as an end in itself and as an autonomous being requires respect for personal privacy. To lose control of one's personal information is in some measure to lose control of one's life and one's dignity. Therefore, even if privacy is not in itself a fundamental right, it is necessary to protect other fundamental rights."

Autonomy requires privacy and vice versa. This dynamic relationship between the two is succinctly explained by Johnson (1985) this way: "To recognize an individual as an autonomous being, an end in himself, entails letting that individual live his life as he chooses. Of course, there are limits to this, but one of the critical ways that an individual control his life is by choosing with whom he will have relationships and what kind of relationships these will be.... Information mediates relationships. Thus, when one cannot control who has information about one, one loses considerable autonomy."

Privacy and autonomy in healthcare

In the context of healthcare, autonomy refers to the competent patients' right to make informed decisions about their medical care without undue influence from their healthcare providers. This does not imply, though, that clinicians don't have the responsibility to educate their patients since autonomy also requires full disclosure of diagnosis and prognosis, including alternatives. It simply says the patient must make the decision and that his/her decision must be respected. There are two conditions, then, that are ordinarily required before a decision can be considered as autonomous: the patient have relevant internal capacities for self-government and, the patient is free from external constraints.

The relevant internal capacities include minimum rationality (exhibits at least minimum capacity to know and understand options and their consequences) and psychological capacity (absence of internal constraints). Freedom from external constraints include absence of manipulation or coercion.

Privacy in healthcare, on the other hand, means that a person has the right to keep secret all personal records and information. Patient privacy is complimented by professional confidentiality on the part of the clinicians, making sure that all patient information is secured and kept confidential.

But privacy and confidentiality of information in healthcare is not absolute. It can be broken when patient gave consent, to prevent greater harm or in the best interest of the patient or of the public, or when required by lawful authority (court).

Privacy and autonomy in information technology

The invasive nature of information technology and its fluidity in terms of regulation and control poses a great challenge to privacy and autonomy. While guidelines and protocols for the ethical use of information technology, especially in relation to healthcare, are in place, monitoring and compliance is a big problem.

While there are numerous options provided by information technology, the extent to which we allow them to invade our privacy and autonomy and how willing we are to trade them away for the increased freedom that comes with convenience and pleasure, are difficult to qualify. This is where ethical issues occur and where noncompliance to guidelines happens.

The Privacy and Information Security Initiative of the University of California (PISI, 2013) identified and defined three concepts related to information technology, privacy and autonomy: informational security, informational privacy, and autonomy privacy. The Initiatives' report defined the three concepts as follows:

- Autonomy privacy is an individual's ability to conduct activities without concern of or actual observation.
- Information privacy is the appropriate protection, use, and dissemination of information about individuals.
- Information security is the protection of information resources from unauthorized access, which could compromise their confidentiality, integrity, and availability.

The relationship between the three concepts is illustrated in Figure 2.

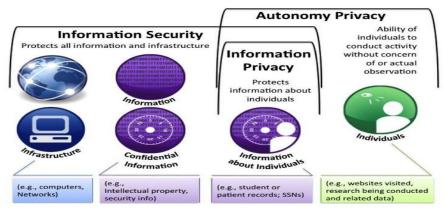


Figure 2: Relationships of concepts related to information technology

Autonomy privacy includes anonymity and freedom from observation, monitoring and surveillance of behavior and activity. Information privacy refers to the "individuals' interest in controlling or significantly influencing the handling of information about him or herself" (Clark, 2016). Information security "supports the protection of information resources from unauthorized access, which could compromise their confidentiality, integrity, and availability. Information resources include both infrastructure (such as computers and networks) and information (whether or not it is related to individuals). Information security supports, and is essential to, autonomy and information privacy" (PISI, 2013).

The Initiative's conclusions clearly showed the intimate relationship between the three concepts, albeit independent from each other. Even so, each has a regulative function, that is, they each restrict the extent of their application. They are also bound by the same principle of autonomy which requires that every action must be made with full knowledge, independence or freedom, and voluntariness. All

information technology applications must then ensure that all these three are safeguarded and assure the users that these three will be protected at all cost.

The revised "Helsinki Declaration" on ethical use of health databases. The Helsinki Declaration of 1964 and its subsequent revisions emphasized the centrality of informed consent in understanding the principle of autonomy. Because of the influence of information technology in biomedicine and healthcare, the World Medical Association published an updated declaration in 2016 entitled "WMA Declaration of Taipei on Ethical Considerations Regarding Health Databases and Biobanks."

The revised Helsinki Declaration emphasized the importance of respecting autonomy, privacy and confidentiality in health databases. The revised Declaration reiterated that "the rights to autonomy, privacy and confidentiality also entitle individuals to exercise control over the use of their personal data and biological material" and that "confidentiality is essential for maintaining trust and integrity in Health Databases and Biobanks. Knowing that their privacy will be respected gives patients and donors the confidence to share sensitive personal data. Their privacy is protected by the duty of confidentiality of all who are involved in handling data and biological material."

The report on big data and health. In 2017, the International Bioethics Committee (IBC) of UNESCO released a report outlining the legal and ethical considerations on big data and health. The IBC adopted the following seven dimensions of autonomy identified by Mertz and colleagues:

- 1. Competence of the individual concerned to access, to understand, to assess and to apply relevant information;
- 2. Information must be available that is relevant and understandable for the question at stake;
- 3. There must be a choice between different options, be it the one between doing or abstaining from doing something or the one between doing different things;
- 4. Values of the individual, his or her preferences and attitudes are considered in deciding and acting;
- 5. Voluntariness is granted so that the individual can decide and act without inner or outer coercion;
- 6. Formation of will refers to the ability of the individual to choose an aim and appropriate means to reach it;
- 7. Action can mean a conscious doing or refraining.

Using these dimensions, IBC concluded that there are major problems in the use of technology and big data, especially in the areas of consent, privacy, and accessibility. These problems "leads to a loss of autonomy which in consequence means a loss of control and a loss of freedom from decisions which are made by the technological environment and automated processes." Thus, the IBC reiterated the importance of autonomy being supported by public education which allows "users,

patients and research participants to understand the range and the impact of possible uses of their data."

The Report also highlighted the need to protect privacy and confidentiality in the advent of Big Data. While traditional means of protecting privacy are highly recommended, Big Data generated by new information technology applications, like those of QS, entails "change and openness of purpose, limitlessness of data, nontransparent processing, little protection of data in order to gain as much knowledge as possible, and non-transparency for persons concerned" (IBC, 2017). IBC also observed that anonymization of personal data on longer provides sufficient protection of privacy and confidentiality since the integration of large amount of data from different sources may allow for identification of person concerned. For information technology applications to remain true to privacy and confidentiality, safeguards must be created to prevent re-identification of persons using them.

There is also the danger of differentiated profiling "which allows for acting on groups according to specific profiles" which is referred to as "group identity". Thus, even if the identity of the person is not made known, there is still a possibility to profile him/her, for example, by the IP address he uses. There are even calls now in Europe to declare as human right the right not to be profiled, or "the right to not be measured, analyzed or coached, and the right to meaningful human contact" (Rathenau Institute, 2017).

This shows that privacy is not mere protection of data. It also includes protection of freedom from interference and undue influence, freedom for unwanted surveillance and observation, freedom from control and manipulation, and freedoms of speech, of association, of location, of movement and space, of beliefs, thoughts and feelings, and of behavior. The IBC uses the term privacy "in the sense of a right to respect for private life in relation to those areas of life or those data that individuals want to keep reserved for themselves or, at least, for some specific members of their families or relationships" (IBC, 2017).

Code of conduct on privacy for mHealth apps of the European Union. In 2016, the European Commission submitted the Final Draft Code of Conduct on Privacy for Mobile Health Applications (hereafter: Code) for approval by the European Union Assembly. This document covered areas such as user's consent, purpose limitation and data minimization, privacy by design and by default, data subject's rights and information requirements, data retention, security measures, principles on advertising in mHealth apps, use of personal data for secondary purposes, disclosing data to third parties for processing operations, data transfers, personal data breach, and data gathered from children.

The Code recognized the undeniable personal and social benefits of mobile health applications. But it cannot also be denied, as noted in the Draft, that data concerning health is highly privacy sensitive. Thus, the Code is proposed to help and guide developers of mobile health applications and users themselves on how to protect privacy, confidentiality, autonomy and safety of use.

In its practical guidelines for apps developers, the Code, developers are advised to secure the user's free, specific and informed consent in order to process their data for the purposes they've described to them. Users must be able to withdraw their consent and receives assurance that all information gathered from them are deleted.

Users must also be fully informed in clear and comprehensible, and user-friendly manner and not in lengthy legal text that, often, are not read in full by users.

The Code also explained in detail privacy by default and privacy by design. Privacy by design can be defined as a requirement to "implement technical and organizational measures appropriate to the processing activity being carried out and its objectives, such as data minimization and pseudonymization, in such a way that the processing will meet the requirements of this Regulation and protect the rights of data subjects", "having regard to available technology and the cost of implementation and taking account of the nature, scope, context and purposes of the processing as well as the likelihood and severity of the risk for rights and freedoms of individuals posed by the processing" (Code, 2016). It requires developers to take into serious consideration the privacy implications of the application's design and that privacy choices for users are imbedded in the app.

On the other hand, privacy by default can be defined as a requirement "to implement appropriate measures for ensuring that, by default, only personal data which are necessary for each specific purpose of the processing are processed; this applies to the amount of data collected, the extent of their processing, the period of their storage and their accessibility. Where the purpose of the processing is not intended to provide the public with information, those mechanisms shall ensure that by default personal data are not made accessible without human intervention to an indefinite number of individuals" (Code, 2016). This implies that, wherever a user is presented with a choice with respect to the processing of his or her data but did not make any preference, by default the app automatically assigns the least privacy invasive and compliant choice. In this way, the app protects the privacy and the confidentiality of all data recorded in the app.

Data gathered from users through the mHealth apps can be used for big data analysis only if their identity and intimate information is held confidential and the analysis is relevant to the original purpose why the data has been gathered and stored, say, scientific, historical or statistical researches. Such analysis must also comply with the requirements of the law.

To what extent and how much we allow? Autonomy and Quantified Self (QS)

QS and Raz's concept of autonomy. When seen under the lens of Raz's three conditions of autonomy, QS appears to have a problem in the first and the third conditions. The minimum rationality condition restricts the use of QS to those who has (1) the capacity to know objects of belief, (2) the ability to determine the certainty of one's knowledge of an object of belief, (3) the capability of deciding that one's belief is necessary for the achievement of intended end, and, (4) the ability to identify an end or goal/objective. Those with reduced or diminished rationality may agree to a request of an app before download or use even if they did not understand what is being asked or required, or they may be easily swayed by malicious promos or promises that requires them to reveal intimate information before they can avail of them. Those who habitually ignore terms and conditions or agreement before download or use may become victim of unwanted ads or promotions that occasionally appear in the screen based on profile given.

If one is unable to "intend whatever we believe is a necessary means to an end that we intend" (Broome, 2005), it means that one failed to fully understand the

purpose of the QS app downloaded or purchased. It can be that the app has other properties that are not directly related to an intended goal but is requiring one to enter personal details or using details already entered in the app's operation that is directly related to your goal for another purpose without requesting for your consent.

While reduced rationality maybe the fault of the person, the impersonal and nontransparent nature of the app naturally ignores such human condition. This is dangerous because it exposes the user with diminished rationality to breach of privacy and invasion of autonomy.

The second condition requires the presence of variety of options, and it is obvious that QS do provide many options to choose from. The third condition, however, makes QS problematic. The independence condition requires freedom from most external and internal sources of interference with, and coercion and manipulation of the will. A consequence of this condition is autonomous decision-making. With QS, one's decision-making is influenced by the data analyzed by the app. Recorded and analyzed data's reliability, validity and certainty is also questionable since they were made based on programmed algorithms and not actual diagnosis of a medical doctor. This can interfere with the individual's sound decision-making and goal-setting. There are also questions about data-bank safety and privacy. Issues such as data control and access, data sharing, confidentiality and protection. QS providers may use recorded data to influence user's behavior.

So, does QS enhance individual autonomy? Yes, when seen under the lens of variety of options and meeting desired ends. No, when seen under the lens of privacy, data security, and independent decision-making. Information privacy, as explained above, is a necessary condition for autonomy. According to Westin (1967), "informational privacy is the control individuals, groups and institutions have over determining how, when and to what extent information is distributed to and, ultimately accessed by others." A violation of the very conditions of required for autonomy occurs when one's privacy is violated by information-distribution, access, data-mining to and by the state, commercial companies, an employer, colleague or unknown third parties without someone's consent.

Privacy of information may be compromised if the provider is forced, either by the court or by law enforcement agencies, to reveal or give away personal data recorded in their app. There is also the temptation to sell gathered and stored data to third parties, such as insurance companies, biomedical companies, or those with QS interest. There is also the threat of data miners who, without consent of the users, gather data needed by a certain company or gather data for profit.

QS services are usually not limited to processing data of specific users in isolation. Instead, they provide comparisons between and statistics among different users, as well as features to share data (sub)sets with specific users or the public. These algorithms may be used as basis for the development of new QS technologies or can be sold to companies that produce the needs identified in the data. QS technologies can generate big data that can be accessed by health care companies and others even without the consent of users. A QS user should not be surprised to see appearances of ads and promotions of products that are aligned to his/her needs or to the information recorded in the app being used. Brill (2014) observes: "We are all familiar with big data's ability to personalize our daily activities – helping companies

determine which ads to pitch to us, which newspaper articles to recommend, and which movie should be next in our queue."

Bill (2014) further identified troubling practices that users of QS technologies must be wary about, and these are: (1) the collection and use of data — whether generated online or offline — to make sensitive predictions about consumers, such as those involving their sexual orientation, health conditions, financial condition, and race, (2) the creation and sale of profiles to identify financially vulnerable consumers, (3) use of deeply sensitive personal information to make decisions about consumers, outside a legal regime that would provide notice and an opportunity to challenge the accuracy of the data the risk that such sensitive personal information may fall into the wrong hands through a data breach, and, (4) the damage that is done to our sense of privacy and autonomy in a society in which information about some of the most sensitive aspects of our lives is available for analysts to examine without our knowledge or consent, and for anyone to buy if they are willing to pay the going price.

Lutpon (2017) mentioned a particularly intriguing feature of current self-tracking technologies. She called this "function creep," that is "the spread of the mentalities, motivations and technologies for self-tracking beyond the personal, domestic or medical sphere into other social domains." To explain this feature, she identified five modes of self-tracking, namely, private, pushed, communal, imposed, and exploited (Lupton, 2016a). Private self-tracking is a voluntary, reflexive self-monitoring for some personal reasons like decision to lose weight, healthy eating and living, fell better and stronger, control of stress level, etc. There are also those who find value and comfort in sharing their personal data to others to find support and engage others in similar pursuits. This is called communal self-tracking.

There are also instances where people are pushed to self-track, like when student are required to monitor their performance or personal biometrics using a particular app, or when patients are required by their clinicians to track their health at home and are expected to send gathered information to their clinicians using mHealth technologies, or when insurance companies encourage their clients to upload medical or personal data in exchange for rewards or lower premium, or other perks. There are also cases where self-tracking is imposed, say, like when a company mandates employee to upload medical or other personal data for wellness or fitness monitoring programs. Often, employees have little option but to comply with the requirement since it is made to appear as a condition for continued employment. Data gathered from these modes of self-tracking may be exploited by research and insurance companies, private and government institutions, or cybercriminals and hackers who engage in fraudulent activities.

An insurance company could decide not to accept a customer based on the collected data, or could charge an increased premium; an advertiser could use the data to try selling tailored products to the user—a practice considered useful by some persons, but bothersome by others. A QS service provider in control of collected data and interpretations could try to maliciously manipulate such data (e.g., with the goal of analyzing and/or influencing a user's behavior) (Leibenger, et.al., 2016).

These concerns threaten the independence or freedom of the user, not only in relation to privacy and control of data, but also in decision-making and autonomy.

While not denying the benefits of QS technologies, self-tracking can become an instrument for social surveillance and social betrayal. Thus, when seen through the criteria of Raz, QS endangers personal autonomy.

Basic Ethical Principles in Regulatory Frameworks for QS. The regulatory frameworks issued by the EU and UNESCO, including the one's issued by some regulatory bodies in United States, are motivated by the need to put a break on the extent of influence and invasiveness of self-tracking devices as well as big data technologies, as demanded by ethics. Common among the regulatory frameworks are: protection and promotion of informational and constitutional privacy and confidentiality, data protection and security, consent, protection and promotion of autonomy, full disclosure and sufficient information, institution of safeguards and guarantees, prevention of discrimination, marginalization and stigmatization, and, application of the precautionary principle.

Ethics for Quantified Self (QS)

QS is unstoppable, and QS technologies are inevitable. QS is attractive to consumers because it provides them immediate information and "analysis" of their health and lifestyle. But QS gives false assurance of autonomy and privacy. For QS to be truly beneficial to individuals and society, the following ethical considerations must be kept in mind in their development and use.

1. QS providers must ensure that both constitutional (freedom to make one's own decisions without interference by others regarding matters seen as intimate and personal) and informational (concerned with the interest of individuals in exercising control over access to information about themselves) privacy are protected and safeguarded.

Invasion of (informational) privacy involves "personal information that gives access to the subject's life, for example, his or her thoughts, words, actions, habits, history, plans, aspirations, and so on, and these are made available to others without the consent of the subject. It also involves publication of private data or making them public knowledge without the consent of the data owner. If, for overriding and legitimate public interest the data was gathered, then making it available is not a case of invasion of privacy" (McFarland, 2012).

Invasions of privacy is a great concern in QS for the following reasons: "the more widely sensitive information is disseminated, the greater the danger of error, misunderstanding, discrimination, prejudice and other abuses; the lack of privacy can inhibit personal development, and freedom of thought and expression; it makes it more difficult for individuals to form and manage appropriate relationships; it restricts individuals' autonomy by giving them less control over their lives and in particular less control over the access others have to their lives; it is an affront to the dignity of the person; and, it leaves individuals more vulnerable to the power of government and other large institutions" (McFarland, 2012).

Informational privacy in a normative sense refers to a non-absolute moral right of persons to have direct or indirect control over access to (1) information about oneself, (2) situations in which others could acquire information about oneself, and (3) technology that can be used to generate, process or disseminate information about oneself (van den Hoven, et.al., 2016). Thus, privacy agreements must always be present in simple, understandable way so that users will not skip reading them,

provided that such presentation does not disadvantage the user. Unnecessary and intimate information must not be gathered.

- 2. QS providers must ensure protection and security of personal data to prevent harm, commodification of personal data, informational inequality, informational injustice and discrimination, and encroachment on moral autonomy (van den Hoven & Weckert, 2008). Security measures must also be in place that prevents effectively illegitimate access and mining of data, as well as use in big data analytics. Users must be given utmost freedom and independence in deciding what information to share and to what extent such information can be used and shared.
- 3. User consent must always be secured before merging personal and private information of an individual with different database than the one for which it was originally collected. The user has the right to be informed of the use and purpose of the information merger, the benefit and risks, as well as implications and consequences, and must have right of access or right to change details of her personal information when necessary. Clients must be diligently informed of the intended an various uses of the personal information gathered and be given the right to withdraw permission or consent whenever desired by the client.
- 4. Personal and other private information that is no longer necessary for the function for which it was collected must not be retained, and thus, destroyed or deleted altogether from the database. This is to prevent unwarranted access to information and mining of data for fraudulent purposes.
- 5. Confidentiality of data must always be respected. No data can be accessed by others, or shared to any platform or database without the user's permission. This must be explixitly stated in the user agreement of every app.
- 6. No user must be subjected to illegal and unwarranted surveillance, monitoring, or observation, as well discrimination, stigmatization or marginalization in employment or services, or any other form of injustice based on data stored in QS apps. Thus, QS providers must be aware of the demands of social justice when designing their apps, users must be conscious of the information they are providing or sharing.
- 7. Accuracy or analysis and predictions must be ensured by providers and communal analytic platforms to protect users from ill-advised decisions, especially in healthcare.
- 8. Deidentification of users must be done whenever feasible. It is not enough to strip the names and addresses of users; the possibility of re-identification is high. It is encouraged that companies should do everything technically possible to strip their data of identifying markers; they should make a public commitment not to try to reidentify the data; and they should contractually prohibit downstream recipients from doing the same (Federal Trade Commission, 2012).
- 9. QS Providers and Analytics Platforms must institute ethics monitoring committee to ensure compliance with ethical norms and principles in the use of QS technologies and data gathered and stored. There is also a call calls for individual companies to appoint "algorithmists" licensed professionals who would have ethical responsibilities for an organization's appropriate handling of consumer data (Mayer-Schonberger & Cukier, 2013). Companies are also encouraged to implement privacy by design as policy to become "firms that understand the legal

and ethical dimensions of the use of algorithms to make decisions about individuals" (Brill, 2014).

Conclusion

Quantified Self (QS) technologies are beneficial to us, but there are accompanying risks that we all must be wary about. Medical data generated by mHealth, for example, provides us and the medical community considerable "biovalue in the digital economy" (Lupton, 2016). Their value in understanding the social prevalence of a particular experience or medical condition through big data analysis is undeniable in research and science.

But ethical issues such as invasion of privacy, confidentiality, security and protection of data, access and management of data, consent and autonomy, among others, warns us to be conscious how much personal information are we to provide and to what extent must we allow them to be shared.

The responsibility of protecting autonomy and independence rests not only on QS providers and but also to users. Prudence and care must guide you when approaching technology, especially those that require intimate information. We must always remember that technology is for man, not man for technology! Try a QS app, and see how it affects your life.

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Is ethical hacking in conflict with data protection? Clarifying issues and resolving conflicts

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Summary

We are now in the age where information is valued most and for some, this information is critical to their day to day activities and transactions and the most common questions are: Are this information safe and secure? Who can access this information? What is the level of access to this information? Are there back-ups to this information?

This paper explores some of the misconceptions of ethical hacking and the perceptions of users in the organization, the potential threats and the effect after the process was done. It will give a brief background of what hacking is and an anatomy of a hack, social engineering and other methods used by intruders to gain access to their target machine, users or organization. It will also discuss the step by step process on how this kind of security testing will be done and the none disclosure agreement that needs to be discussed.

This paper will also look on the different perceptions of different users in the organization on ethical hacking, what prevents them in doing the process and what makes them do the process. It will also discuss the different classification of hackers for better understanding.

Introduction

Gone are the days where computers and digital devices are standalone and disconnected to networks. The demand for connectivity is getting higher because technology has become part of our daily life. We are now living in a connected world compared to what we used to have. From the corporate world, the academe, small business and simply our homes the demand for connectivity is great. Social media is one of the very fast changing technologies used to promote anything, share experiences, showcase talents, for public and private consumption. It has already surpassed electronic commerce and makes day to day transactions much faster and easier because of computerized systems and centralized of the database. More and more information is being uploaded into the world wide web than ever before.

When companies and schools adopted the local area network (LAN) and internet technology in their organizational system, security then is not a big issue. Their main concern then were viruses that can infect their computer systems. These are the trojans, worms, macro viruses and malwares. There were very few cases of hacking incidents, most cases were virus infections, that is why most of the companies

^{··} pp. 194-201 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

invested on anti-virus software. The position of a Chief Security Officer or Chief Information Security Officer is also not popular. It was the Network Administrator or Systems Administrator who usually do the job in securing the networking environment of the company. Only big companies had that position. In the academe, those positions were not popular and in some were not even exist.

As development in technology evolved, the demand for computerized and networked systems increased be it in the enterprise and in the academe. With these developments, the threats in computer systems also increased especially the threats to the stored information. Data on information systems today are not just stored and access on a specific location. These are either stored on a cloud storage or in a network drive shared to other users. How secured are the data? How are these data protected by the companies and schools especially personal confidential information? Today, there are many hacking cases in companies and schools where they experienced a breach in their network systems security. Because of these, the position of a Chief Information Security officer now became popular. A new career in the field of Information technology also emerged, that of Ethical Hacker.

Methodology

This paper explores the field of ethical hacking, the misconceptions in ethical hacking, the perceptions of users in the organization, the potential threats and what will be the effect after the process was done. This paper will also give a brief background of hacking and the anatomy of a hack, social engineering and other methods used by intruders to gain access to their target machine, users or organization. It will also discuss the step by step process on how this kind of security testing is done and the different classification of hackers.

The researcher interviewed IT professionals, ethical hackers and hackers. The researcher also attended seminars and workshops on ethical hacking to understand and to validate interview data.

Findings

A. What is hacking and ethical hacking

Hacking is gaining access to information from a computer to view, copy, edit information authorized or not authorized. It is in the activity of illegally using a computer to access information stored on another computer system or to spread a computer virus" (Cambridge English Dictionary)

Ethical Hacking describes the process of finding a vulnerability, bugs, loopholes to a computer, a system, a software and organization. It is also known as "Penetration Testing or Intrusion testing". This is done by a hacker, a computer expert / geek that breaks into computer programs or computer networks. A person who secretly gets access to a computer system in order to get information, cause damage, etc. (Merriam Webster).

In this field, there are Certified Ethical Hackers, these are skilled professionals who understand and know how to look for weaknesses and vulnerabilities in target systems and uses the same knowledge and tools as a malicious hacker, but in a lawful and legitimate manner to assess the security posture of a target system(s)". (EC Council)

B. Types of Hackers

1. White Hat Hacker: A white hat hacker is somebody who has non-malicious purpose or intent in whatever point he breaks into computer systems. White hat hackers are security specialists with a deep knowledge on computer networks, system administration and network protocols. They are also known as the Ethical Hackers.

White Hat Hackers are authorized and paid by companies to hack their own servers/system and networks to test their security. They use hacking for the benefit of the company. They break security to test their own security system.

2. Grey Hat Hacker: A Grey Hat hacker is someone who is between White Hat hacker and Black Hat hacker. Grey Hat normally do the hacking without the permission of the administrators of the network.

A Grey Hat Hacker gathers information and enters into a computer system to breech the security, for the purpose of notifying the administrator that there are loopholes in the security and the system can be hacked. Then they themselves may offer the remedy. They are well aware of what is right and what is wrong but sometimes act in a negative direction. A Gray Hat may breach the organizations' computer security, and may exploit and deface it. But usually they make changes in the existing programs that can be repaired. After sometime, it is themselves who inform the administrator about the company's security loopholes. They hack or gain unauthorized entry in the network just for fun and not with an intension to harm the Organizations' network. (ahare, Naik & Khandey, 2014)

3. Black Hat Hacker: A black hat hacker / cracker is somebody who shows qualities from both white hats and grey hats. Also has deep knowledge in Computer Networking, Network Protocols and System Administration. A Black Hat hacker always has malicious intention for penetrating a network.

The intension of Black Hat Hackers is to harm the computer systems or network. They break the security and intrude into the network to harm and destroy data to make the network unusable. They also deface the websites, steal the data, and breach the security. They crack the programs and passwords to gain entry in the unauthorized network or system. They do these things for their own personal interest like money. They are also known as "Crackers" or Malicious Hackers.

C. Phases of Hacking

Hackers follow certain steps whether they are White Hats, Grey Hats, or Black Hats.

Reconnaissance. Reconnaissance refers to the preparatory phase where an attacker gathers as much information as possible about the target prior to launching the attack. Also, in this phase, the attacker draws on competitive intelligence to learn more about the target.

This phase may also involve network scanning, either external or internal, without authorization. This is the phase that allows the potential attacker to strategize his/her attack. This may take some time as the attacker waits to extract crucial information. Part of this reconnaissance may involve "social engineering." A social engineer is a person who smooth-talks people into revealing information such as unlisted phone numbers, passwords, and other sensitive information. Social

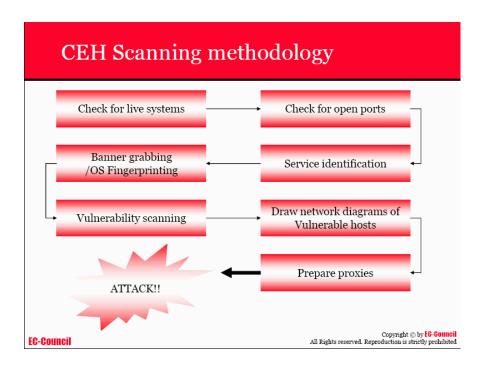
engineering is the process of obtaining or gaining information through a simple conversation without the knowledge of the person to gain meaningful information that can be used during the attack.

Scanning / **Enumeration.** This is the method an attacker performs prior to attacking the network. In scanning, the attacker uses the details gathered during reconnaissance to identify specific vulnerabilities.

An attacker can gather critical network information such as the mapping of systems, routers, and firewalls by using simple tools such as Traceroute and the like. Alternatively, they can use tools such as Cheops to add sweeping functionality along with what Traceroute renders.

Port scanners can be also used to detect listening ports to find information about the nature of services running on the target machine. The primary defense technique in this regard is to shut down services that are not required. Appropriate filtering may also be adopted as a defense mechanism. However, attackers can still use tools to determine the rules implemented for filtering using a firewall.

Below is a diagram from the EC Council for the Certified Ethical Hacking Methodology. The diagram shows that scanning is the first step used to be able to gain access before the attack. It will also find loopholes in the system where the attacker can pass thru. From there, all the required details are drawn.



Gaining access / vulnerability analysis. The most important phase of an attack in terms of potential damage. Attackers need not always gain access to the system to cause damage. Denial-of-service attacks can either exhaust resources or stop services from running on the target system.

Stopping of service can be carried out by killing processes, using a logic/time bomb, or even reconfiguring and crashing the system. Resources can be exhausted locally by filling up outgoing communication links.

In this process, the vulnerability is located, and the attacker attempt to exploit it to enter into the system. The primary tool that is used in this process is Metasploit.

The Metasploit Project is a computer security project that provides information about security vulnerabilities and aids in penetration testing and IDS signature development. (Wikipedia).

Maintaining Access. It is the part where the hacker has already gained access into a system. After gaining access, the hacker installs some backdoors in order to enter into the system. Metasploit is the preferred tool in this process.

Once an attacker gains access to the target system, the attacker can choose to use both the system and its resources. He/she can use the system as a launch pad to scan and exploit other systems, or to keep a low profile and continue exploiting the system. Both these actions can damage the organization.

Attackers, who choose to remain undetected, remove evidence of their entry and use a backdoor or a Trojan to gain repeat access. They can also install rootkits at the kernel level to gain admin user access. The reason behind this is that rootkits gain access at the operating system level while a Trojan horse gains access at the application level. Both rootkits and Trojans depend on users for their installation.

Within Windows systems, most Trojans install themselves as a service and run as local system without the user knowledge or consent, which has administrative access. Attackers can use Trojan horses to transfer user names, passwords, and even credit card information stored on the system. They can maintain control over the system for a long time by hardening the system against other attackers, and sometimes, in the process, do render some degree of protection to the system from other attacks.

They can then use their access to steal data, consume CPU resources, and trade sensitive information or even resort to extortion. For instance, the attacker can implement a sniffer (a tool used to monitor all network traffic) to capture all network traffic, including telnet and ftp sessions with other systems.

Covering tracks. This process is the unethical activity. It has to do with the deletion of logs of all the activities that took place during the hacking process.

An attacker would like to destroy evidence of his/her presence and activities for assorted reasons such as maintaining access and evading punitive action.

Erasing evidence of a compromise is a requirement for any attacker who would like to remain ambiguous. This is one of the best methods to avoid trace back.

This usually starts with erasing the contaminated logins and any possible error messages that may have been generated from the attack process like a buffer overflow attack that will usually leave a message in the system logs. The attention is turned to effecting changes so that future logins are not logged. By doing some manipulation and tweaking on the system event logs, the system administrator can be convinced that the output of his/her system is correct, and that no intrusion or compromise has taken place.

Ethical issues

The legal risks of ethical hacking include lawsuits due to disclosure of personal or confidential information. Such disclosure can lead to a legal battle involving the organization and the ethical hacker. By breaking into the system, one can discover vulnerabilities that can be fixed to make the system more secure. However, the main disadvantage of ethical hacking is that it presents risks of information disclosure. As an outsider, the ethical hacker could intentionally or unintentionally disclose the company's confidential information to other parties. That is why this procedure should be bounded by contracts and non-disclosure agreement between the organization and the ethical hacker.

The skill of the ethical hacker can also be an issue because if the ethical hacker failed to do his job and find the companies vulnerabilities, then the risk will still be there. The ethical hacker should have a strong background in networking, systems analysis and design, penetration testing, computer forensic and years of experience in information security. Ethical hacking or penetration testing is now considered a career in the field of information technology. There is a certification called the Certified Ethical Hacker (CEH) established by the EC Council.

The Ethical hacker also must know the different tools used in penetration testing and how to use them. "Companies hire ethical hackers because they need to test their security. By granting their permission to the pentest, they effectively cover their corporate eyes and ears while these tests are carried out." (Ian Sutherland, 2015)

Ethical Hackers must break the organizations security policy and procedures. This is also violating the code of conduct. This is the part wherein the ethical hacker sits down with the administration including the IT department of the company to identify what policies and procedures that will be affected during the penetration testing. These policies and procedures include not only pertaining to the system but the physical security as well. "Penetration testers are expected to make informed decisions based on their understanding of the situation at hand, supported by any procedural, ethical, and technical training they may have undertaken" (Xynos et al., 2010).

Privacy of the employer and employees and the actual delivery of the results are sensitive issues. All information regarding the vulnerability of the companies should be safely relayed or submitted to management with caution because if it falls into the wrong hands, it may compromise the company.

The ethical hacker has a responsibility to ensure the safety of any information and all information related to the work is destroyed or kept safe and confidential at the end of the process. This is part of the code of conduct of the ethical hacker. "Adequate documentation, Detailed reports on the discovered vulnerabilities, including how they can be fixed, updates and support when needed and high-level reports that can be presented to managers" (Gurpreet K. Juneja) must also be made.

During the process, the actual hacking or penetration testing will be done in a live or production environment to really test the integrity of the system. Data back-ups are important before the process will take place because during the process, some of the data might be corrupted or destroyed and worst case can be lost.

Conclusion and recommendations

There will be no conflict between ethical hacking and data security if before performing any ethical hacking or penetration testing procedure, the ethical hacker or the penetration tester know and understand the nature and characteristics of the client organization's business, system and network, policies and procedures of the organization that will be affected and the code of conduct for the ethical hacker. This will guide the ethical hacker in handling sensitive and confidential information that might be encountered during the ethical hacking process. Maintaining transparency with the client is also important in ethical hacking. Communicating all relevant information while ethically hacking the client's system or network is also a must because transparency ensures that the client knows what is going on. It enables the client to take necessary actions for security of the system or network.

There will also be no conflict in ethical hacking if the ethical hacker does not go beyond the limits set by the client the company. But sometimes, this limitation hinders the full result. In ethical hacking, it is possible for the ethical hacker to have access beyond the target areas that the client agreed so the ethical hacker must stay within the target areas of the system or network specified in the agreement. The ethical hacker must not go to other areas of the system or network that are not specified in the agreement. All the necessary tools that will be used in penetration testing or ethical hacking should be defined, identified and stated in the agreement or contract of the two parties.

After performing ethical hacking, the ethical hacker should never disclose client information to other parties. This should be part of the non-disclosure agreement between the two parties ti ensure the protection of the client. Ethical hacking is done for the security of the client's system or network. Disclosure of the client's confidential information renders ethical hacking ineffective. Confidential information must be kept private, and confidential information must be kept confidential.

"I do believe that hacking -- when properly defined -- is an ethical activity". (M.J. Wilson Computer World, 2004) Therefore, it is recommended that the policies and procedures to be done are well defined and approved by the top-level management. All pentest tools and techniques that will be used are identified and enumerated by the ethical hacker. Detailed reports of the results (vulnerabilities) as well as what data are being exposed should be well documented and presented to the top-level management and hacking does not only include computer systems but as well as the physical securities of the organization.

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Technology security and the development and implementation of security policy at St. Paul University, Quezon City

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Summary

This research evaluates the existing security policies and implementation in terms of using the technology at St. Paul University Quezon City (SPUQC). An instrument that evaluates the compliance of SPUQC to existing guideline on technology security in the area of physical, information, software, user access and network security was distributed to the SPUQC employees. The results were used as a basis for the development and implementation of security policy at St. Paul University Quezon City. The study involved SPUQC employees. The questionnaire consisted of 106 items divided into six (6) areas, namely: introductory security, physical security, information security, software security, user access security and network security. The responses in this scale were categorized as always, often, sometimes, seldom, never and not applicable. Weighted mean was used to identify the level of compliance to the existing guidelines. Recommended policies which were listed at the end of this paper are subject for further approval of the administrators.

Introduction

With regards to technology security, who is responsible for securing an organization's information? It can be said that it is the Research and Evaluation department or the Information and Communications Technology office but that is not exactly the case. Ultimately, it is not only individual employees or departments that are responsible for the security of confidential information, but also the institution itself. It is the responsibility of the top administrators who are in charged with protecting the institution's best interests and to ensure that an appropriate and effective security policy is developed and put into practice throughout the organization.

In a university, cyber security models that target appropriate and proportionate security controls at vulnerable assets have to be developed. The cyber threats facing universities vary, such as through distributed denial of service attacks that may directly or indirectly target an institution's network. Potential sensitive data from organizations which includes personal data of students or staff held by the institution or certain types of information, such as research, for commercial or political means, are the usual target.

While policies themselves don't solve problems, and in fact can actually complicate things unless they are clearly written and observed, policy does define

 $[\]cdot\cdot$ pp. 202-208 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

the ideal toward which all organizational efforts should point. By definition, security policy refers to clear, comprehensive, and well-defined plans, rules, and practices that regulate access to an organization's system and the information included in it. Good policy protects not only information and systems, but also individual employees and the organization as a whole. It also serves as a prominent statement to the outside world about the organization's commitment to security.

In the Philippines, the government, through the Department of Information and Communications Technology (DICT), is mandated to establish cybersecurity measures to guard the country against cyber threats. The department will be in the frontline to protect the Philippines' critical infrastructure, government and military networks, businesses and supply chains, and the Filipino people through the crafting of a comprehensive and realistic national cybersecurity plans, policies and programs through the Cybersecurity and Enabling Technologies of the created the Cybersecurity Plan 2022.

In the US, in the first few months of 2016 there were already around 50 percent increase in higher education breaches. Data breaches in higher education institutions cost approximately \$300 per record, second only to the cost of health care breaches. (Most other breaches average \$150 per record.5) The cost per record has increased annually for the past several years. In 2014 cost per record was only \$200 in higher education breaches. Recent examples of breaches in the higher education sector include:

Southern New Hampshire University: 140,000 records, including student names, email addresses and IDs, course names, selection, and instructors, due to third party vendor configuration error.

University of Central Florida: 63,000 records, due to unauthorized access into the university system. The data compromised included financial, medical, grades and Social Security numbers. The university provided one year free credit monitoring for those affected.

University of Virginia: 1,440 records including personal and financial data, due to cyber-attack of the human resources system. The attack was initiated by a phishing email to an employee asking for usernames and passwords to their HR system and one or more employee fell for the phishing scam. The information compromised included data from W2 forms. The FBI-led investigation resulted in arrests.

Penn State College of Engineering: Servers were hacked on two occasions by hackers believed to be based in China and may have exposed at least 18,000 individuals' sensitive data. Notification was sent to employees and faculty. The university asked affected individuals to change user name and password, and set up a VPN with a two-factor authentication.

University of California Berkeley: Notified individuals of a data breach in their real estate division that resulted in unauthorized access to servers used to support a number of real estate programs and work station. The data included names, Social Security numbers, credit card numbers and driver's license numbers. The university offered one year of free credit monitoring.

University Development and Alumni Relations at the Penn State College of Medicine: Penn State notified 1,176 individuals of a data breach of their personal information, including Social Security numbers.

Maricopa County Community College District: Breach response cost over \$26 million and required notification to 2.3 million people, including current and former students, staff and vendors from as far back as 30 years. Data hacked included Social Security numbers and banking information. The risk of exposure includes records for all individuals who come in contact with higher education services, including, donors, alumni, students, prospective students, virtual students, parents, employees, faculty, medical patients, athletes, and third party vendors. Data breaches in higher education institutions cost approximately \$300 per record.

In the Philippines, there were few reported cases of higher education data breaches. In the reports, government agencies are usually the target. However, that does not mean that this issue must be disregarded.

Approved acceptable use policy for information technology (IT) resources of the UP system: http://upd.edu.ph/aup/

The Data Privacy Act or R.A. 10173 seeks to make the Philippines compliant with international data security standards. The law also aims to protect and boost the IT-BPO industry: http://www.disini.ph/news/npc-to-hold-public-consultation-for-data-privacy-act-draft-irr/

Top Security Breach Cases of 2015: http://www.aim.ph/blog/top-security-breach-cases-of-2015/

Philippine electoral records breached in 'largest ever' government hack: https://www.theguardian.com/technology/2016/apr/11/philippine-electoral-records-breached-government-hack

The state of cybersecurity in the Philippines:

http://www.rappler.com/newsbreak/in-depth/130883-state-cybersecurity-philippines

Research problem and objective

The study is concerned primarily with information technology security as it relates to the privacy and confidentiality of education information. The purpose of this research is concerned primarily with information technology security as it relates to the privacy and confidentiality of education information. The purpose of this study is to examine the technology security of SPUQC. Data generated may be used as basis for policy/program recommendations for an integrated technology security of SPUQC.

Conceptual Framework

Figure 1 shows how the study was developed. The Input part contains the technology security checklist in the physical, information, software, user access and network/internet security. The process part contains the answering of questionnaire provided by the researchers to gauge the extent on the implementation of technology security in SPUQC. Lastly, the output contains the recommended policies/programs for the technology security implementation at SPUQC.

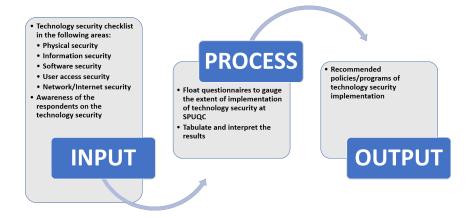


Figure 1: Conceptual Design of the Research

Methods

Research design: This study used descriptive method in gathering information that is needed in the study and to determine the level of implementation of technology security at SPUQC. Descriptive method of research is fact finding study with the adequate and accurate interpretation of the findings. Likewise, Calderon and Gonzales (1993) and Martizano, Paguiligan and Zamora (2004) claimed that this method of research describes what actually exist and thus, interpreted data with accuracy.

Respondents: The respondents of the study were the select employees of SPUQC who are exposed to or are responsible to handling confidential data and information. Using convenience sampling, the respondents were 5 deans/principals, 10m managers/administrators and 15 assistants.

Research Instrument: The researchers developed a questionnaire based on the National Cooperative Education Statistics System which was funded by the National Center for Education Statistics (NCES) of the U.S. Department of Education. Twentynine (26) statements pertain to Introductory Security Checklist, thirty-seven (34) on Physical Security, fourteen (14) on Information Security, seven (7) on Software Security, twenty-two (20) on User Access Security and twenty-two (7) on Network/Internet Security. Likert scale of 0-4 was used to score the statements. Gathered data were then analyzed and interpreted using percentage (for demographics, weighted mean for question 1) and T-test for question 2.

Results and discussion

For the introductory security, results showed a weighted mean of 2.56 which has a verbal interpretation of Often. The items in the list with the rating below 2.50 are considered as the organization's specific needs must be given priority in the development and implementation of a well-conceived set of safeguards.

The physical security got a weighted mean of 2.70 and a verbal interpretation of Often. From the respondents rating, it was perceived that the St. Paul University

Quezon City's building and equipment is protected, the power supplies are reliable, climate control is adequate and appropriate protection from intruders is in place.

For the information security, the weighted mean is 2.79 with a verbal interpretation of Often. The respondents value confidentiality and enforce passwords complexity.

The software security has a weighted mean of 2.74 with a verbal interpretation of 2.74. The respondents believed that the software being used in the organization is licensed and that the critical system is controlled by the ICT.

The network security has a weighted mean of 2.50 and has a verbal interpretation of Often. The respondents believed that the system access points are secured, restricted sites are blocked, and cabling and wiring are secured as well in SOUQC.

Analyses showed the following salient findings:

- Introductory Security
- o Staffs receive security training tailored to their needs
- o Security issues are included in the employee performance reviews
- o Security policies are reviewed annually at a minimum
- o Security activities are monitored
- o A security breach response plan is in place
- Physical Security
- o Equipment are housed out of sight and reach from doors and windows, and away from radiators, heating vents, air conditioners duct work.
- o Up-to-date records of all equipment brand names, model names, and serial numbers kept in a secure location.
- o Security staffs are required to maintain a log of all equipment taken in and out of secure areas.
- o Uninterruptible Power Supplies (UPSs) are in place for critical systems.
- Introductory Security
- o Staffs receive security training tailored to their needs
- o Security issues are included in the employee performance reviews
- o Security policies are reviewed annually at a minimum
- o Security activities are monitored
- o A security breach response plan is in place
- User Access Security
- o The opening screen is clear and specific about the organization's expectations of the user.
- o The opening screen requires the user to accept the conditions of monitoring and punishment before proceeding.
- o The system administrator changes all pre-set and packaged passwords.
- User Access Security
- o The opening screen is clear and specific about the organization's expectations of the user.
- o The opening screen requires the user to accept the conditions of monitoring and punishment before proceeding.
- o The system administrator changes all pre-set and packaged passwords.

Listed below are the implications of the findings:

- Top-level administrators should invest time and expertise to develop well-conceived, comprehensive, and customized security policies.
- Commitment and authority is required for the top administrator to implement the policies to the entire organization.
- This research, would want to convey that increasing information security is both necessary and achievable task it is a must to do for organizations as well as the right thing to do for students, parents, staff and communities.

Conclusion

Many schools, school districts, state education, agencies and colleges and universities now use technology to manage student, staff, and administrative records. Safeguarding electronic information is not as simple as assigning a technical staff person to verify that the system is protected. Top-level administrators should invest time and expertise to develop a well-conceived, comprehensive, and customized security policy. Commitment and authority is required for the top administrator to implement the policies to the entire organization.

This research, showed that increasing information security is both necessary and achievable task – it is a must to do for organizations as well as the right thing to do for students, parents, staff and communities.

The policies that will be created or formulated including to help educational administrators and staff at the building, campus, district, and state levels better understand why and how to effectively secure their organization's sensitive information, critical systems, and computer equipment.

Recommendations

In light of the findings and conclusions drawn from the study, the following are recommended:

Conduct technology security awareness orientation/seminar to stakeholders Review the ICT policies and procedures to comply to RA 10173

Create a new policy and procedures in handling data to protect the records of employees and students in coordination with the Data Privacy Officer.

Consider a privacy impact assessment to information systems to test the integrity and confidentiality of information.

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A basis for a code of ethics for ICT users from the implementation of ethical protocols and practices in using information and communications technology (ICT)

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Summary

This research evaluates the existing ethical protocols and practices in using ICT at St. Paul University Quezon City (SPUQC), the Philippines. With the use of an instrument that pertains to ethical use of Information and Communications Technology (ICT), it also determined if there is a significant difference among the respondents in the evaluation of the protocols and practices in using ICT. Furthermore, the results were used as a basis for proposed building ICT programs.

The study involved 10 faculties/employees and 72 students. The questionnaire consists of 20 items which is divided into four areas namely: security and confidentiality of computers and networks, software theft or privacy, intellectual property rights and information privacy. The responses in this scale were categorized as always, often, sometimes, seldom, never and not applicable. T-test was used to identify the existence of difference among the aforementioned variables.

Recommended policies for further approval of the administrators were listed at the end of this paper.

Introduction

Information can be defined as facts or knowledge given, while technology is advanced machines and equipment developed using technology. Information technology (IT) is a combination of computer and communication that use to create, store, exchange and use information in many forms. Nowadays, the applications of IT are everywhere: at work, at school, and at home.

Ethical practices involve principle used for deciding what is right and what is wrong. These include the moral guidelines that govern the use of computers and information systems. These days, most people are involved in many ethical issues in information technology.

According to Reynolds (2013), ethics has risen to the top of the business agenda because the risks associated with inappropriate behavior have increased, both in their likelihood and in their potential negative impact.

There are many factors of ethical issues in ICT view; it can be good or bad. Recent studies show that example of good in point of ethical issues are searching information or current issues, learning new things, and creating social media account. Meanwhile, bad are plagiarism, libel, software piracy and downloading

[·] pp. 209-214 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

music, picture and videos.

According to Casal (2007) as cited by Khan (2011), education is the first and best key area for ICT applications. ICTs can help by providing alternative possibilities for education. The purpose of ICT in education is generally to familiarize students with the use and workings of computers, and related social and ethical issues. ICT has also enabled learning through multiple intelligence as ICT has introduced learning through simulation games; this enables active learning through all senses (Gateway 2010)

Many universities recognize the use of ICT as an important topic in education. It can enhance teaching and learning outcomes. As a result, almost all courses have computer subjects. The applications of ICT in education increases tremendously, these includes the use of PCs, Internet, World Wide Web, news and discussion groups, chat rooms, e-mail, Facebook, and so on - that are accessible from all over the world. Thus, the growth of the Internet, the ability to capture and store vast amounts of personal data, and greater reliance on information system in all aspects of life have increased the risk that ICT will be used unethically, particularly in ICT education.

With this problem, the researchers aim to describe the extent of the implementation of existing guidelines and practices in the use of ICT at SPUQC. It aims to find out whether there is significant difference between the students and faculty regarding the implementation of ethical protocols and practices in using ICT. The findings of the study served as a basis for code of ethics for ICT use in SPUQC.

Methods

Research problem and objective: The study aimed to describe the implementation of ethical protocols and practices in using ICT at SPUQC that will serve as a basis for proposed programs to the school administrators.

Conceptual framework: Figure 1 shows how the study was developed. The Input part contains the designation of the respondents who are presently working for or enrolled at SPUQC and the awareness of the respondents about the Ten (10) Commandments of Computer Ethics. The process part contains the answering of questionnaire provided by the researchers to gauge the extent on the implementation of ethical protocols and practices in using ICT. Lastly, the output contains the recommended policies/programs for the improved implementation of ICT at SPUQC.

Research design: This study used a descriptive method in gathering information that is needed in the study and to determine the level of implementation of protocols and practices in using ICT. Descriptive method of research is fact finding study with the adequate and accurate interpretation of the findings. Likewise, Calderon and Gonzales (1993) as by Martizano, Paguiligan and Zamora (2004) claimed that this method of research described what actually exist and thus, interpreted data with accuracy

Respondents: The respondents were 10 faculties/employees and 72 students. They were chosen using convenient sampling technique.

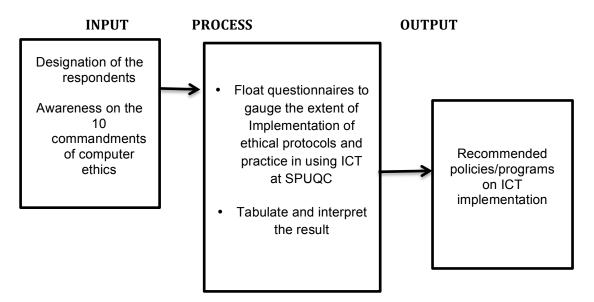


Figure 1: Conceptual Model

Research instruments: I used a questionnaire as an instrument for the study. The questions are based on the ten commandments of computer ethics. It includes questions regarding ethical practices in the use of IT based on the Association of Information Technology Professionals (AITP) Code of Ethics and Standard of Conduct as parameters to assess the extent of the implementation of protocols and practices in using ICT at SPUQC.

Eight statements pertain to security and confidentiality of computer and networks; Nine (9) statements pertain to information / software privacy; and three (3) statements pertain to intellectual property rights.

A Likert scale of 0-4 was used to score the statements. Gathered data were then analyzed and interpreted using percentage for the demographic profile of the faculty/employee and students; for the extent of the implementation of ethical protocols and practice in using ICT among the respondents, the weighted mean was used and for the question regarding the significant differences regarding the evaluation on the implementation of ethical protocols and practices in using ICT between the faculties/employees and students, t-test was used.

Results

As the study of Fenstermacher (1986) as cited by Alakurt et al. (2010), faculty and students are expected to be aware of ethical issues so that they are ready for any incident that may arise in the classroom. Regarding the awareness of the Ten Commandments of Computer Ethics, 60% respondents were aware of the commandments.

For both the employee and students, Item #5 "Untusted sites are blocked" had the highest mean of 2.70 and 3.54 respectively. It shows that employees as well as the students recognized the importance of making the untrusted sites inaccessible.

Faculty should discuss with their students the ethical standards and practices expected for them. According to Lumpkin (2008), through course content, during class activities, and one-on-one interactions with students, teachers must continually emphasize that moral knowing requires that individuals not justify wrong actions by trying them to make them seem right.

According to Johnson (1999), students' understandings of ethic concepts need to be assessed. Technology use privileges should not be given to students until they have demonstrated that they know and can apply ethical standards and school policies. Testing of appropriate use needs to be done especially prior to student gaining on-line privileges such as email accounts or Internet access. The teacher should keep evidence of testing on file in case there is a question of whether there has been instruction on appropriate use.

According to Henard (2012), ICT responds to a growing internationalised higher education sector. ICT may offer new educational opportunities at a lower cost and with more flexibility, irrespective of their physical location. However, using ICT to facilitate teaching needs careful thought and investment of time and effort is required to get it right. Codes of ethics, codes of conduct or codes of good practice are expanding throughout the world in an attempt to prevent unethical behaviour. They are part of an ethically positive approach to good practices in higher education management.

Reynolds (2013) stated that the growing use of IT has increased the potential for new ethical issues and problems; thus, many organizations have recognized the need to develop policies that protect against abuses. Although no policy can stop wrongdoers, it can set forth the general rights and responsibilities of all IT users, establish boundaries of acceptable and unacceptable behaviour, and enable management to punish violators. Adherence to a policy can improve services to users, increase productivity, and reduce costs.

Findings

Analyses showed the following salient findings:

- 1. Classifying the type of respondents according to its designation, 10 or 12.20% respondents are faculties/employees and 72 or 87.80% of the respondents are students.
- 2. In terms of the implementation of ethical protocols and practices in using IT, both the faculties/employees and students gave item #5 which states that "Untrusted sites are blocked" the highest mean of 2.70 and 3.54 respectively. Also, both of the two groups of respondents give the same item, items #2 and #3 which states that "Passwords are changed regularly" and "Strong passwords are required" the lowest mean of 0.40 and 0.51 respectively.

Conclusions

Based on the findings of the study, the following conclusions had been drawn.

1. SPUQC is well equipped and well supported in terms of access to ICT tools and to teaching materials and resources.

- 2. The respondents agree with the extent of the implementation of protocols and practice in the use of ICT is "moderate". The results possibly mean that respondents are willing to ethically use the ICT effectively and work collaboratively in all learning areas at school; however, they don't apply standard guidelines and act to avoid the common dangers to personal security when using ICT and apply appropriate basic social protocols when using ICT.
- 3. There was no significant difference on the evaluation of the implementation of protocols and practice in the use of ICT between the SPUQC faculties/employees and students.

A learning continuum about applying social and ethical protocols and practices when using ICT was made based on the findings of the study.

Recommendations

In light of the findings and conclusions drawn from the study, the following are recommended:

- 1. Faculty members must identify and independently operate a range of devices, software, functions and commands, taking into consideration ergonomics when operating appropriate ICT systems, and seek solutions when encountering a problem. On the other hand, students must follow class rules about applying selected standard guidelines and techniques to secure digital information. The success in the use of IT in education depends largely on teachers and their level of skill in integrating IT into the teaching process and in utilizing IT to provide learner-centered, interactive education.
- 2. The administration must continue in providing trainings and seminars for the faculty, as well as non-teaching personnel. They must consider that the knowledge and understanding information and communication technologies are fast and automated, interactive and multimodal, and they support the rapid communication and representation of knowledge to many audiences and its adaptation in different contexts. It is the responsibilities of the school to not only instruct teachers how to integrate the technology into the curriculum, but also how to do so in an ethical manner.
- 3. HEIs should ensure that ethical ICT protocols and practices in the use of ICT should be involved in its implementation. This will enable the users to be aware of what is expected of them with respect to using the facilities. Also, they should ensure that ICT infrastructure and facilities, ICT training materials and qualified workforce are in place as it support teaching and learning using ICT. Further, since ethical values are to do not only with beliefs but also with our understanding, feelings and behavior, therefore values education can only be addressed implicitly through modelling and through the day-to-day policies, processes and practices that occur within and/or beyond the classroom.
- 4. The program as an output of this study must be validated and approved by the administration before its implementation.

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Evolution of reflections on transdisciplinary bioethics in Asia

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Introduction

Societies and the social systems that emerge in communities of individuals are not static. Despite romantic images of literature or film that are often quoted to depict an epitope of a nation, the images portrayed are snapshots (or selfies to borrow a modern term). The journey to get to find that image is also an evolutionary one. Considering a famous work of John Steinbeck (1960), *Travels with Charlie: In Search of America*, we can ask to what extent did he find America? What is America? Of course, it is much more varied than the already great diversity of the United States of America. The same is true of any community, espeically a complex one.

Societies evolve and are transformative to not only the persons within a society, but also to the social systems themselves. Even nations which pride themselves to be more homogenous, such as Japan, are incredibly diverse societies (Macer, 2003; 2004a), that are subject to constant process of mundialization (Cha, 2011). In a sense they are self-evolutionary constructions of knowledge, and a fusion of biological, social and spiritual systems that shape our existence, taking pieces of wisdom from all around the world. In this paper I reflect on the evolution of bioethics as a concept and as the foundation of our world. I will propose that such evolution is likely to be just as much circular as linear.

Can we see the reflection?

The process of questioning ourselves, our relationships, our identity and the meaning of our life can be called reflection. In the normal process of ontological development of <u>Homo sapiens</u> the capacity for deep self-reflection is obvious by the early teenage years in the questions that children ask of themselves. This deeper reflective gaze into our mind is years after the normal time when we become self-aware of our own reflection in a mirror, or self-aware looking at our image in a still pond of water. We start to ask what is behind the reflection.

A number of other animals experience the process of self-reflection and can recognize themselves in a mirror. We are not sure how many other species participate in a process of self-reflection in terms of asking questions of their identity. This is a question for future research. Although we can see some other species paint art, whether they be elephants or chimpanzees, we have only been able to communicate well enough with chimpanzees to know that at least some of them pose questions of self-reflection.

At the same time, not all human beings show signs that they actually reflect deeply on their own existence, but it is widespread and known in some form in

 $[\]cdot\cdot$ pp. 215-224 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

every human community that we have had the pleasure to meet. In communities which have a written language and literature, we can see numerous writings from around the world which illustrate a deep philosophy. Those writings are convenient materials for scholars of bioethics, and a norm of academic literature can be called the "paper chase", the perpetual and relentless reading, quoting, copying, writing and discussions of a growing body of literature.

Gradually we have seen the emergence of academic journals in the field of bioethics, with the first regional journal in bioethics, the *Eubios Journal of Asian and International Bioethics (EJAIB)* since 1990, being joined by several other journals. Globally there are over fifty journals of bioethics, which is an illustration of evolution of the field.

On the other hand, the routine daily activities of many persons in the world apparently take us away from the desire to be reflective. We may be forced to work hard to earn enough money to pay for a house, food, and taxes, leaving little time for reflection. Many minds are distracted by the rise of many addictive games, if the programs on the television fail to act as a sufficient mind control agent – not losing the analogy between programming of a computer and programming of human beings to live in each society, not cusing too many ripples. Conscious bioethical decision making may only appear at certain crises in our life, like an unwanted pregnancy, a serious disease, a fatal car accident, disaster or war. Arguably we can still call these mundane life choices as a form of bioethics, perhaps practical and programmed rather than reflective.

My thinking on bioethics has been most influenced by deliberative choices to enter into dialogue with other beings over my entire life. For over forty years I have had the pleasure to be reflecting on my existence, through writing music, painting and viewing art, reading, writing, playing, laughing, crying, and listening to thousands of other persons. Part of this process has been several hundred Bioethics Conferences and Roundtables, including the precious ones in Kumamoto over the past twelve years.

Transdisciplinary

Although I define bioethics as the love of life (Macer, 1998), this is deliberately ambiguous. My view that bioethics is broader than any definition, is also shared by the absence of agreement of any definition of bioethics in the *Universal Declaration on Bioethics and Human Rights* (UNESCO, 2005). Although there were attempts at definitions in various drafts of that international instrument, there was no consensus possible between the experts and governments of countries in the document.

The subject matter of bioethics is most commonly depicted as including environmental ethics and medical ethics. Although practitioners of bioethics may often focus on one or the other, even within each field there is diversity. We need to explore the bridges between these and other fields (Lee, 2017; Macer, 2017), including public health ethics, gene ethics, and applied ethics of science and technology.

Beyond the content of bioethics, the research methodology of bioethics includes those associated with numerous fields of bioethics, including anthropology, sociology, philosophy, psychology, law, biology, anthropology, and even more. The

inherent transdisciplinary nature of bioethics is attractive to many scholars who are tired of the narrow-minded approaches of many reductionist approaches to knowledge. Bioethics is both emotional and rational, and something that all persons do. We can see the emergence of cultural norms, laws, and individual choices in a multi-layered approach to analyze bioethics (Takahashi, 2011).

One of the most interesting questions in transdisciplinary bioethics is whether there is a particular discipline which is more suited to the methodology of descriptive bioethics, or prescriptive bioethics, or interactive bioethics? For sociologists who study society, one of the basic joys is looking at how do we understand each other, and how do we understand the way different communities set norms and standards? What are the virtues in one society? What is our image of love, or life? Are our virtual actions the same as those actions considered virtuous by another life? Although there are a number of theories that have been used to describe societies, it's still an open book as to which works best in each of the over 4000 communities around the world.

Evolution of religion

One of the ways that evolution of bioethics has occurred is through the sharing of religious concepts between countries. Across Asia we can see a variety of expressions of Islam, Christianity, Hinduism, Buddhism and Confucian values, with animistic foundations that may be earlier, such as Shinto in Japan. Over the past millennia there has also been importation and exportation of Western values both into Asia and out of Asia (Macer, 1999). It is no coincidence that the dominant religions of the world today were all developed in Asia, but it does not mean that they were any superior to the religions that developed in the Americas and Africa, merely that Asian religions such as Christianity and Islam were associated with aggressive colonization.

Informed consent is becoming accepted, and bioethics is part of a transition that is transforming society from a paternalistic society to an individualistic one. It can be traced to human rights discourse, as well as to dialogues on religious freedom and self-determination.

There is no demographic predictor of a person's views found in surveys of bioethical attitudes (Macer, 1994a), so actually religion is not the primary shaper of bioethical views. Although it can be influential in shaping policy in a country that has strong religious attitudes, such as the Philippines, Ireland, or Iran, for example. Animism is not necessary correlated with having a more ecocentric view of the world (Macer, 1998).

Evolution of demographic structures and public health

The bioethics story is further complicated by the inter-generational nature of the relationships between people. The population demographics of societies change over time. In the past there were larger numbers of younger persons and fewer persons survived until old age. As life expectancy increased, and as birth rates fell, we see aging nations. This is also work in progress. The economic performance of a country is usually linked to the population of persons of working age, so countries with many children, or many retired persons, can suffer from having less persons available to earn wages.

While the principle of justice is accepted socially (UNESCO, 2005), the increasing proportion of aged persons means even in socialist countries that provide social safety nets to vulnerable persons, sick people are expected to pay a slightly higher proportion of the medical costs themselves to lessen the tax burden on others. While it is reasonable according to the ethical principle of solidarity that a person who is sick can expect to be covered from health insurance, most people do not want to simply be a burden on the state or family.

Although there have been infectious diseases throughout history, AIDS, has been associated with much ethical debate in Asia. Confidentiality should be maintained for personal and medical information, and in some countries, there are laws against those who break the confidentiality of a person having HIV as in Japan. In the case of a fatal infectious disease like HIV, there is the threat of possible harm to others, so it could fall as a legitimate exception if that harm is a real threat. The early years of the AIDS epidemic saw hospitals refusing to treat persons infected with HIV, and disclosures of HIV status of individuals to third parties beyond statutory government reporting (Feldman & Yonemoto, 1992). There are still cases of harm being done to persons of particular groups, including those with HIV, certain occupations, or those of sexual minorities. The exceptions to confidentiality have revealed how weak the sense of confidentiality is.

In Japan, Physician's law Article 19-1 says that a physician must see a patient seeking a medical cure unless sufficient reason exists. This was used to argue against refusals of admission of HIV infected persons that was observed in the 1980s and 1990s. In a court case, if a patient was hurt as a result of doctor's refusal, the doctor has responsibility to pay. On 30 June 1992, a Kobe District Court awarded damages to a patient based on a refusal of emergency medical treatment. The Judge said the physician has the responsibility to compensate the damage the patient incurred as a result of the refusal of care.

There was also introduction of a quota system for employment also for HIV infected persons. If a company refuses to hire under the quota from the beginning it is against civil code Article 709 and 715, and the company has to pay consolation money to the person. The contamination of blood with HIV in Japan eventually lead to prosecution of some of the responsible persons who failed to stop non-heat-treated blood products being sold. This also helped erode the trust people had in physicians and the Ministry of Health and Welfare. Similar scandals were seen around the world (Macer, 2003). Public health structures have evolved through these types of misadventures.

Evolution of technology

Technology developed through innovation, which leads to technological evolution. Modern Western medicine took hold in Asia in the nineteenth century. The rapid progress of medical technology has led to transformation in the way that medicine is practiced, as well as to changes in what is considered to be an ethical communication system. The existing systems and patterns that are seen in the relationship between patients, families, health professionals and the society in general, changed as paternalism diminished. At the same time as technology is transferred between communities, some values are also imported beyond the general acceptance that new technology must be better than old.

Information technology, smart phones, personal computers, bank accounts for all persons, and education for all, have transformed the choices that people make. All persons are taught to be financially responsible for their choices. This is also part of the evolution towards informed choices. Technology that promotes individual choice, from private transportation systems (e.g. the automobile) to shopping malls, to online shopping, are technologies that affect our values.

New technology is shaping our values in the way that we relate to machines and even in the way we write books, or the way we paint our paintings, or write and sing songs. We can reproduce a relaxing occasion with the advent of virtual reality. Bioethics can become even more challenging if we find it difficult to differentiate between the reality that exists in a physical sense of reality, compared to purely virtual reality that exists in the mental sphere only. The reality of what exists today may be different tomorrow if that will be a reality shaped by virtual reality, though we can certainly argue that it would be more ethical to let soldiers and politicians fight virtual wars instead of real ones, to minimize the suffering of innocent persons. One cannot expect to simply transfer a machine-gun or warplane to another community without also expecting that the new user will assume that it is also OK to kill using the guns.

One of the technologies that has been the most controversial in Asian countries is organ transplantation. In some ways organ transplantation was a "flagship" for the introduction of bioethics debate into Japan (Macer, 1992), and thus this specific technology may have led to consideration of the need for the public to be seen to be involved in the debate on medical ethics. The issue of consent was closely linked to this question, and it raised questions of trust in doctors. Rather than religious views, the fundamental doubt against organ donation in people's mind may have been, and may still be, trust in the medical profession (Macer 1992). This issue of trust has also been cited as a reason why African-Americans are reluctant to donate organs (Siminoff and Saunders Sturm 2000). Sadly there is a general tendency in evolution to see citizens less trusting of their governments and those in positions of power over time, mostly due to the exposure of corruption that may have been hiden more in the past.

The most controversial issue involving the use of modern scientific technology is organ transplantation from brain dead donors. On this issue, there has been more debate in Japan than in any other country in the world. There were substantive debates also in Korea and India. The first heart transplant in Japan was performed in 1968, and the second was delayed by this debate until 1998. The brain death law was passed in 1997, and by April 2000 there had been 6 transplants approved under the new law. For a country of 125 million people that is almost nothing. There are still critics of the law permitting organ transplants from brain dead donors (Becker, 1999). One of the motivating arguments used to support organ donation is love of others. The organ donor cards in Japan feature four little angels, actually a Western concept, are giving organs to save others.

Actually the level of public agreement sine the mid 1985s, with about 25% rejecting organ transplants from brain dead donors, is the same as the range as general opinion across Western countries. It was argued that Japanese have special cultural barriers to such donations, which has been dismissed by Japanese sociologists and religious groups (Nudeshima, 1997). In every culture some people

reject removing organs from bodies and their views should be respected. As mentioned the more serious doubt in the minds of some people is whether they can trust doctors (Macer, 1992), and among ten countries in Asia-Pacific area surveyed in 1993, Japan had the lowest trust in doctors (Macer, 1994a).

Evolution in human research subject protection

Since the 1970s people have become more conscious of their rights to informed consent, which could be attributed to the importation of civil rights debates that occurred in the USA and Japan in the 1960s (Kimura, 1995). Most hospitals in Asia have some poster to explain what are patient rights, and policies to work against paternalism.

The black episode in Japanese medical ethics is the World War II experiments conducted on prisoners in Manchuria China, while under China was under Japanese occupation in World War II. At least 3,000 persons, mainly Chinese, were murdered by or after vivisection and other experiments, in facilities under Unit 731 at several locations in China. The functions included vivisection practice for nely qualified army surgeons, intentional infection of diseases, trials of nonstandardized treatments, and learning the tolerance of the human body (Tsuchiya, 2000). Unlike Nazi war crimes the Japanese war crimes were only prosecuted in the Soviet Union, but the United States gave the head persons immunity from prosecution in exchange for all the recods, so that the knowledge gained for biological warfare experiments could be kept secret (Harris, 1994). The United States actually tested some of the weapons on people in North Korea in 1952.

Neither Japanese nor Chinese bioethics looked hard at these experiments until the year 2,000 when a series of papers explored the ethical issues they raise (Morioka, 2000; Tsuchiya, 2000; Macer, 2001; Nie, 2001). Because of the opportunity to have access to the best medical research facilties in Asia many physicians went to the Unit, and after the war it was only in the mid 1990s that some members of the Unit started to confess and apologise for their actions, as they reached old age.

However. now there are few major institutions in Asia that do not have some form of ethical oversight, and Institutional Review Boards (IRBs) have become common. Evaluation procedures are also conducted so that human subjects will be better protected. There are still many efforts at education underway.

Diversity of views in Asia

Opinion surveys found that there was a similar diversity of views in Asia (Macer, 1994a) compared to that found in most Western countries. The hesitant introduction of bioethics in Japan is more related to the structure of Japanese society than to any difference in individual person's attitudes between Japan and Western countries. When individuals were asked to give their reasoning for their opinions over bioethical issues such as genetic manipulation or screening, there was much variety in opinions expressed by members of the general public in each country (Macer, 1994a).

Japan has an elusive property for Europeans being at the Far East of Asia, and having had an isolationist policy in the time when Europe was colonizing much of the world in the past four centuries. Since the Meiji restoration in the 19th century

the doors have been opened to all countries, and the ideas have been undergoing rapid change with globalization that is also driven by the communications devices that Japanese industry has exported around the world.

Macer (1999) would place the origin of informed choice with the older samurai tradition, which includes the control of when one will die, and the choice of suicide. In addition, the concept of informed consent is seen in the writings of Hanaoka Seishu on breast cancer from the Nineteenth century. In South Asia we can see the individual pursuit of nirvana, as seen in gurus and sages, acts of informed choice. This does not mean that they did not express a strong sense of social solidarity.

With the introduction of Western medicine there has also been an influx of Western religion, philosophy and etiquette. As cultures evolve it becomes impossible to separate which aspects were introduced what sources and at which time. Within a few decades a culture may see something as unique to its own tradition, even though it was an import. Even the concept of having a written text can be a cultural import in some Asian countries. Although ancient Japanese and Chinese books date back more than 1300 years (Shinagawa, 2000), and legal systems were established at earlier times, the Westernization of Asia led to European style laws being introduced. This affects the types of law and guidelines that govern medical practice.

Circles of evolution?

The term bioethics has had an effect to stimulate cultures around the world to think about the relationships between patient and practitioner, as well as between the public and the government (Macer, 1994b). One reaction that has been seen in Japan in the 1990s from the introduction of Western medical ethics in the 1980s, particular from the United States, has been a backlash to claim that Japanese are different from Westerners. This can be used to defend existing practices, and also as an anchor to the rapid social change. We have seen the development of the Asian Bioethics Association as one attempt to break with the domination of U.S. bioethics. At the 1997 UNESCO Asian Bioethics Conference (Fujiki and Macer, 1998), there was discussion by a number of Asian researchers of the need for recognition of the bioethics of traditional Asia, rather than importing bioethics from the USA or Europe. There has been discussion of whether the idea of fundamental human rights is compatible with the Asian ethos (Sakamoto, 1999).

The involvement of the family means that some modern Western textbook ideas on autonomy and confidentiality are not accepted in Asian medical practice. The family may be told medical news earlier than the patient. In Asia we see a number of sick persons who know they have a terminal illness, play a "game of avoiding to hurt another" pretending they do not know the seriousness of the disease with family members who pretend the patient is not terminally ill.

Modern Asia however is more individualistic than it used to be, and patient rights are being promoted by many persons, so medical ethics is in a transition phase that is not able to be really separated from broader socio-economic changes. The late twentieth century has seen rapid evolution of the concepts of how a person is integrated into the family, and the boundaries of the family one dwells with (Maekawa and Macer, 1998).

The evolution of concept of patient autonomy is a trend that is reflected in all Asian cultures as a movement from paternalistic compassion and love, towards informed decision making. The situation is not so simple to claim that in the past people did not have autonomy, and that physicians always acted paternalistically. The sick may prefer to leave the decisions up to others, or use subtle linguistic expressions to convey their will, as seen in language in general. However, there is still a hierarchical social system which makes it difficult for patient and doctor to be truly at an equal level in their relationship. Even more so, the concept of informed choice where the patient becomes the consumer of medicine, is only seen in the pharmacy stores but not in the medical consultation. Many sick persons are afraid to be a bother or burden to others so they attempt to avoid trouble that could occur if they clearly expressed their will and it differed from others.

There are also theories of ethics in the West based on community, which argue that individuality, autonomy or rights of a person, are not suited to the community structure of society. Communitarians argue that societies need a commitment to general welfare and common purpose, and this protects members against abuses of individualism, which could be equated with selfish pursuit of liberty. Politically we also do not know which model of political system will be more successful, when we compare an authoritian system such as in the People's Republic of China, and a more democratic system such as Bangladesh, for example.

Importantly, I would argue that often the evolution of individualism and communitarian systems are not linear, but circular. We can see the circles of evolution of socieites between those that are guided more by love (e.g. a situation ethics system) and those that are governed by strict laws and regulations. However we can only test this hypothesis over a long time period, since currently many countries seem to be headed to individualism. However we can see even large developing countries such as Thailand and India shifting to public supported healthcare systems, a communitarian bioethical structure based on application of justice.

Unless we reproduce, we will not have a subsequent generation; this is a fundamental requirement of a society to evolve. Overall birth rates in most countries in Asia have fallen to more sustainable rates and some countries such as Japan will decrease their population over the coming decades. Self-determination is a norm and an accepted part of reproductive rights, with contraception, abortion, and assisted reproductive technology popular choices that persons and couples across Asia have widespread access to. Asia is somewhat more liberal than Latin America and Africa as a region in permitting persons to exercise their reproducive liberty.

Where is Asian bioethics heading?

Assuming we can see evolution of bioethics, is this random change and chaos or does it have some logic? The key turning point issue for bioethics in Japan was the unprecedented social debate over the law to allow organ transplants from brain dead donors. It is rare to see a debate between the public and the policy makers over any issue, but this issue led to the introduction of informed consent and the need for medical policy to be more sensitive to public concerns. This debate led to a broader further transition from paternalism to informed consent to informed choice in many spheres of life, what we can call a broad bioethical transformation.

The bioethics debate was the catalyst required to transform Japan from a "paternalistic democracy". People of any country may resist the rapid change and globalization of ethics, ideals, and paradigms, as ethnic and national identities may be changed, or even lost, especially countries with such a long history of culture. How countries approach globalization is a fundamental question, but many individuals in countries with access to common news media have already answered the question by their converging lifestyles and values. To the extent that human rights and the environment are more respected, this trend is to be encouraged.

Evolution of bioethics does not mean introduction of laws and regulations will be more likely. Although we can see the adoption of some laws against the surrogacy trade in Thailand and India for example, does it mean human rights are being better protected (Macer, 2014)? Promoting greater bioethical maturity and responsibility for our decision making through education is more effective to evolve social morality than laws. When Asia opened its doors (usually these doors were forced open) to Western society it led to the introduction of a newly emerged science and scientific paradigm, only part of the fabric of Western society. Meanwhile, Western society has continued to evolve, also adopting some aspects from Asia, and bioethics has emerged. Part of this development includes importing and developing ethical approaches which can be debated, but a more important part is the involvement of the public in discussion and development of the indigenous diversity of ethical traditions. We evolve together.

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A bioethical critique on the policy of Bangladesh over children with disability

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Summary

Is there any dignity for children with disability? This very question is asked worldwide regarding the status of children with disability. They face various challenges in society which seriously degrade their self-esteem and dignity. In this regard, the Bangladesh government and various non-governmental organizations (NGOs) have adopted a national action plan. However, the discussions leading to the action plan's adoption have excluded critical issues that exist behind the policy and action plan. Emphasis on dignity, caring and a special status to uphold the social status of people with disability is a very common phenomenon. Many thinkers have proposed several theories which purport to include dignity and fully-fledged moral status for all people with disability. The present study focuses on the following points: Firstly, it offers some criticism addressing the charge of over-estimation of disabled people. Next, it presents a bioethical analysis to show how the actions adopted in this policy are problematic. The paper seeks to offer an alternative recommendation for thinking about children with disability.

Disability and its present scenario in Bangladesh

How do we understand the term "disability"? Bangladesh, as a member country of the World Health Organization (WHO), incorporates the definition by WHO:

"Disability is an umbrella term, covering impairments, activity limitations and participation restrictions. Impairment is a problem in body function or structure; on the other hand, an activity limitation is a difficulty encountered by an individual in executing a task or action while a participation restriction is a problem experienced by an individual in involvement of life situations. Thus, disability is a complex phenomenon reflecting an interaction between features of a person's body and features of the society in which he or she lives" (WHO, 2004, 1980).

Not only the WHO, but also some other international bodies have developed policies for people with disability. The reported composition of all people with disability in Bangladesh according to categories used in 2005 is shown in Table 1.

The fifth National and Housing Census (2011) identified that 1.4% of people in Bangladesh had a disability. Bangladesh Statistical Bureau (BBS, 2011) conducted a survey in 2011 which indicated the figure as 9.07%, while in the same year, the

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World Bank estimated that 31.9% of the population were people with disability. If according to the World Bank estimation, the figure was 10%, then the number of children with disability would equate to 13.83 million. However, the prevalence data for children with disability in Bangladesh has problems in accuracy and is questionable. On the other hand, India has estimated that 6-10% of children in India are born with a disability, and India and Bangladesh having almost the same socioeconomic conditions.

Table 1: Composition of all people with disability in Bangladesh (Source: Nizamani, 2005)

(Bouree, Mizamani, 2000)									
Types of Disability	%								
Visual prevalence	31.3								
Physical prevalence	27.5								
Hearing and speech prevalence	28								
Mental prevalence	4.9								
Goiter prevalence	8.3								

Given the current growth rate of the population, the number will rapidly increase. Considering this critical situation, Bangladesh has placed more emphasis on the issues of children and children with disability. The context of children with disability is considered more important and has received more emphasis due to the special needs of these children.

Let's consider the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs), the Convention on the Rights of the Child (CRC) and the Convention on the Rights of Persons with Disabilities (CRPD). These documents have incorporated issues relating to the rights of people with disability, indicating that poverty and disability are mutually reinforced. The mutual link between poverty and disability has been explored in the World Bank's estimation, in which it assumes that worldwide, there is at least one child with disability for every five people living in poverty. SDGs 4, 8, 10, 11 and 17 advocate for "inclusive and equitable quality education". At the same time, lifelong learning opportunities should be promoted for all. In these goals, the term "for all" has taken the inclusive sense that it includes people with disability and children with different types of status. The same tendency to reflect on the rights of children with disability has also gained importance in different articles of the Constitution of Bangladesh 1972. Not only has Bangladesh, in its constitution, recognized the rights of children with disability, but through its different action plans and policies, it indicates that the rights of children with disability are to be incorporated into education, health and other social opportunities.

However, a wide lacuna exists between dreams and reality in Bangladesh with regard to providing opportunities, social benefits and security to people with disability, and especially to children with disability. Despite the legal and procedural steps and social security, the opportunities and advantages for people with disability have not yet been granted importance in any sphere of life. Therefore, to accelerate advantages and opportunities for people with disability, different kinds of measures need to be incorporated. Due to the failure of the constitutional steps, the questions

are: how can we begin to improve the life of people who are affected by disability? Should this be a rights-based approach ensured by the constitutional means of the state? Or should strong mechanisms to implement social security for people with disability be launched? These questions are discussed in this paper to gain a better understanding of the problems related to disability in Bangladesh.

Disability is an issue that occurs through random chance, accidents, genetic errors or for other reasons. However, an inseparable relationship exists between poverty and disability. Studies (DfID, 2000) have shown that, due to lack of economic solvency, a lion's share of the total population is involved in risky and dangerous work situations, deplorable living conditions, limited access to proper treatment of post-accident injuries, poor hygiene, insufficient knowledge about physical impairment, natural disasters, and inadequate opportunities to obtain nutritious food. This relationship is based on data from the United Nations Children's Fund (UNICEF)'s in which it was estimated that 15–20% of the total population in developing countries is poor and suffering from problems due to impairment. As a member of UNICEF, Bangladesh is included in these data and experiences.

How the term "children with disability" is reflected in Bangladeshi society and cultural sphere is a question for thoughtful consideration. The term "disability" is defined from various perspectives which encompass its severity, causes and duration. The United States (US) Federal Government (ADA, 1990) defines the term "disability" in a way that is well regarded among experts working in the field of disability. In the Americans with Disabilities Act of 1990 (the ADA Act), disability is said to be the "inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to last or has lasted for a continuous period of not less than 12 months" (ADA, 1990).

Certainly, the Bangladesh constitution has ensured equality and human rights, irrespective of social status, race, color, religion, gender, ethnicity or disability. In the articles (GOB, 2004, 1972) of the Constitution of Bangladesh 1972, the right of people with disability to full status has been guaranteed. Many positive things have been adopted in the constitution, law and policy, while the government had adopted the agenda to promote the rights and opportunities of people with disability. Despite all the obligatory tasks assigned by the state, the current state of affairs is that people with disability are subject to inequality in different spheres of social, economic and cultural life. Through this declaration, the state has affirmed that Bangladeshi citizens will not be excluded from their rights in any way. Thus, the conclusion is that having a disability is not a condition for exclusion. This inclusion received deeper emphasis in Articles 15 and 28 of the constitution. Among other basic necessities, medical care, the right to work for a reasonable wage, access to leisure and recreation and the right to social security were meant in Article 15 by providing "public assistance in cases of undeserved want arising from unemployment, illness or disablement" (GOB, 2004, 1972, article- 15). In Article 28, Section 3, it is promised that the state shall not discriminate against any citizen "... on grounds only of religion, race, caste, sex or place of birth be subjected to any disability, liability, restriction or condition with regard to access to any public place" (GOB, 2004, 1972, article-28:3).

The social, emotional and economic status of people with disability throughout all of South Asia is almost the same. They live in very adverse conditions and, in particular, in situations where they face hostility, hatred and, to say the least, unfriendly situations. We can learn about these aspects of their quality of life from various social research data (Sultana, 2010) and direct observation. In many policies addressing disability, the Bangladesh government and NGOs are now more concerned about disability than at any previous times. In promoting its response to the situation, Bangladesh has confirmed itself as a signatory of two significant international treaties: the CRC (the Convention on the Rights of the Child' 1990) and the CRPD (Convention on the Rights of Persons with Disabilities' 2006) which were adopted by United Nations (UN) General Assembly. With the help of the UN, Bangladesh is endeavoring to resolve the problems faced by people with disability. In one of its reports (UNICEF, 2015) on disability, UNICEF indicated that it hoped that the state of Bangladesh is promoting the rights of children with disability. In that report, UNICEF confirmed Bangladesh's activities as a shift from the "charitybased approach" to the "rights-based approach" which is reinforced by civil society and by having a sincere interest in people with disability.

Disability in Bangladesh: some responses

Some responses to address the needs of children with disability have strongly focused on different policies with actions and action plans, for example, caring, asking for dignity and establishing the moral status of people with disability as humanhood. However, from a bioethical point of view, the present study shows that all these approaches have been unsuccessful in the long run in the context of children with disability. Delving deeper into the problem, the study explores some problematic social phenomena present in Bangladesh's culture and social framework. Stigma and social paternalism are inseparably linked in this social and cultural sphere. A caring approach encourages handling the problem of disability. In the provision of caring, there is an involvement of dependency; at the same time, in the provision of caring, the mindset created in the person receiving the care is a dependent one. Social dignity and moral status are claimed as being received only for the survival of people with disability in society. Such steps have been taken to pay respect to their dignity and moral status. Keeping these traits of human beings in mind, taking care of the people with disability will not necessarily be helpful in implementing the whole policy. Therefore, the present study assumes that to be a "full person", it is not essential to follow the autonomy principle, dignity and the criterion of moral status.

Before making an understanding of this problem, we may discuss the concepts of "moral status", "human dignity" and "caring" as conditions of perfect human beings and its relevance with people with disability. The problem and opportunity that are faced by the people with disability can be shown in the diagram in Figure 1.

Firstly, it is essential to realize that stigma is deeply embedded in Bangladeshi culture and society. Arising from stigma, attitudes towards people with disability are that they are not usually received and, if they are, it is not in a good manner; they are not given social opportunities; and discriminatory employment judgments are much more common for people with disability.

Secondly, why is stigma effective in Bangladesh in the case of people with disability? Due to our social and cultural orientation, the status of people with disability is not improving. Some problems revealed in this study will not be further emphasized here; instead, those problems can be schematized.

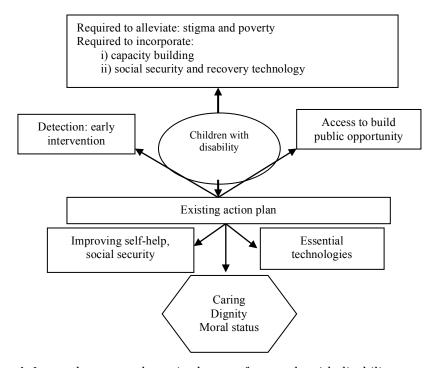


Figure 1: Ignored actors and required actors for people with disability

Stigma is a superstitious belief set in the human mind, with stereotypes, and prejudice and discrimination particularly active behind the stigma. In a society, according to social psychologists, stereotyping, as a component of stigma, works as a "social knowledge structure" learned by people in that society. It is a serious representation of society as the knowledge is an agreed-upon belief of the members of a social group (Hilton, 1996). Owing to its social conformity, it works in ways that are efficient and active. Through the practice of stereotyping, members of society can generate expectations, emotions and perceptions of individuals. Prejudice is a wrongful misunderstood cognitive and affective response. It leads to discrimination, exclusion and avoidance. In the non-urban peripheral regions of Bangladesh, people still believe that bad luck will follow if they see a person with a disability when they are departing for travelling, going to sit an examination or going to perform any important task. Due to stigma, we even find that most families hide their children with disability from the extended family and relatives as if parents or family members are ashamed of having these children. All the stigma, discrimination, trauma and exploitation repeatedly occur and increase in Bangladesh, particularly in the peripheral countryside.

Caring and dependence is the second issue involved with disability. This section shows that care for someone with a disability, to some extent, is problematic in the sense of their independence as a human being. In most cases, if we take care of disabled people then they may recover sooner. From this perspective, we often consider them as special children. As a result, there are always tens of them. This tension forgets to pay more attention to their actual recovery. In order to make a good understanding of this problem, we should enter into depth of this problem. Let us look more at the ethics of care.

An understanding of care ethics, as developed by Carol Gilligan (*Gilligan*, 1982) is helpful here. Regarding morality, our first question should be "what is just?" But, there is another parallel issue to this question: "How do we take care of the subject? It can be, sometimes, overruled very congenial norms of universal code of conduct and our convention of social justice. Instead of conventional code of conduct, justice and autonomy, care ethics emphasizes on the interconnectedness of 'care-givers' and 'care-receivers'. Just as E. Kittay (Kittay, 2001, 2002, 2005, 2006, & 2011) applied this view to the issue of disability, my concern is to show that caring is not the best option for promoting the interests of those with a disability. Instead, it is very much a recent technique for lifelong survival of a person with a disability. It also confines their efforts to achieve freedom, independence and empowerment in the long run.

Care ethics indicate the sense of a "personal relationship." The personal relationship in care ethics reflects on three different patterns. Firstly, in our social life, all the members contain the same moral attitude, such as empathy, compassion, pity and kindness which we take as natural (Noddings 2002). Secondly, some significant morally valuable attitudes and actions are present in our relationship which can help us promote that relationship (Nietzsche, trans: 1998). According to this explanation, the term "care" is derived from labor and attitude. Firstly, care can be understood as labor which implies that when we try to maintain others and ourselves, we are in a situation of scarcity. On the other hand, from an attitude perspective, the word "care" indicates a sense of affective bondage to others for their well-being. Without an appropriate sense of attitude, the labor cannot be done properly. Thirdly, the weightiness of the duties is acknowledged.

In various forms and patterns of care ethics, dependency is coupled with care. Of course, dependency is in direct contrast to independence. The term "dependency", to some extent, means assistance from another person. Does suitable "assistance" form a relationship between the donor and recipient? Hypothetically, we may assume that, in the action of "assistance", two candidates are present: (i) the donor, with the donor in a superior position and (ii) the recipient, with the recipient in a position that is inferior. What consequences arise from the relationship of people with disability and those who provide them with aid or assistance? This question can be answered from various perspectives.

The first criticism we raise is from Nietzsche's notion of "slave morality" (Nietzsche, trans: 1998, Kittay, 2001) According to Nietzsche, all moral traditions are explored in the nature of "master morality." In this sense, Nietzsche states that the term "good" is used with such a sense that it "picks out proud states" (Nietzsche, trans 1998) and also contains "values, power, nobility, and independence." People contained within "good" have a sense of the "fullness of power, wealth, ability, and so on" (Shakespeare, 2000: 1- 20) In contrast, the term "bad" contains inferior properties such as "lowly and despicable, etc." "Good" refers to the "noble aristocratic" or the "spiritually high-minded"; on the other hand, the concept of "bad"

developed from "common", "plebeian" and "simple." In the difference between good and bad of the traditional Christianity and Utilitarianism, a hierarchy is maintained in the relationship between people of the higher and lower classes of society.

Therefore, what follows Nietzsche's narrative of the good-bad dichotomy in the context of care ethics in the case of disability. If we consider the term "care", it reflects on two parties. The first party who provides empathy and care to a person with a disability is of a good and noble personality. The care receiver should show gratitude to the care provider who is in a higher position. According to Nietzsche's care ethics, this can be considered as "master morality." Instead of "master morality", what follows the sense of "slave morality" in the case of a person with disability? First of all, "slave morality" is a revolt against master morality: in particular, it breaks down the long-awaited binary position of the slave-master dichotomy. Under the dominance of master morality, our society has explored happiness only for the noble person. In slave morality, the so-called noble person is considered to be an evil and "good" is absent in that person. This also focuses on removing oppression and repressive behavior in society as a moral action through opposition to noble morality.

Therefore, the present study approaches slave morality which has the intention of encouraging people's patience as well as ensuring equality irrespective of ability, color and race. In contrast to care ethics, this morality aims to promote quality human life in a real sense, giving importance to the well-being of human beings and encouraging people to become progressive and optimistic. Moreover, instead of slave morality, care ethics function as "master morality", playing a role that expresses pessimistic attitudes towards transparent and equitable human life. Likewise, care ethics expresses doubts about better life-sustaining kindness and moral subordination being hierarchical functions.

On the basis of that intention of care ethics, most policy experts of disability with children make an uncomfortable relationship between care and disability. Thus, the idea falls into the assumption of dependency. In most cases, it has been observed that the physical dependence on caregivers cannot provide enough support for disabled people. A few instances can be found where the caregivers enable the people with disability to carry on regular activities of daily life. However, such dependence brings economic dependence, which discourages them to earn an adequate income and makes them think as more dependable. Therefore, it is normal to think that care ethics is a constraint on the development of the status of children with disability. If we look at the concept of a person with disability, they have been clearly denoted as different from an able-bodied person. They can possess compensatory behavior and seek help as someone who is dependent. Therefore, in the case of disability, dependency is a core issue and identifies some problems in society ((Shakespeare, 2000: 1-20).

The third potential issue is polarization. It is a very common belief in the society of Bangladesh that normality is good and abnormality is bad. Consequently, normality has been applied only to able-bodied people and people with disability are treated as abnormal. This dichotomy has been considered based only on capacity and that this capacity creates a dichotomy between the able-bodied person and the person with disability. Able-bodied people have independence, but people with disabilities require dependence on able-bodied people for their survival. This

view has been attributed as the "dependence myth." This is a myth as no reality exists to maintain these kinds of difference on the basis of physical impairment. For example, we mention the American President F. D. Roosevelt, whose disability was a result of contracting polio. He certainly was physically impaired; but, in his lifetime, he was not seen as someone dependent and helpless (Gallagher, 1985).

In this regard, this next question is very important: is there any person who is completely independent with no dependency? The answer is clear from the story of human development from birth through childhood to being adult. On the contrary, the infancy of human beings is a period of the most extreme dependency and, among other species, this period is prolonged for the longest time. Culture, language and society are essential factors in the development of human beings. A. O'Hear, in his study *Beyond Evolution: Human Nature and the Limits of Evolutionary Explanation* claimed that "[h]uman dependency in childhood is a direct evolutionary outcome of success in adulthood" (O'Hear, A., 1997). Therefore, human life cannot be thought of as being without dependency. On the basis of caring and dependency, we can never treat human beings who belong to the circle of disability. Mike Oliver's study revealed another perspective of the same claim when he wrote that:

No one in a modern industrial society is completely independent, for we live in a state of mutual interdependence. The dependence of disabled people, therefore, is not a feature which marks them out as different in kind from the rest of the population but as different in degree (Oliver, 1990:50).

Supporting these instances of dependency, we could say that as people with disability need more and more of their special needs to be met, they are highly dependent. But what happens in the case of a socially high-ranking person or a member of the Royal family? The term "dependency" will gain a different meaning. In fact, forming a pairing between disability and dependency is misunderstood. This is due to our limitation in observing social opportunities, as can be seen in Michael Oliver's comments:

[Dependency is] ... created amongst disabled people, not because of the effects of the functional limitations on their capacities for self-care, but because their lives are shaped by a variety of economic, political, and social forces which produces this dependency (Oliver, M, 1989: 49).

Therefore, the implication is that the sense of "dependency" does not mean to have "special needs." People with disability need the same things as every ablebodied person deserves in their everyday life. All these needs should not be viewed as dependency; rather, meeting all these needs is "a sort of prosthesis that permits one to be independent" (Kittay, 2011: 50) In the words of Judy Heumann, Kittay created a reciprocal meaning of the terms "dependence" and "independence." Heumann stated that: "[t]o us, independence does not mean doing things physically alone. It means being able to make independent decisions. It is a mind process not contingent upon a normal body" (Stoddard, 1978: 4).

Now the very question we may pose is: what are the burdens of dependence? Usually, at the state policy level, people with disability are considered to be a burden and therefore, the responsibility is felt to take on a caring role for them. Another problem from the burden of dependence happens in the case of parents with disability. The same scenario is also true in the context of children with a disability.

Characterizing the situation as a curse, our society and culture consider people with a disability as a burden, making an ineffective effort and perceiving that as meaningless indulgence. Owing to this mentality, the policy adopted by our society of considering people with disability as a burden has excluded them.

Bangladesh's policy and response to disability suffers from another problem, which is: ignoring voice and need of people with disability. In the caring strategy, the voices and desires of children with disability are ignored and their needs are not treated the same way as able-bodied children's needs. From various sources in the literature, we have learnt that those who receive services, caring and kindness from family or society do not have any say: their voices are not heard. Postmodernism refers to these people as "others". No voices or opinions of people with disability are ever received in society; even their voices are lost behind the care and kindness. In supporting this statement, we go through Baldwin and Carlisle's statement on their heartfelt efforts on disability:

We lack children's [with disability] accounts of pain, discomfort, dependence on [the] other for feeding, bathing and toileting. We do not know how they feel about the way doctors, social workers, therapists and other children treat them (Baldwin and Carlisle, 1994: 35).

In reality, those who receive care and help from family and society are usually neglected. Behind this mentality, we find various reasons and societal defaults.

Firstly, the social structure in Bangladesh is very paternalistic. If someone is a provider or care giver of children with disability, they think of themselves as guardians of those children. Vulnerability comes from many aspects: (i) children are treated as dependents in every society all over the globe, the same as in Bangladesh; and (ii) due to the caring role, the need for protectiveness and the prevalence of abuse of children with disability are both very nominal in Bangladesh.

Secondly, cultural and capital processes are another reason for behaving in such a manner towards children with disability. As we observed, many children with disability do not work; at the same time, they are also passive dependents of their family. In a market sense, their dependency is sometimes also recognized as a non-profitable burden. These children face the crisis of marginalization all the time, due to the challenges of marginalization, the existing pattern of paternalism and the social stigma experienced. These children are treated (in most cases) as subordinate, helpless and incompetent, along the lines of "be seen, but not heard, [do] not raise [your] voice." These factors all demonstrate that children with disability are never able to work or to do something by their own effort. The final arbitration is to treat them not as normal human beings. Thus, the dependency process plays a potential role in shaping our "engendering feeling of social marginalization, personal humiliation and emotional vulnerability" (Hockey and James, 1993: 10).

Based on the above analysis, it is clear that in viewing Bangladeshi society as competent, both misconceptions and misunderstandings are found. These misconceptions are responsible for bringing social paradox, marginalization, hierarchy, and the tendency of exclusion and alienation into our social framework. In Bangladesh, the social system has also experienced all these misconceptions. Therefore, people (including children) with disability are treated as marginalized and suffer from the curse of dependency.

From the above discussion, the present study would like to highlight the misconceptions deeply embedded in Bangladeshi society. Due to this mentality, in reverse, children with disability think of themselves as insulted and inferior members of society. Their frustration comes from thinking about the suffering and sadness of the life they are living. Therefore, in response to the current policy of the Bangladesh government and NGOs, the following serious matters need to be incorporated: (i) creating a favorable psycho-social environment where people's mentality and culture are not contaminated by superstitions and psycho-stigma; and (ii) the need to revise our sources of knowledge including our curriculum and legal procedure where misconceptions are hidden. This means identifying those ideas and misconceptions that are obdurate in our mentality and culture and, accordingly, undertaking an action program to reform the various social institutions and policies.

Conclusion

In the sphere of people with disability, it is essential to consider some philosophical debates regarding the status of people with disability. In Bangladesh, the issue of dignity is concerned with the social status of people with disability. Before clarification of the concept of dignity, a question needs to be asked: why are people with disability excluded from mainstream society? We can resolve this problem by proposing two alternatives.

The first alternative is that children with intellectual disability should be treated as a member of human society. Owing to their lack of properties that are present in normal beings, they cannot claim access to various opportunities that are only available to fully-fledged human beings. The second alternative is that, around the world, many agreements, welfare and other activities, and special opportunities have been provided by the state while, at the same time, clinical expertise has been developed for children with intellectual disability. All over the world, states are providing efforts and budgets to improve their facilities. At times, children with intellectual disability are receiving special care and benefits from the state that ordinary citizens do not receive.

With the second alternative, it is very important to reconsider the stance of Fletcher's indicators of humanhood. It would not be unusual to discard Fletcher's indicators, and Plato and Aristotle's expositions viewing them as undermining a dangerous philosophy regarding the reality of disability. For example, the strategy of discarding sexist language and philosophy in the case of women's emancipation has proved a great success. In addition, racism has also faced opposition in different regions of the globe. I would like to mention two statements from Fairclough, the first being that "... language contributes to the domination of some people by others" (Fletcher, 1979:15) while the second is that "consciousness is the first step towards emancipation" (Fairclough, 1989: 2). Fairclough explores "non-sexist language reform" to eliminate sexism from our society and mentality. The analysis emphatically claims that, in the case of children with disability, it is essential to abolish these kinds of linguistic patterns and thoughts which are antagonistic to establishing the rights of people with disability.

Through these considerations, both the dignity and well-being of people with disability face many challenges in their everyday life. Thus, how can they live suitable lives and be granted the same fairness that is bestowed on normal people

(those without a disability)? Is a caring policy or showing dignity sufficient to solve the problem of disability? This question contains two aspects and the possibility of the emancipation of people with disability. Before us, firstly, is a very simple look at promoting the interests and comfort of people with disability. And, secondly, is the claim that dignity for life is, to some extent, a superficial humanitarian approach.

People are disabled by society as well as by their bodies. It is the social and environmental barriers, prejudicial attitudes and other exclusionary processes which often make living with impairment so hard for people with disability and their families. Cultural representations of disability and professional discourses of welfare dependency are other ways in which people are disabled. The approach in the present study, known as the social model, emerged from the campaigns of the disabled people's movement. It can help us to look at care debates in a new light. Moreover, it can be applied more broadly to explore the processes of oppression and marginalization which apply to members of other help-receiving groups. However, it is a priority to consider and research the voices of people placed in a situation of dependency or impairment, instead of using carers, parents or professionals as their proxies.

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Ethical issues of end of life care in acute care hospitals in Japan

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Summary

In Japan, death at home has decreased due to urbanization and nuclear familization; since 1976, the rate of hospital death has continued to exceed that of home death. As the rate of hospital death has now reached approximately 80%, improvement of the care of end-of-life patients is an issue even in acute care hospitals. In the nursing records of one acute care hospital (J Hospital), the Japanese expression "mi-no-okidokoro-ga-nai" is often used to refer to patient-specific-distress at the end of life. It literally means feeling out of place, or having a sense of restlessness. However, medical staff at J Hospital seem to use this expression when patients have terminal restlessness.

In this paper, we report from the electronic medical records of patients nursed during their final moments of life at J Hospital, and examine the circumstances of "mi-no-okidokoro-ga-nai". The results show that whenever the nurses judged that the distress symptoms in terminally ill patients was not sufficiently alleviated, this Japanese expression was used to imply that the medical team should quickly diagnose the cause of the pain and expand the range of treatments. In such a context, we consider ways to broaden the treatment range of patients, with consideration of various ethical issues.

Introduction

1. hospital death having increased

Japan is now about to experience the emergence of a super-aged society which is globally unprecedented. According to Japan 2018 statistics by the Ministry of Internal Affairs and Communications Statistics Bureau, the population ratio of elderly citizens, which had been 5% in 1950, increased to 23% by 2010, and is predicted to be 30.0% by 2025 and 32.8% by 2035. Further, the annual death toll is estimated to increase from 1.2 million in 2010 to 1.66 million in 2040, and the number of deaths from cancer is also expected to increase. According to research by the Ministry of Health, Labor and Welfare, the main cause of death in 2016 was cancer at 298.3 (per 100,000 population), heart disease at 158.4, pneumonia at 95.4, stroke at 87.4, and senility at 74.2. Looking at the annual trend, the number of deaths by cancer has continued to rise continuously, making it the highest in ranking of causes of death since 1976.

As the number of cancer patients increases, the social debate of the place of medical treatment and the place of death will intensify. According to 1947 statistics, home death accounted for 90.8% of the total, but after the Second World War, the

pp. 238-251 in *Philosophy and Practice of Bioethics across and between Cultures*, ed. Takao Takahashi, Nader Ghotbi, and Darryl R.J. Macer (Christchurch, N.Z.: Eubios Ethics Institute, 2019).

number of hospitals increased, along with the development of medicine and medical care, such that the place of death changed from home to hospital. In 1950, home death accounted for 82%, and it continued to decrease such that after 1976, hospital death exceeded home death, with home death decreasing to 12.7% in 2015. Since the number of municipalities promoting home medical care has increased, in 2016, home death increased 0.3 points to 13%, but the proportion of deaths in hospitals was still around 80%.

In recent years, home death has become less usual for Japanese people, due to the fact that home death has decreased and the number of families living with the elderly has also decreased as a result of the proliferation of nuclear families. As a result, the perception of death as "the result of insufficient support from the families of sick people" has changed, and death is viewed as "an outcome that happens in hospital." In addition, with developments in medicine and the increase of available treatments, there are many patients and families who cannot accept their declared life expectancy, and who try to visit several hospitals in order to continue therapy so as to cure the disease. Some patients wish to receive advanced medical care even if it is expensive and involves some risk; family members who visit acute care hospitals to get the highest level of treatment often do not want to shift to local medical institutions or home care because they desire a medical environment that can quickly deal with changes in symptoms.

However, since the premise of acute care hospitals is professional medical care intensively applied to patients who need urgent treatment following sudden injury or acute exacerbation of chronic illness, the medical staff are often unfamiliar with palliative care and mental care that are necessary for patients in the terminal or near-death period.

In addition, hospitals are not "places of care" and often continue treatment to prolong temporal life with a belief that medical personnel can sustain life, even if for 1 minute, but they cannot effectively alleviate the pain distinctive to the end of life. There are cases in which patients in the near-death period are transfered to university hospitals or municipal hospitals, when such hospitals need to provide end of life care, making the care of patients at their end stage a big issue.

2. Use of the expression "Mi-no-okidokoro-ga-nai" in nursing records

The electronic medical record data of patients who died in the general ward at J Hospital was preserved from April 2016. Among the nursing records of patients who were observed at the general ward of J University Hospital in FY 2016 (April 2016 to March 2017), it was found that nurses had assessed a kind of pain of the terminal patients as "mi-no-okidokoro-ga-nai".

Originally, this expression was a subjective one used by a patient when he or she was not able to calm down due to anxiety, irritation, pain, an itching sensation or defecation desire or feeling restless. However, at J Hospital, nurses tend to use this expression as an objective term to express specific distress in a patient at the end of life and those assessments sounded vague because they may be interpreted in many ways when read by a third party.

While this expression refers to some kind of sudden change of symptoms, a third party may not be able to judge whether the cause is attributed to mental distress, physical suffering, with sudden change or not, from its description only. On the other hand, the interpretation that physicians and nurses make depends on the cause.

Therefore, I will attempt to clarify what medical staff should do when they see a patient undergoing such an experience that can be judged in many ways.

Methods

1. Survey target

I targeted the electronic charts of 441 patients who were admitted to the general ward of J Hospital in FY 2016.

2. Procedure of Research

The presence or absence of the expression, "mi-no-okidokoro-ga-nai" in the nursing records within a week prior to the date of death was examined, and if such a description was found, further checking of the records of two weeks before was done to determine the first time when the expression was used. Then I confirmed the process of care and treatment, and whether or not the palliative care team had intervened, as well as the interactions between the patient, the family, and the medical staff. Then, by comparing the before and after reports which were left in the electronic medical record, a third party examined whether or not the assessment of "mi-no-okidokoro-ga-nai" by a nurse indicated a consistent interpretation of the cause.

3. Purpose of the study

By an assessment of the patients evaluated as "mi-no-okidokoro-ga-nai", the kind of care chosen was examined for patients for whom the reason for using the expression could not be identified; thus, from the viewpoint of medical safety, the quality of medical care may be improved.

Survey results

1. Results of checking medical records

The results of checking the nursing records are shown in Table 1. "Stated cases" is the number of cases where the nurse recorded "mi-no-okidokoro-ga-nai" in the nursing record. "Cancer cases" is the number of patients suffering from cancer among the patients who were assessed as "mi-no-okidokoro-ga-nai". The number of "Palliative care" is the number of patients who were given a treatment using opioids to relieve symptoms or who were supported by the palliative care team, among the patients who were assessed as "mi-no-okidokoro-ga-nai". "Sedation" refers to sedative drugs such as Dormicum administered to lower the level of consciousness to alleviate patient-specific-distress prior to death among patients whom were assessed as "mi-no-okidokoro-ga-nai".

2. Results of a third party's ability to identify the basis of assessment

There were 55 cases (12.5% of the total) that were assessed as "mi-no-okidokoro-ga-nai" in the nursing records, with the first-time assessment having been made within 2 weeks prior to the date of death. It was found that the use of this expression increased for patients who were approaching death with a form of suffering. Of the 55 cases, in 21 the cause could be narrowed down to one including 5 cases of pain, 14 cases of respiratory distress, and 2 cases of delirium. There were cases where the expression was used several times, but in 21 cases a third party was also able to narrow down the cause to one, and the condition was resolved through treatment and care by doctors and nurses. In 18 cases of the remaining 43, although probably

multiple factors had influenced the use of the expression, it was possible to improve the condition while checking both the patient's verbal and non-verbal response by nurses. On the other hand, patients in the near-death period had difficulty communicating and often suffered various complications. In several of the 18 cases, the reason for using the expression could not be identified, and with the consent of the family, the patient was sedated with Dormicum to alleviate pain by lowering consciousness level as the patient approached death. There were cases in which the cause could not be identified as the symptom related to the causative disease was clearly different from and the complaint and the state of the patient, or the patients could not express their feelings through physical expression such as by "hand grabbing" and "facial frowning".

Table 1: Results of checking medical records

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2016.4- 2017.3	4	5	6	7	8	9	10	11	12	1	2	3	total
Dead cases	3 1	41	31	40	47	33	41	40	35	43	30	29	441
Stated cases	5	5	2	6	6	2	4	2	4	7	6	6	55
Cancer cases	5	4	1	5	5	2	4	1	2	6	6	4	4
Palliative care	4	5	2	4	5	2	3	2	2	5	5	5	44
Sedation	2	0	0	0	1	1	2	1	1	0	2	2	12

Through this analysis, nurses at J Hospital stated the patient's condition as much detailed as possible in the nursing records. Sometimes they judged that physical pain could not be expressed with words peculiar to end-of-life patients, as in respiratory discomfort with pre-death wheezing and mandibular breathing, extreme tiredness, edema resulting from inability to discharge urine, general malaise, brain metastasis, organ failure, or terminal delirium, among other conditions. Whenever such problems were emerging and ongoing therapy did not relax the symptom, they used the expression "mi-no-okidokoro-ga-nai", implying that "it is necessary to promptly specify the cause of pain and broaden the range of treatment".

3. Presence of dilemma in patients and families

When it was recognized that the patient was in a state of "mi-no-okidokoro-ga-nai", palliative care needed to be reexamined in order to broaden the range of treatment. Palliative care "is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual "(Sepulveda C, 2002, pp91-96), including support for both the mental care of the family and the patient's own death acceptance. However, only 80% of the patients with the assessment of "mi-no-okidokoro-ga-nai" had been given opioid-

based pain care or received intervention by a palliative care team, including family care, since if any patient complained of pain, if it was home care, palliative care was supposed to have been done. Therefore, in order to confirm the background behind why palliative care was not given, I reconfirmed the nursing records and the minutes of the team-meeting.

In this regard, while palliative care is an indispensable treatment for patients who are about to die, it was confirmed that patients and families rejected it simply upon hearing the word "palliative care". Speaking of "palliative care" in Japan, the reality is that many people still think that it is "pain control" and "supportive care for cancer patients". Patients and families who selected J Hospital as the place of treatment at the end of life commonly expected to be treated when hospitalized, so if doctors inform them about the "palliative care policy", they may feel that they are being abandoned by the hospital, and not treated. Also, during explanation of the intention of DNR (Do Not Resuscitate) that is a part of the procedure at the time of hospitalization, they sometimes feel that the hospital is rejecting their wish to look for possible treatment.

In such a case, even if the patient himself is so weak that he cannot express his intention, the family insists on continued treatment with anticancer drugs, believing that if he were to be given such treatment, he would become healthier again. As medical staff also treat according to the needs of their own families, they may miss the timing of appropriate palliative care intervention. Patients and patient families who make such remarks tend to misunderstand the term "palliative care" as "care after treatment options are gone".

On the other hand, patients and families may be reluctant to intervene in palliative care because of the fear of opioids being drugs, and because of intrinsic anxiety. In fact, when a medical doctor proposes a palliative care using morphine to a patient's family, there are families who make remarks such as "Do not use morphine, I think you can still treat him". There are many negative remarks about morphine in the records, such as, "we want to communicate with the patient, so please do not use it", "It is poisonous", "His or Her life will be shortened if you use drugs" and other such remarks.

In fact, there was a case in which the patient couldn't receive pain control as his family did not approve the use of opioids. Medical staff recommend that the family allow the use of Oxifast in order to alleviate the pain of the patient at the end of lung cancer, but his family answered, "There is a possibility that consciousness will be lost, so do not use it"; so the nurse informed that he might be somnolent but also a high possibility that he was suffering from pain of abdominal fullness, and flushing with Oxifast would reduce his pain. However, his family would not approve, saying that they saw a little more hope. After that, the patient frowned saying, "painful, painful", and although it was possible to get a reply occasionally, speaking didn't last. Then the nurse recommended flushing with Oxifast to the family again, but they only said: "We do not think it is needed as he is not conscious". The following day, even though the patient was growling, and the nurse continued to persuade his family by explaining that there was a possibility that flushing with Oxifast may ease his pain, the family could not accept the patient's state of near death. Consequently, medical staff could not use Oxifast until the patient died 2 days later.

In another case, while palliative care teams began using morphine to alleviate the pain and respiratory distress of lung cancer patients in a late stage, his family recognized that using morphine was a prerequisite treatment for transfusion, so they asked doctors to transfuse the following day as they felt that the patient would have desired it even on the day before his death.

In another case, a patient whose general condition was deteriorating due to the worsening of mesothelioma and his family was reluctant to have palliative care using morphine; but, when he was in a state of anguish just before death and suffered from pain, his wife finally asked his doctor to sedate him. Administering Dormicum helped lower his consciousness level before death.

Another case was about a patient whose pain suddenly worsened two days before death, and the patient himself informed a nurse that he could not put up with the pain in the back and he could not wait an hour until the next painkiller. He also assessed that his pain level was about NRS 9, however the nurse responded with only Loxonin as pain treatment. He could not sleep and went back and forth between his bed and the lobby during that night. The next day as well he made a strong appeal. Although the patient had not proposed a way to treat his pain, Loxonin alone cannot alleviative the pain of end-stage liver cancer. Considering that the patient had a feeling of abdominal bloating and the urinary flow was poor even after catheter insertion, doctors should check the condition of ascites of a patient with a portable echo or request the palliative care team to intervene in order to ease his pain.

On the other hand, when a palliative care team nurse suggested the use of morphine for a patient who had pain from abdominal fullness, the patient asked her whether the side effects such as serious nausea, as seen in the TV dramas, would emerge or not, so she explained about the side effects carefully and then he answered, "I would like to use it, even if I become a little sleepy, I'd like you to use it right away." In this case, the importance of the knowledge about palliative care is well demonstrated.

4. Results of the survey

Due to reduced ADL (activity of daily living), a patient who is about to die will need assistance for excretion; and restrictions on bathing and even oral care will result in dignity becoming vulnerable, resulting in mental distress and pain. Also, when suffering from severe pain, the patient feels death and it can also be assumed that the patient is falling into panic due to the sense of anxiety that he may die as he is. Medical staff need to provide pain relief for such patients, allowing them to spend every day as they like (Miyashita M, 2014, pp12-15). Even one cry of "pain" may include not only the pain coming from cancer but also the pain from anxiety, fear and loneliness, such as the patient's request that "the nurse accompanies me by talking about pain" and "I cannot keep calm when I stay alone, but if a nurse comes to give pain relief, I can sleep". There was a case where a patient who had difficulty going to sleep even though she seemed not to have more pain at the time of death kept a nurse saying: "do not go". When the nurse touched her back for about five minutes, her facial expressions calmed down and she was able to fall asleep. There was another case where the patient complained of mental suffering to the nurse and said that he wished her just to stay in his room because he did not want to put on the electrocardiograph and oxygen mask and if he was alone he would cry out loudly.

The pain that is assessed as "mi-no-okidokoro-ga-nai" by nurses, even with the expertise of nurses at the acute care hospital, should be considered as "total pain", which encompasses four aspects of terminal pain: physical, psychological, social, and spiritual, which are related and influence each other. Even if the suffering on all sides is not manifest in a superficial complaint of the patient, we should understand that the patient is suffering internally from pain and distress in various aspects.

In order to broaden the range of patients' treatment in such situations, medical staff have to assess the true cause of the patient's "distress", and all staff, such as the doctor in charge, palliative care staff, nurses in charge, counselors, science therapists and patient families must work together and correctly assess the condition of the patient in order to cure both psychological and physical pain. And in order to be able to effectively collaborate with each other, it is necessary to share information about the patient and patients' opinions about the medical treatment. Additionally, the management system that enables doctors to collaborate with other departments and to exchange opinions about the change and satisfaction of the patient after engagement must be collaborative.

Furthermore, patients under crisis have difficulty making decisions, and families witnessing a sudden change in their patient may also feel upset and confused if they are asked for surrogate decisions about treatment. Family members may not be able to speak clearly about their intentions, or they may not be able to make a choice that reflects patients' top priority. Therefore, in the treatment and care of a patient in the near-death period, an ethical dilemma tends to occur between a patient, a family member and a medical professional.

5. Clinical situation of J Hospital a) Nurses' role in terminal care

At J Hospital, a special function hospital, reports on the death of all hospitalized patients are submitted to the Medical Safety Management Division, with about 60% of the reported cases on cancer patients. Even if medical staff explain that a condition is serious but does not require aggressive treatment, offering good expectation and hope, there are cases where treatment is carried out under adequate informed consent. Some staff report to the Medical Safety Management Division and consult whether their medical attitude may develop into a lawsuit or not. Patients may regard palliative care as "terminal defeat", so some family members feel that this hospital does not offer any medical treatment to patients near death. Therefore, in terms of medical safety, there is a major problem in connection with the patient at the end of life.

At J hospital, the average length of hospital stay is 11 days, the bed occupancy rate is 98% and the nursing necessity exceeds 30% on average; it is difficult to keep attending to one patient for a long time as one nurse is in charge of multiple patients. Nevertheless, in these conditions, it is the nurse who has been involved with patients and their families for the longest time, and is physically and mentally close to both. Therefore, it is important for the nurse providing patient centered terminal care and supporting patients' Quality of Life to understand that patients and their families are in a unique situation; that is, "death" cannot be avoided, and should encourage them to think about how to spend the remaining time and to prepare. In order to respect the hope of patients and families, nurses sometimes have to consult

doctors and review the nursing environment. Nurses need the ability to observe non-verbal expressions of hope of patients and families.

b) Present condition of the palliative care team

The palliative care team at J Hospital was established in January 2003 prior to the "Basic Plan for Promotion of Cancer Countermeasures" in July 2007, after which palliative care diagnosis by a full-time medical team began. The palliative care team consists of a palliative care physician, a pain clinic doctor, a mental clinic doctor, cancer specialist nurses, a clinical psychologist, pharmacists, medical social workers, physiotherapists, who hold a joint conference on a regular basis with relevant departments, the doctor and the nurse in charge with consulting about care. At the time of team intervention, patients and families will be interviewed, and intervention will be done after signing a consent form. Then, palliative care will be added for cases with team intervention (Okuno S, 2011, pp570-581).

The palliative care team at J Hospital is involved in the treatment in the form of consultation from the first to the last stage. For suggestions relating to treatment by the team, only those examined and adopted by the department in charge will be provided to the patient. In addition, when a request comes to the palliative care team, the purpose of the request is stated. Basically, the palliative care team will examine the contents according to the purpose. However, even if the doctor in charge sees palliative care as supportive therapy, there is still need for mental support of patients and families. When the palliative care team intervened and made a proposal, it was adopted into treatment by only about 50% of patients.

At J Hospital, the number of patients admitted to palliative care treatment is 400 to 500 per year. The palliative care team is in a state of heavy overload because they provide mental care to other patients and on Saturday, they hold a meeting where cancer patients and families can talk to each other and offer patient association activities. Considering the activities of the palliative care team in the future, it is necessary to consider the expansion of the team.

Discussion

1. On the suffering of patients at the time of death

No matter how much medical technology advances, there is no treatment that can ultimately prevent death, and everyone will die. How to eliminate the suffering of patients in the near-death period and assist the patients and families to have the death they want, is highly individual and can only be decided case by case. This is because patients at the time of death may feel not only direct pain such as symptomatic pain or dyspnea, but also "total pain" caused by various factors, such as mental suffering from anxiety about relationships with family and friends, social distress from economic conditions and spiritual distress from why he or she contracted such a disease, or what his or her own understanding was.

In such situations, a collaborative approach involving the multi-occupation such as physicians in charge, palliative care staff, nurses in charge, counselors, physiotherapists and patients' families should collaborate to determine the true consequences of such background "suffering". In order to ease patients' total pain,

we simultaneously offer psychological support and the treatment of physical distress by correctly assessing the condition of the patient.

2. Issues of terminal care in acute care hospitals

The hospital is not a place to support patients during the near-death period. However, in view of the current situation in which approximately 80% of Japanese deaths are now hospital deaths, we have no choice but to think about "giving better care in hospitals". Nurses' assessment of nursing records plays an important role in assessing the patient's condition of suffering, because medical staff often reexamine their treatment plan and try to identify and cure the cause of the patient's affliction at the terminal stage if they have doubts by checking the nursing records.

In an acute care hospital, nurses oversee the patient on a 24-hour basis, but since intensive care of patients in the acute phase may require urgent examinations and surgery, it is more time consuming to provide patient care in the acute phase than to help relieve pain and anxiety in end-of-life patients. Therefore, it is currently difficult for end-of-life patients and their families to decide how to spend their leisure time until the nurses' arrival. In addition to this, the feelings of patients and families during the terminal period, especially in the late terminal or the death period, frequently fluctuate as the symptoms get worse, and often selection of the treatment policy and place of recuperation will not be decided due to discrepancies in opinion on treatment among families or the opinions of relatives who suddenly appear. In such a medical environment in acute care hospitals, in order to carry out appropriate care for terminal patients with total pain, and for patient and family satisfaction, it is essential for nurses to enhance their skills of health communication; listen to the causes of distress of patients and their families, and explain symptoms and treatment in an easy-to-understand manner.

3. Response to ethical dilemmas over palliative care

Patients in crisis of death have a difficult time expressing their intentions even by inference, and their families who see sudden changes of patients also experience confusion, and when asked for surrogate decision on treatment, family members may not be able to express their intentions accurately, or they may not be able to make a choice that ensures the patient's top priority. Therefore, in the treatment and care of a patient in a near-death period, ethical dilemmas often occur between a patient, a family member and a medical professional. Since the awareness of advance directives in Japan is low (Morita, et al. 2002, pp447-543), it can be difficult to confirm the patient's own intentions. Therefore, the medical staff often has difficulty dealing with many situations. Even if patients express their own will by themselves, their intention may change depending to the situation. In the event that a manifestation of intention cannot be indicated due to a decline in the consciousness of a patient who has reached the terminal stage, doctors and nurses often obtain consult families and friends in order to draw out the patient's intentions. In addition to this, confusion among medical staff makes it difficult to make appropriate judgments in a situation where the patient suffers intensely, making it difficult to provide the treatment desired by the patient (Watanabe, et al. 2004, pp62-77).

While we recognize the necessity of hospice and palliative care in modern medicine, only the pursuit of diagnosis, treatment, and prolongation of life has been developing. In addition, the medical system in modern hospitals is specialized and

subdivided, meaning that patients receive a series of examinations for different symptoms when they consult a medical institution, after which examination results are comprehensively examined and the treatment is begun. End-of-life patients are also included in such a flow, and since many doctors concentrate on examination and treatment, relief for symptoms afflicting patients is regarded as "symptomatic treatment", and interests and concerns are low in the current medical situation. Under these circumstances, in 1990 WHO called for the global promotion of palliative care for patients and families who were unable to be cured even with modern medicine. WHO defined palliative care as "an approach that improves the quality of life of patients and their families facing the problem associated with lifethreatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual" in 2002 (Kellehear, 200, pp508-510), indicating that palliative care is also applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes investigations needed to better understand and manage distressing clinical complications. This represents a change in the guidelines for palliative care, in that palliative care should intervene not only at the stage of the terminal period but also at the stage of entering the terminal stage in order to relieve pain immediately in parallel with the treatment of the disease. In 2003, the European Ministerial Committee also adopted the "Recommendation 24 of the European Ministerial Committee on Palliative Care to Member States" which states that palliative care is to be provided not only to some cancer patients, but also to all patients in the end stage of life as an important part of the health insurance system in each country. "Moreover, the origins of palliative care lie in the areas of religious care and nursing, rather than medicine (Kellehear, 2001, pp508-510), and palliative care draws heavily on a broad spectrum of disciplines, knowledge, skill, experience and creative thought" (Crawford, et al. 2003, pp32-34).

In light of this trend, all patients who feel distress-related pain should have access to palliative care. According to a study of hospice terminal cancer patients conducted by Yodogawa Christ Hospital, the appearance of pain is conspicuous when the survival period is more than one month, and in this survival period, general malaise, anorexia, constipation, insomnia and other symptoms appear with increasing frequency. Confusion may begin to increase as the survival time approaches 2 weeks, together with increased disability for self-mobilization. At the stage of only a few days before death, wheezing begins, and disorders of water intake, conversation, and response increase rapidly. In medical education and training, emphasis is placed on examination, diagnosis and treatment, while education and training on symptom mitigation are inadequate.

Many people consider palliative care to be provided when anti-cancer drugs or steroid treatment options are void. Some patients and patient families have some difficulty to accept palliative care using narcotics like morphine for individual values such as in religious convictions. In other words, among patients and families making decisions on palliative care, a dilemma may arise from the conflict between morals and ethics; morals define personal character, while ethics dictate the working of a social system (Ohba, 2012, pp1328-29).

From the perspective of ethics, patients' families understand that "it is necessary to relieve symptoms so as the patient does not suffer", "I do not want patients to suffer unnecessarily", "palliative care is a socially recognized treatment". On the other hand, individual morals with conflicting emotions may emerge, such as, "morphine is scary", "you should not use it to the patient as well", "If a doctor uses morphine once, a patient may not be able to take treatment anymore", "a patient will be unable to communicate during palliative care" or "a patient must be unwilling to use narcotics". In order to alleviate such a dilemma, it is important for medical personnel to provide correct knowledge of palliative care to patients and patients' families, and to suggest palliative care interventions at an appropriate time while looking at the patient's condition.

It is said that ethical principles in medical treatment are do not harm, benefit the patients, respect for autonomy, and fairness (Tokyo Women's Medical University Nursing Department, 2012, pp42-53). Family members often do not give a consent to palliative care during a near-death period even when patients cannot express their intention any more. But if the family does not agree, it will not be possible to carry out necessary care to alleviate patients' suffering in the near-death period. Patients and their families who need to make decisions will make choices about treatments while being worried, anxious, and confused as to what should be used as a standard of judgment. And when patients and their families make decisions, it is necessary to explain the symptoms and the side effects of treatments sufficiently and ensure that they understand it. When choosing a treatment, the intent of the patient should be respected most, but sometimes the treatment advances without the patient's full understanding. Therefore, it is necessary for medical staff to not only support patients and patients' families in decision-making situations but also to understand the process of their decision-making in order to avoid regrets about their decision. The opportunity for genuine consultation and collaboration is of great benefit to the patient. These benefits have been an integral part of the practice of medicine for a long time, but the concept of who has the final say when there is conflict may still present difficulties. In palliative care, the final decision-maker is the patient, and the patient uses many pieces of information, many sources of support, and their own values as a guide (Crawford, 2003, pp32-34).

Even if the patients themselves do not recognize the pain as a problem to be addressed, the medical staff must actively support and encourage them to accept pain relief, while paying attention to the fact that the majority of patients at terminal stage have pain. Specifically, medical staff should explain that it is important to deal with pain at an early stage for efficient pain relief, since the progress of the disease state and pain are not necessarily proportional, and there is a chance of improving ADL by relieving pain while speaking in plain language to both patients and their families. Palliative care in acute care hospitals should also provide whole person care (Nitta, 2007, pp59).

For patients in the near-death period, the medical staff has two obligations: "Eliminate patient suffering" and "Do not let the patient die without treatment." However, in the case of sedation, the two responsibilities conflict and a dilemma emerges. The patient cannot express his intention, and the patient's family does not know whether he can speak accurately to his doctor. Not knowing the patient and family background, the medical doctor may experience confusion regarding his

choice of treatment. In such a case, an important consideration is to recognize that if one intends to satisfy one's ethical values, other values may not be satisfied. For example, by attaching a life support device, the principle of self-reliance of a patient is kept, but a patient is subjected to physical invasion and a change in appearance, and the principle of do not harm will be violated. Therefore, medical staff must seek to understand the background of the conflicting values, and the values of people related to the patient, and as a member of a medical team, medical staff should judge what is the best for patients and consider the treatment and care plan considering the condition of the patient and family.

4. Issues related to the Quality of Death in the near-death period

The report of the National Congress of the Social Security System Reform in 2013 stated that for "Medical treatment and cure for the whole region" commensurate with a super aged society, there must also be medical treatment to raise "quality of death (QOD)" with a view to a dignified death of human beings destined to die (National Assembly, 2014). The concept of QOD was reflected to the Lien Foundation of Singapore's charity organization in 2010 (The Economist Intelligence Unit, 2010). It was about the assurance that the quality of care to people who are about to die is reported through an investigation of the basic environment, degree of penetration, and cost, among others. In the report, it was pointed out that the QOL has improved but QOD has not improved in the same way, noting that countries incorporating palliative care in medical policy are few. Japan is no exception.

According to the Ministry of Health, Labor and Welfare's statistics for the first time in 2014 about house death, the regional difference has almost tripled due to the influence of the state of home medical care in the area. By municipality, the ratio of home death tends to increase in depopulated areas with few medical institutions. The highest in the entire country was 54.8% at Kozushima village in the Izu Islands. The second was 50% at Yoron-cho in Kagoshima prefecture; both are remote islands (The Nihon Keizai Shimbun, 2016). Taking into consideration the current state of Japanese "hospital-weighted type" care where aging society is accelerating, it is necessary to improve the medical system within hospitals in order to respect the QOD of the patient such as what kind of death they want. To that end, it is important to look not only at biological data with the aim of prolonging the patients' lifespan using advanced medical care, but also to pay attention to the patients' view of life and death, mental satisfaction and their narrative. In addition, it is also necessary to ensure patients and families understand information that is offered by medical staff and help them form their own values. Personal responsibility is accompanied by formation of values and decision-making about medical treatment. Patients and family members have freedom of choice according to their own values, but once they express their opinion, the consequence will be to take full responsibility on their own.

Therefore, instead of emphasizing on only procedures such as confirmation of DNAR (Do Not Attempt Resuscitation), informed consent using written forms and acquisition of consent forms, medical personnel should also explain the merit of treatment and the hospital environment as well as the disadvantages, and when patients and families are confused, they should propose and explain other options in order to ensure they get opportunities for decision-making. In the case of late terminal and near-death patients, since the general condition changes day by day,

there is no treatment manual or fixed form of care. Therefore, medical staff should recognize that such way of thinking as "should be involved", "such an ideal care" and "should accept such death" sometimes lead to excessive paternalism.

Conclusion

It is essential for the medical staff involved in end-of-life care of the patients to understand the importance of the patient's background, the existence of conflicting values and the relationship of the persons related to the patient, and to consider the treatment and care plan in terms of the benefits for patients. It is also necessary to understand the background of the patient by paying attention to the fact that patients may not understand information that medical persons take for granted.

In order to realize patient and family-oriented medical care, it is necessary to abandon pride as professionals and develop medical care in a way that actively involves patients and families. If professional and technical approach becomes the object of treatment and unknowingly pushed onto the patient and the patient's family, it will be impossible to understand the background and benefit for the patient. For this reason, when other medical professions collaborate and practice team medicine, patient-centered viewpoints must be shared among them since the staff at the acute hospital have less time to get in touch with the patient than staff at home care. Acute care hospitals are not a system in which the purpose of each job category is different within the organization with the top belonging to the doctor, but rather a medical team system in which patients and families participate in the form of sharing terminal care.

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Philosophical Counselling: Indian Model

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Introduction

India lives in two or more conceptual worlds at the same time: (1) the world of the Great traditions in which the mythological past lies in the present, time exists in a mosaic of different periods, matter and mind appear on the same continuum, and the dominant conceptions are of groups, clusters, and patterns and (2) the modern world of science and technology in which mathematics plays a major role in describing the world, matter and mind though related are discrete entities, and conceptions are deductive, linear and of individual events. But which one is the need of the hour?

We need to develop alternative world-views, alternative metaphysics, as the basis for reflection on technology vis-à-vis society and civilization. The way towards understanding the metaphysical roots of technology must lead through the creation of an alternative world-view which will enable us to grasp sharply and clearly ramifications and consequences of present technology for a future human society. It is here where people from non-western cultures have much to contribute. But how to start? The starting point is that we must re-examine our intellectual heritage and tradition in the light of our present situation.

Tradition is always hermeneutical and accommodates new interpretation and understanding. This reconstruction means reconstructing the present categories of knowledge. Man's mode of being in the world helps a person to evaluate the tradition. It is not possible for a person simply to follow the tradition, but he has the right to evaluate the tradition. The world of historicity will have an impact on the tradition and it accepts evaluation and reinterpretation. This does not mean that we are revolting against the tradition, but interpreting them in the context of present historicity. The cultural world, which one belongs to, allows a radical interpretation of the tradition. This sort of interpretation teaches a way of looking at the tradition afresh from a new perspective, which will suit our present situation.

Basic concepts

Who is a human being? Is she/he a mere psycho-physical organism or is just a physical entity? A distinction between a "person" and a "biological human being" is maintained in philosophical discourse. John Locke, for example, defines a person as "a thinking, intelligent being that has reason and reflection, and can consider itself as itself, the same thinking thing in different times and places." The idea of personhood is important in ethical discourse also. The moralists hold the view that persons have a special value and that they deserve moral respect. Since a person is different from

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a biological being, "being human", i.e. being a member of the homo sapiens, does not automatically qualify one for the special kind of moral respect due to persons. According to Kant, persons are primarily characterized by their rationality, and so they have an intrinsic value, i.e. dignity, which makes them valuable. According to a Tamil text, *Tirukkural*, a man who has five noble qualities, viz. love, sensitivity, altruism, compassion, and truthfulness is considered to be a human being.

Many Indian Philosophers have talked about the significance of individual. One such thinker is Sri Aurobindo. He is concerned about the aspiration of the individual. He examines the spiritual beings in one's own self and helps others in similar evolutionary ascent which is considered as real service to the mankind. His integral philosophy considers the problems of human beings. He considers man/woman as part of the cosmic evolutionary process. Man/woman is an ideal combination of matter, life and mind. As mind is finite, he is bestowed with limited powers of consciousness. The nature of evolution indicates that mind is followed up with a higher integral consciousness, called supra-mental consciousness. Human being, according to him is a transitional being. By this, he means that man/woman is not a final. Man/woman is mind imprisoned in a living body. Mind is not the highest power of consciousness. This means that mind is not in possession of truth. It is only an ignorant seeker. Thus, Sri Aurobindo presupposes that beyond mind, there is Supermind, the gnostic power of consciousness, which is in eternal possession of truth. This Supermind is the Superman. The Supermind is in the eternal possession of Truth. Aurobindo says that it is the Gnostic growth.

This conception gives a new hope and a new prospect of life for the future of mankind. Man must awake himself to the divine person to overthrow the desire-soul or the little ego. The desire-soul is the egoistic existence. It is shut off by the egoistic walls. In the surface-soul or the desire-soul there is no real soul-life. How to proceed from desire soul to Divine soul? This is a basic issue in Sri Aurobindo. He says that it is possible by a psychic man. He says that mental man has evolved but a spiritual man is yet to evolve. In this context, Sri Aurobindo talks about three levels of existence. They are: (1) the level of the being, (2) the level of the being and nonbeing and (3) the level of the non-being. Man is born into the world at the level of being and non-being. This non-being is a process of becoming. This implies a new departure for both man and the world. Thus, man's progress consists in his ceaseless aspiration to transcend himself.

According to Sri Aurobindo, it is always the future of man, which is more important and significant than his present and the past. Thus, in Sri Aurobindo, the concept of man is the genetic evolutionary one. Man is not only engaged in his own greater perfection and happiness but also in the general liberation and higher evolution of his fellow creatures. The lower life of plants and animals is conditioned by nature; the material life of man and his species tend to harness the forces of nature to make the human life both happier and nobler. Man has to evolve his capacities of knowledge with greater mastery over them. This is the extension of consciousness.

It is easy to say that the entire human race is one community. But to put this into practice is difficult. It is possible if we put it into action. To put it into practice, we need a strong will and determination. The instrument for this is love. Love is the seed to make the world more meaningful. Out of this seed, the tree of humanity

grows. The ideal man's life is always guided by love for humanity. This is essential because out of love, springs kindness. It in turn grows into inestimable prize for friendship. Love is a defence against evil also. Virtue is based on love. The joy of heaven, it is said is the fruit of virtue which is rooted in love. If a society is based on virtue, it cannot be destroyed.

Now, what is a virtue? Virtue is knowledge, says Socrates. The Tamil sage Tiruvalluvar stresses the power of virtue throughout the text, *Tirukkural*. He makes a distinction between domestic virtues and ascetic virtues. Hospitality is a virtue for domestic people. When a guest is waiting, it would be improper to eat, even though it were nectre, says Indian tradition. Gratitude is another virtue. "It is not good to forget the benefit received; but it is good to forget then and there the injury done by another". There are other virtues like, self-control, right conduct, patience, fear of evil deeds which are included under domestic virtues. Gandhi could apply these two virtues in the political sphere. Indian tradition shows that if we practice truth, no other virtue is needed because all other virtues simply follow it. His attitude towards non-violence is to be taken seriously in a world wherein violence and terrorism is threatening the entire globe. "The path of rectitude is the path of non-violence", says a text. A philosophical approach to the problem of violence and terrorism is necessary at the present juncture. Indian tradition gives the advice in the following way: "Do not commit any act of violence though your life is in peril."

It is only virtue which brings immanent as well as transcendent happiness and hence it is the Supreme of all. Virtue is that which is free from four things—malice, desire, anger and spotless mind. Virtue as a moral principle always guides us. The question why we should be moral is meaningful in this context. Plato was the first philosopher to ask the above question. In the Book Two of the *Republic*, by way of a fable about the Ring of Gyges, Plato implies that we only do the right thing because if we do not, we will be caught and punished. This may not be a proper answer to the question why one should be moral. The proper answer is available in the Indian tradition. It is said in the text that one has to be moral because there is nothing higher than it and it exalts one. Purity of mind is the basis for all other virtues. All other activities are mere pompous show. Virtue is defined as follows: "Avoid envy, greed, anger and harsh words. This is the way to acquire virtue." Virtue means to welcome one with a pleasant look and loving words. True joy comes only from virtue. If we were to practice virtue every day, it would be the stone that blocks the way to suffering in life.

Discussion

Human relationships are based on virtues of righteousness, honesty, kindness and compassion. Whenever these virtues are either ignored or eroded, then we could clearly perceive disruptions of human relationships. In a way, this kind of a confused atmosphere evidently prevails in modern society. But by the change of mind, we can solve many problems. He points out that the crown of man's virtue is the uprightness of heart and his unbiased attitude towards other fellow beings. There are three types of action one has to perform. Do not perform the action condemned by the great. Though you find your mother starving, do not do any action that will be condemned by the great. This means that action which does not promote virtue and

produce fame, should be avoided. This is what is called purity in action. This has a relation with resoluteness. Determination in action is one's resoluteness. When we are performing action, one must not delay actions. Do not delay that which cannot be delayed. An unfinished action is like a half-extinguished fire. While performing an action, five things are important. (1) resources, (2) means, (3) time, (4) the nature of deed and (5) the place.

Indian Philosophical Tradition talks about persons who possess great virtues. It is not concerned with a man endowed with mind and body alone. It speaks about an ideal man who is endowed with five noble qualities, viz. love, sensitivity, altruism, compassion, and truthfulness. These are the five pillars of excellence. Truth and non-violence are the two important virtues which have influenced the entire globe. Gandhi showed that, if we practice truth, no other virtue is needed, because all other virtues simply follow it. His emphasis on non-violence has to be taken note of seriously in the modern world wherein violence and terrorism are threatening the entire globe. A philosophical approach to the problem of violence and terrorism is necessary at the present juncture.

Commenting on the importance of virtue, it is said in Indian Philosophy that among the three human values (virtue, wealth, and love), virtue alone brings immanent as well as transcendent happiness, and so it is the supreme value. It is virtue which is free from four evils: envy, greed, wrath, and harsh words. In the contemporary debate, the issue becomes significant when F.H. Bradley discusses the question, "Why should I be moral?" in his *Ethical Studies*. He says that the question is illegitimate, for it may suggest that there is some ulterior purpose behind the exercise of virtue, or the performance of duty. He says: "To take virtue as a mere means to an ulterior end is in direct antagonism to the voice of moral consciousness." Though he rejects this question, he also answers it as: "A man is moral because he likes being moral; and he likes it partly because he was brought up to the habit of liking it, and partly because he finds it gives him what he wants while its opposite does not do so." Indian Philosophy declares that there is no greater wealth than virtue, and if one forgets it, then there is no greater evil than this. Purity of mind is the basis for all other virtues; any other activity is a mere pompous show.

What is the distinction between human beings and other beings? The main distinction is that man alone has the capacity to feel for other beings; he understands the sufferings of his fellow beings, and also of plants and animals. This is the nature of noble human beings. Man, by his reasoning power and love, knows the sufferings of his fellow beings. Keeping this in mind, modern thinkers like Hans Jonas talk about the "responsibility ethics", thus emphasizing the need to protect the whole earth by man. The greatest of all virtues is the virtue of non-killing, because killing brings in all sins.

Human relationships are based on righteousness, honesty, kindness, and compassion. Whenever these virtues are either ignored or eroded, then we could clearly perceive disruptions in human relationships. In a way, this kind of chaos prevails in modern society. Indian Philosophy provides a remedy for this, which actually lies in the change of mind. The ancient Veda says: "Let there be peace everywhere". Buddha, for example, taught that a man should overcome anger by love, evil by good and lie by truth. Different religions like Christianity and Islam also speak about the importance of love, affection and peace. Gandhi fully appreciated

the insistence on peace by different religions. He firmly believed that the mankind and its civilization could be saved from destruction only though the means of non-violence. As a strong believer of non-violence, he prescribed to the world the non-violent technique of satyagraha as an effective substitute for the violent armed warfare. He said that before this peaceful method of non-violence, "the bayonet runs to rust and the gun power turns to dust." Gandhi is of the view that when a person achieves this state of realization, he believes that he develops a spirit of renunciation of imperialism, territorial gains or that of power and destructive weapons used for violence. War is a state of mind which reflects greed and the spirit of exploitation. The way of liberation from the tragedy of war is through a bold and unconditional acceptance of the non-violent method with all its glorious implications. His belief in the identity of self with the truth finds expression in his idea of the essential unity of mankind who should live in a united world of peace and non-violence.

Gandhi was a witness to two world wars during the last century. He therefore maintained that the major unsolved problem of international relations is war and so long as this problem is not solved, the ideal of world peace cannot be achieved. E. Stanley Jones said: "Almost simultaneously two great forces emerged in the world – atom force and atma force, one physical and the other spiritual." The atom force has been used in its advent for physical ends—destructive physical ends. One is universal destruction and the other is universal deliverance. According to Gandhi, war and violence can never solve the problems. They sow the seeds of hatred that generate future wars. Dialogues and negotiations alone can settle disputes and the effects they produce are permanent. Because of this reason, it is said that "the more of violence the less of revolution". All conflicts can be solved by peaceful means.

Non-violence and possession do not go together according to Gandhi. Theoretically perfect love and absolute renunciation have invariable concomitance; one who has desires, designs and attachment with any object cannot truly love a single individual, and can never be non-violent. It requires one to dedicate oneself to society and be a selfless seeker. It is impossible for an individual to possess wealth, a house, car and the physical body and be absolutely non-violent. Only a man who renounces all his desires, possessions and ego can truly and absolutely be a nonviolent individual. Gandhi says: Love and exclusive possession can never go together. Truth is meaningless if it is devoid of non-violence. For him means and end are identical. Truth and nonviolence are indistinguishable. They are one and convertible. The goal of nonviolence is the establishment of moral order not only in one's own country but in the entire universe. It aims at social inequality, freedom from want, fraternity and justice. The highest aim of the votary is the realization of God or truth. It is the means that is more important than the end. If the means is wanting, the realization of the end is not possible. Gandhi chose the spiritual means of non-violence and applied it for the realization of different ends. By employing evil means moral and spiritual ends cannot be realized. If the means utilized is pious and pure, the resultant end will necessarily be sublime. Non-violence is a comprehensive and many-sided path which not only brings salvation but uplifts the entire cosmos with it. It aims at social or cosmic salvation in preference to the individual salvation.

The purpose of human life is to show how there can be all-round progress in life and how man can live a better life. Thus, it could be viewed as a critique of life. There is an inseparable relation between value and action. R.M. Hare in *The Language of*

Morals says that the logic of value-words should finally result in action. The doctrinal imperative on ethics and values as discussed in the Upanisads necessarily harbor the problem of ego-sensitiveness with its incongruous character in a more compatible way for the overall development of humanity. The changed attitude towards 'what should I be' rather than 'what should I do' for the well-being is focused here and is the matter of discussion to maintain the condition of 'good', the basic principle of ethics, that is already within us all as if hidden in the core of a hard nut. Every man has the principle of ethical 'good' in him, but it is always in conflict with the 'ego'- principle that corrupts one's as well as others' moral predispositions.

Even though the sovereignty of 'goodness' is the unifying factor, it has the risk of falling into the coerciveness of the instruments of 'ego-hood'. The overcoming of the perversive 'ego-ness' results in the attainment of 'goodness' and that should be the aim of all. In the normative ethics, metaphysical conceptualization of an ultimate value is essential. Ethics is a science of values. It is the evaluation of human conduct which is connected with human goodness. A careful analysis of the various Upanisadic doctrines on the moral aspects reveals that a full treatment of the virtues within oneself can bring out his 'goodness' of being-in-this world. His acts solely depend on the institutionalized virtues - 'the primacy of character. TTUpanisad raises the all-important question of "goodness" of actions. Accordingly, if one has the propensity to adopt the actions enshrined in the 'dharma' - the rules of ethics, one can achieve the status of moral goodness and he may continue to act according to these laws of 'dharma'. The ultimate value or Purusartha lies in the 'goodness' of actions that applies universally to the whole of humanity. One cannot deceive this 'ground' that is our innate, inherited nature. When there is harmony between these three, man and his social relations become perfect and compatible with ground and thereby he tries to move socially towards the concept of 'well-being' of the society. In this way, moral conflicts become reduced.

To experience this good there are essentially two principles of morality: Truthfulness and Non-violence. There should be harmony between speech (truthfulness) and action (non-violence) and consequently between the mind and action since the mind is the governing principle of actions. Truthfulness is the symbol of 'perfection' or internal harmony. It leads to Universalizability of ethical values (emphasis on moral character), utilitarianism (emphasis on consequences of actions) and deontological category (emphasis on obligatory duties and rules of conduct).

In the Upanisad, the Self is called the Atman; it is consciousness, and its presence is known through the experience of "I am." The Upanisad notices various forms of self-identification — we may call them, forms of ego-involvement — with the body as in "I am the body," with the life-principle as in "I am the life in the body," with mind as in "I am the perceiver of the rose," with reason as in "I am the thinker," and with something beyond as the ultimate, peaceful, undisturbed, blissful knower of all these "I am". The scriptural texts declare that Brahman is of the nature of consciousness and that the Self is identical with Brahman. The Self is, therefore, of the nature of consciousness. It is through consciousness that everything, whether it is an object in the external world, or one's own body, whether it is a mental state like pleasure or mind itself, is known. Consciousness which is presupposed in all acts of knowing is the basis of all knowledge. While other objects are established through

consciousness, the latter is self-established for it is self-luminous by its very nature. The Self which is consciousness is said to be self-luminous in the sense that while it is not revealed by any other means or agency, it reveals other objects. According to Sankara, we miss the character of the Self because of the presence of an innate ignorance which identifies it with the non-self and which superimposes its attributes on the former. The Self, according to him, is a transcendental reality which cannot be objectively given.

In the philosophical counselling of Indian tradition, self-awareness is the most authentic, indubitable and incontrovertible fact of experience. Sankara makes a distinction between the Self and the non-Self, "the sphere of which is referred to through the concept of 'I' and "the sphere of which is referred to through the concept of 'thou', objectively given to me in my experience and what I can refer to as "thou" in so far as it always stands *opposed to* and contradistinguished from *myself*, the knowing subject or that which I refer to as "I". It should be noted here that "I" here is used in the true sense of the term. All that is given as "object" in experience *cannot* be the subject. The subject never can be *objectively presented* or else it would cease to be the subject, and the object can never function as the subject or else its "objectivity" would have no meaning. Sankara says that the subject differs from the object as light differs from darkness. When someone says "I am lean," or "I am fat," "I am clever," etc., he is simply transferring or superimposing the properties of the body or mind which are objects to the sphere of the subject. This is the erroneous notion of the Self according to Sankara.

The Self cannot be refuted for that which refutes is itself the Self; Surely, fire cannot itself refute that it is hot; I know the objects in the recent and the remoter past; I anticipate the objects to come in the near and the remote future; in all this, though the objects vary as in the past, present and future, the knower remains identically the self/same. For that reason, the knower is not capable of being destroyed or of changing its nature from what it is to something else, even in the event of the body being reduced to ashes. The reality of the Self is established by Vacaspati as follows: "The Self is known through indubitable, non-erroneous and immediate experience of the nature of 'I' and therefore cannot be questioned or investigated. No one indeed doubts 'Do I exist?' or 'Do I not exist?'.

Wittgenstein uses the word "I" in two different senses. In normal usage, the word refers to the physical body (i.e. the possessor). When I utter the statement, "I am fat," the word "I" refers to my body. But in another usage, the word "I" cannot refer to the human body or soul. It is the Subject. Neither good nor evil can affect the "philosophical I" or the Subject because it is beyond everything. Like Wittgensteina's usage of ordinary and philosophical "I", Sankara also makes a distinction between the "Self of man, and the "Self-in-man." The Self which is also known as Atman, is the supreme reality. It is one and non-dual. The Mandukya Upanisad says: "This Self is Brahman." It is the "Self-of- man." The Self being of the nature of consciousness is self established. It is devoid of attributes. Being immutable, it has no changes like origination, destruction, etc. But in the case of "Self in-man," the Self is caught up in man's experience — waking, dream, and deep sleep — in association with the three bodies: gross, subtle and causal, which serve as the adjunct (upadhi) of the Self. The Self in-man is the non-Self. The non-Self is what is perceived. Having name and form,

it is endowed with attributes. It is finite and composite. It is involved in action as a factor therein. It is subject to change.

Conclusion

The distinction between body and self is one of the essential features of Indian philosophical tradition. It is believed that there is no reality to it. The self is conjoined with the sense-organs and the mind is the experiencer. The self is like a person seated in a chariot: the body is the chariot, intellect is the driver, mind is the bridle and the sense organs are the horses. The mind is superior to the sense organs, the intellect is superior to the mind and self is superior to the intellect and there is nothing superior to the self. The mind-body complex is an organ of experience subordinate to the self which is its agent. It is an instrument of knowledge, feeling and action. The self is the knower, the enjoyer, and the active agent. The body, the sense-organs, mind and intellect exist for the self. But the self exists for itself. The self is pure, holy, tranquil, infinite, eternal and autonomous. It pervades, vitalizes and moves the body. The *Bhagavad gita* says the body is mortal whereas the self which it embodies in it is immortal. The self assumes a new body when its old body is worn out.

Though the Self by its very nature has no limitation whatsoever, it becomes limited because of its association with the body. As a result, it becomes the agent of action and enjoyer of the consequences of action. The identification or attachment of the Self with the body is due to ignorance (avidya). Avidya not only suppresses the truth about the Self, but also projects the non-Self as the object of attachment for man. When the Self which is non-relational comes to be related to the body and the world, it is no more the Self-in-body or the Self in-the-world but becomes the Self-of body, or the Self-of-the-world; and this "of relation" with the body and the world symbolizes bondage. For attaining liberation what is required is the knowledge of the Self. If ignorance causes bondage by bringing about false identification with the body and the things of the world, then it can be removed only by knowledge; if man can remain himself as the Self without any attachment to the body and the things of the world, i e. if man can remain without the sense of "I" and "mine" even though he is for all practical purposes, tenanting the body, then he is free even while he is alive; he has no "of-relation" with anything. Such a person: is called the liberated-in life (jivanmukta). He is beyond good and bad; he is beyond everything. The Chandogya Upanisad says: "The knower of the Self goes beyond grief." Even death cannot affect such a Self.

One of the important problems which the human being faces in the world is attachment which is considered to be as one of the emotions. The Indian philosophical traditions have stressed the importance of non-attachment towards life. The *Bhagavad gita* suggests that our life should be like the relation between lotus leaf and water. Similarly, the Buddhist as well as Jain tradition emphasized the need to avoid desire or attachment. Attachment is considered as an effect of mind which generates clinging and yearning. As mental mode, attachment compels the mind to attend to objects of enjoyment. Attachment can be destroyed by the true knowledge of the self. Attachment for sensible objects of enjoyment cannot cease until the self is intuited. The ethical text, the *Bhagavad gita* says that desire springs from attachment, and anger arises from desire. Both attachment and anger are products of mind. Anger is a door to hell because it leads s to the destruction of the

self. Anger as a mental mode arises from subjection or oppression by another person, and gives rise to a desire to inflict injury on oneself and the wrong-doer.

Emotions are due to false knowledge. Negligence in the quest for one's real nature produces delusion. It produces egoism which in turn produces bondage and bondage produces suffering. Forgetfulness of the real nature of the Self produces intellectual disorders in a person who pursues pleasure of the senses. Intellectual disorders are the causes of emotions. Delusion is destroyed by discriminative knowledge which is due to the distinct knowledge of the Self. Compassion as an altruistic emotion is characterized as promoting alleviation of suffering. Its function is intolerance of others' suffering. It is manifested as non-cruelty. Lord Buddha has stressed on the importance of compassion and love. The first basic trait of human existence discerned by Lord Buddha is that human life is characterized by pain or suffering. Suffering consists not in the felt discomforts or inconveniences in life; life itself is suffering. The fact of suffering leading to human anxiety was revealed by the Buddha in his enlightenment. The cause of man's threatened existence, the second feature of human existence is man's ignorance. It is mainly caused by false desires or cravings. Ignorance and desires are the theoretical and practical sides of one and the same fact. Buddhism has its parallel in the philosophy of Socrates and Plato, who hold that virtue is knowledge and that knowledge is the gateway to a craft, a skill, a science and moral excellence. The dialogue between Buddha and Ananda at the time when Buddha was going to die is remarkably akin to the Greek metaphor banquet.

Thus, philosophical counselling in India is based on a different methodology. It is more concerned about the development of the individual by transcending the values which are not real values. We see a metaphysical dimension which is based on the development of the individual through various means so that the individual first understands life so that she/he will become a useful citizen for the society.

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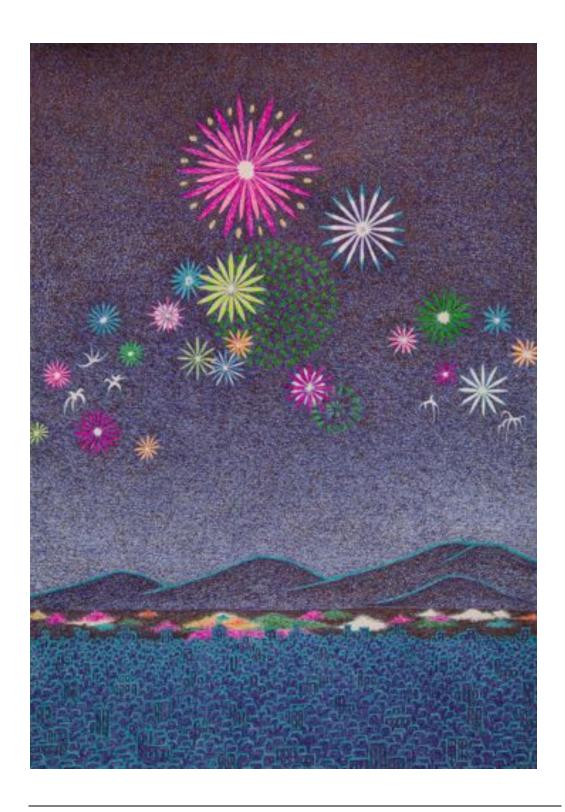
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