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## **Editorial Note: What is Medical? Kumamoto Bioethics Roundtable (1/2)**

This issue and the next issue of *EJAIB* include papers presented at the Third UNESCO-Kumamoto University Bioethics Roundtable -What is Medical?-, held on 12-13 December, 2009 in Kumamoto, Japan. Abstracts for these papers and others presented are on-line.

-Darryl Macer

## **Being Medical: Between the Frontiers of the Natural and the Artificial**

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### **Introduction**

I wish to share some of my ideas on the question: "What is Medical?" A philosophical understanding of being here now, moreover, requires not only my factual presence in this room at this time today but also my being present here in an active and progressive sense of *being* – acting in such a way that I can share whatever knowledge I may have about the topic of our conference.

Philosophers since the time of Parmenides, the Pre-Socratic Philosopher of Elea, have wondered on the primordial question of being. Even a positive understanding of the opposite of being, the notion of nothing which has been touted as an Asian way to negate the so-called western conception of being, must mean something, a nothing or not a thing, in deference to a non-entity that grounds all other particular beings. As the first sentence of the first chapter of the Tao Te Ching puts it, "*The Tao that can be talked about is not the Tao.*" (TTC 27)

The connection between the ground of being and other entities, however, has been debated since modern times as an abyss that cannot be bridged even among finite beings themselves, on the one hand, and the infinite plenitude that grounds all other beings and finite beings, on the other hand. The crux of the matter lies in the

chasm built by modern philosophers between the causal relationships among finite beings by relegating these relationships to the realm of the human mind and not among actual entities themselves. They argue that since even empirical entities themselves are not causally related, it will be more difficult to convince ourselves about an ontological link between finite and the infinite plenitude of being.

Please allow me to propose, by means of an analogy derived from the interactions among finite entities, that this so-called abyss can be bridged if we see the world from the perspective of the dynamic symbiosis of living beings. From the perspective of a country like the Philippines where summer is eternal, even the seemingly inert and inorganic materials such as rocks and sands can be experienced, against the backdrop of the sun and the oceans, as teeming with the processes of living. It is therefore not surprising that we welcome foreigners who visit our shores with the greeting: "Mabuhay!" which means to celebrate being alive in an active and even joyful way.

### **The Act of Existence**

It is no wonder then that the first precept of natural law, according to one of my favourite philosophers, Thomas Aquinas, is to exist (ST I-II, q. 91 a 2, c.). All other activities such as breathing, eating, procreating, reading a book, becoming friends with others, are derived from this initial act of existing. We would not be able to experience anything at all if in the first place, we did not exist.

The act of existing, however, must express itself through the finite entities that we experience in our daily lives. A being that does not express itself in a particular way, even if such expressions are made in a seemingly passive manner such as listening or meditating, might as well not exist since we would not be able to even encounter, let alone know, its being. Even diseases express themselves through symptoms exhibited by the patient. A diagnosis cannot be completed if the client does not cooperate and withholds information from the doctor. Even our sophisticated medical instruments are meant to receive information from the involuntary action or behaviour expressed by an illness.

The art and science of healing, therefore, can be defined as an attempt to support the natural capacity of a being to express its particular form of existing. These medical interventions can range from conservative methods of regeneration, such as rest and sleep, to invasive procedures, such as excision or organ transplantation, that intend to save the biological existence or life of the client.

### **The Natural and the Artificial**

The line between natural healing procedures and artificial interventions can be drawn at that point when external elements such as medication and operative procedures are introduced into the body order to support the client's inherent capacity to heal himself or herself.

The success of medical interventions ultimately depends on the natural capacity of the client to receive the external mechanisms that are intended

to support its life. Self-medication, for example, is not advisable because of the possibility of over-dosage or unintended consequences that can produce harmful side-effects. Medical practitioners, as experts in their fields of endeavour are supposed to determine the mode and measure of external interventions that can help the healing process. But this again presupposes that the physical constitution of the human body must always already have the inherent capacity to receive or even reject the introduced intervention if the prescription or medical procedure is to become successful.

Nature, therefore, defines the way existence is expressed through particular forms of being while artificiality refers to the external support made by medical practitioners as a means of sustaining and enhancing the various expressions of being: plant pathologists diagnose and cure plant diseases, veterinarians study and heal the physical pains suffered by animals while medical doctors estimate the quality of human life attainable by their clients with respect to the mental functions that can still be sustained by medical interventions.

This distinction between the natural and the artificial can have implications on medical practice that range from personal and social issues such as the debate between natural and artificial family planning methods, the use of technological innovations that extend the natural power of the human body, psychotherapy, and the decisions required by end-of-life situations.

### **Medical Applications**

The main argument of natural family planning methods hinges on the conviction that life is a continuous process that begins from the moment of conception until death and that the stages of human development cannot be simply divided up into temporal slices, the way David Hume and other skeptics tried to do. The whole created world, for those who believe in the sanctity of life, is intimately interconnected and every being ultimately derives its existential dignity from the pure act of existence that shared its own act of being by making other beings be.

Artificial family planning methods that range from contraception to abortifacients, on the other hand, presume that the dignity of the human person can be defined only at particular moments of the process of physiological development such as the emergence of the nervous system or the transient awareness of feelings. As one Church document puts it, life cannot be divided up into segments of time, such as the fourteenth day when the embryonic cell has not yet divided itself into various parts to produce the different organs of the human body (*Manila Standard*, Aug 18, 2000).

Sexual union, it is further argued, is a process of participation in the act of existence and that those who make use of artificial contraception merely extract the pleasure of self-expression from the possibility of participating in the momentous event of co-creation (LR 51-54). The human body, therefore, is conceived as the incarnation of a more profound spiritual dimension that derives its

dignity from the umbilical chord of the pure act of existence.

Technological innovations that extend the power of the human body are made possible by the transcendental power of the human mind that reflexively turns into it in order to abstract ideas and concepts from the particular contingencies of the material world. That we are able to conceive of words and ideas that point to realities that are valid not only here and now but can be relied upon as self-evident when we deal with other similar instances in the future and in the past refers back to an intellectual activity that can be performed only by actors that can transcend the particularity of contingent experiences. This is perhaps the most viable argument for the immortal existence of the soul since ancient times.

The power of words to heal or hurt the human body has been demonstrated by Jürgen Habermas in his seminal work on *Knowledge and Human Interests* where he showed how psychotherapists must allow their clients to take responsibility for their illness by allowing the latter to overcome the psychological and social distortions that block self-understanding and emancipated decision making on the affairs of everyday life. (KHI 235)

Habermas contends that contemporary philosophers, like psychotherapists, must act as facilitators of communicative competencies so that conflicts that arise from the particularity and plurality of specialized discourses can be reconciled by referring them back to the affairs of everyday life. Habermas' proposal is not really new to the phenomenological tradition where philosophers have demanded that we "return to the things themselves" (Husserl) or "to unconceal being (aletheia)" (Heidegger). The only difference that Habermas tries to make is to reveal the validity of our claims through communicative acts.

Specialists in the medical profession are thereby compelled to explain their theories and practices in terms of linguistic utterances that can be confirmed or falsified and validated by everyone else. The democratic impulse that derives its power from the intelligibility of life and the capacity of human minds to comprehend the world at large can very well be extended to the medical profession as it deals with the most intimate and privatized dimensions of the human body.

Even end-of-life decision making is intended to save and extend life as far as possible. Organ donation, for as long as it does not cause the death of the donor and the organ is compatible with the recipient, for example, can become an act of generosity that extends the quality of life of another human being even after the death of the donor. (MMC, 88)

### **Conclusion: Medical practitioners as mediators between the natural and the artificial worlds**

If the first precept of natural law governs self-preservation and the extension of life as far as possible, the second precept expounds on the diffusion of the act of existence by sharing the various modes of being with others: Plants expel oxygen and produce flowers and fruits for our

consumption and appreciation, animals take care of their offspring or are consumed by other animals, human beings share their knowledge with others through their speech acts and other educational endeavours. The inherent natures of different forms of beings are actually fulfilled by sharing their very being with others.

Medical practitioners, therefore, are in a distinguished position of serving as mediators that bridge the gap between the natural desire of human beings to extend their lives as far as they can, on the one hand, and the frailties and vulnerabilities of embodied existence, on the other hand. The artificial interventions made possible by advances in the development of science and technology are produced by the human mind in order to extend the lifespan and improve the quality of life itself.

One of the most profound paradoxes of life, therefore, is that it is lived most profusely when given away in the same manner that seeds must be buried to the ground in order to grow and bear fruits (PBE, 62). The products of human intelligence, like medical knowledge, must be applied and shared if wisdom is to be attained by its practitioner. Such acts of self-giving is a dictum of nature that can be characterized by nothing else but an ontological love, the diffusiveness of the inherent goodness of being for the sake of others.

It is perhaps appropriate that we momentarily pause at this point of our reflections and open the floor for discussion on this session which is aptly entitled "The spirit of medicine and love."

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## **Medical Uncertainties and Patients' Decision Making**

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### **1. Introduction**

It is often reported that despite various efforts on the part of medical providers to inform patients of their medical conditions and to encourage them to make their own decisions about treatments, patients tend to have difficulties in understanding the information disclosed to them and, further, in making decisions about which options to choose. Patients often blindly follow whatever is recommended to them by medical providers, and

due to this, many physicians come to feel that all the efforts to make the technical information accessible to lay people are more or less in vain, and to doubt what informed consent is for, e.g. whether it is simply a legalistic ritual or not.

This paper tries to explore patients' attitudes in the informed consent situation. Quite often the step from understanding to decision (consent) is conceived in intellectualistic terms: the decision follows naturally, once the necessary information has become available and the patients make clear their values to themselves. In reality, the patients have to struggle to find an answer in a world full of medical uncertainties. Whatever decision they finally reach, there may be a dynamic process of receiving input and transforming it so it suits their own individual needs. This aspect will be called the gambling phase. First the standard version of informed consent will be briefly reviewed. Next, risks will be identified as the biggest stumbling block when the patients try to make medical decisions. A reported case is brought in, to illustrate that not intellectual problem solving but rather gambling, or taking a chance, plays a central role in the process of decision making. Then some comparisons with other theories are made. This will be followed by some implications from the gambling thesis will be considered. Lastly a modest proposal is submitted.

## **2. The standard version of informed consent**

It is widely agreed that informed consent consists of the following five elements: (1) disclosure, (2) comprehension or understanding, (3) voluntariness, (4) competence, and finally (5) consent (or decision).

With the background conditions that the patients can understand various situations (as in 2) and can make judgments about them when necessary (as in 4), and that there is no coercion from the physicians and/or others (as in 3), the patients receive information about her medical conditions from physicians and also are offered some treatment options, together with information of the benefits and risks of each (as in 1). After considering each option's merits and demerits, using their own values, the patients are supposed to make a decision about what treatment to receive. In the course of the decision making processes, they may consult with physicians, friends or other patients, and even seek advice from them, but the final decision is supposed to be the patients' own. It is expected that they make rational enough choices and that the final decision is reasonable to themselves as well as to others.

## **3. Risks: perhaps the greatest difficulty for the patient**

In our everyday lives, we are surrounded by various risks. Even in routine parts of our lives, like commuting from home to office, there could be devastating accidents which may greatly affect our ways of living thereafter, as is sometimes reported in the media. How do we cope with those possible risks? We are unable to guard ourselves against all possibilities, since for one thing we cannot enumerate all of the remote possibilities and for another what few risks known to us are still too

many for us to be prepared for. We may want to take precautions against the kinds of events which have received a lot of media coverage, or which affected our personal acquaintances. Yet, considering the whole range of risks awaiting us, we only randomly select some to guard against. Probably from a self-defense instinct, we try to ignore or look away from the myriad of possible risks, and continue with the ordinary course of our actions, assuming things will go on as before. When reminded of any of the possible risks, some people may be embarrassed and uneasily turn away their eyes from those possibilities. Some may even laugh at those who mention them, as too cowardly, thinking that those risks will never materialize in their own lives.

Informed consent in clinical settings does not allow this kind of attitude. Typically the patients receive information about the diagnosis of their condition, and then about treatment options to alleviate or cure the problem. If they are unwilling to face various risks, the second component of the doctrine, i.e. understanding, is compromised to a great extent, and the whole process of informed consent is undermined. The more faithful the medical providers are to the ideal of patients' self-determination, the more explicitly they are bound to emphasize the risk factors inherent in each option. The patients do not have recourse to the self defense mechanism they employ in everyday life, but instead they are forced to face those risks directly and squarely.

The problem for the patients is not simply that they are scared of the possibility that some risks disclosed in the course of informed consent might materialize in their own case and consequently they have to endure some serious adversities. More importantly, they may be unable to navigate the world of uncertainties and compare the positive values from the benefits with the negative values from the risks. Typically, information about benefits and risks is given in statistical terms: such as the success rate of the intervention is 80%, or the risk of becoming bedridden is 2% etc. If one can survive some type of cancer 100%, by going through excruciating chemotherapy, the decision to be made is painful but still relatively easy: it depends on how much pain and suffering one is willing or resigned to endure, to attain full remission which is a high positive good.

On the other hand, when the benefit hoped for is not certain but has only a high success rate, decision making becomes quite difficult, since all the pain and suffering to be sustained might turn out to be in vain. Thus, the addition of only one probability factor makes decision making too complicated. Furthermore, when there are several treatment options, the situation may become hopelessly hard to manage. For instance, Treatment A promises the benefit of full recovery at 80%, with the risk of mild complications at 10% and of severe complications at 10%, while Treatment B promises the benefit of full recovery at 70%, with the risk of mild complications at 25% and of severe complications at 5%. Is there any

reliable way that helps us to choose from these two options?<sup>1</sup>

Decision theory tries to show the best possible way to cope with uncertainties. But “the best” here means only “the most likely way” to attain a certain goal, based on a certain method of calculation. For an individual who needs the assurance that a certain course will help him, what this theory offers is another kind of uncertainty. One well-known version is the method to maximize expected utility. In this method, when presented with a possible intervention, what we are supposed to do is on the one hand to ascertain the utility levels of the expected benefits and adverse effects and on the other hand to identify the probability of each possible outcome. By multiplying each utility (positive and negative) with its probability and then summing those probability-weighted utilities, we obtain the total utility of one intervention. By repeating this procedure for each intervention, we can obtain the utility values of various treatments and rank them on a single scale. Then we are supposed to choose the treatment which ranks highest. However there are serious difficulties when patients want to adopt this method for their own decision making. The first problem is the difficulty of assigning a numerical utility to each risk: if a serious, though remote, risk is death, its negative utility is too high to be comparable with any other possible outcome. The second, and more important, problem is that probability, the basis of this method, depends only on the average outcomes, while the patients’ concern is their own individual case, i.e. whether they themselves, not the general public, will benefit from a specific intervention. This method may well be appropriate for physicians who try to find the appropriate clinical policies, or who are in a position to give advice to their patients. It is doubtful if this method will be helpful to patients who came to see physicians with their own individual problems. A 99% rate of success may not be assuring enough, and a 1% rate of a serious risk may be confusing or frightful enough.

It may be claimed that this is exactly where patients’ values become relevant. Even though it may be impossible to assign a numeric value to each possible outcome, whether a benefit or risk, it is claimed that patients could give a rough weight to each possibility or at least each of the important possibilities, based on their general view about life, or on their direct or indirect experiences about illnesses. Nevertheless, it is questionable how much help those values could offer for making a decision regarding their current problem. For instance, many people may want to have “a peaceful death”, not excessively controlled by high medical technology.

This kind of view is, however, too general to be applied to a specific situation at hand, since today any kind of medical intervention has a possibility of

moving toward a “wild death” and it is hard for anybody to see the boundary which separates ordinary from extraordinary treatments. Or, people may have strong convictions about some specific interventions. For instance, a person may have a strong aversion to invasive surgery in general because of his own personal experience. Yet, should he have another serious disease unfortunately and once again have the option of a surgical intervention, he himself would think it is myopic to avoid the option simply because it involves a surgery. Each new situation presents new dimensions of decision making.

*“Once informed, patients are supposed to ask which treatments best promote their “values.” This assumes that patients have relevant values; some set of beliefs that is coherent and considered enough that a decision can be deduced from it. But people have better things to do than formulate principles for problems they hope will never arise. In fact, for most of us much of the time, we find out what we value by observing what we chose. It is hardly too much to say that our “values” are the explanations we give for our choices, not their source.”* (Schneider, 2005: 290)<sup>2</sup>

The sarcasm in “people have better things to do” aside, the enormous variety and complexity of clinical situations is too much for people to consider in advance about what to do if each one of those situations should arise.

#### 4. A case

In this section, I would like to put forward a hypothesis about a key element in decision making processes: gambling or taking a chance. With no resources available to deal with risk factors in satisfactory ways, patients may abandon their initial rationalistic attitude and decide to gamble on one intervention from the choices given to them. To illustrate this, we will look at a reported case of a patient reaching a difficult decision.

The protagonist in this case is Meg Gaines, Professor at the Law School of the University of Wisconsin-Madison, as related in a newspaper article, “Awash in Information, Patients Face a Lonely, Uncertain Road.” (Hoffman. 2005):

*Nothing Meg Gaines endured had prepared her for this moment. Not the six rounds of chemotherapy for ovarian cancer that had metastasized to her liver. Not the doctor who told her, after Ms. Gaines was prepped for surgery that he could not operate: a last-minute scan revealed too many tumors. “Go home and think about the quality, not the quantity, of your days,” he said.*

*Not the innumerable specialists whom Ms. Gaines, then 39 and the mother of two toddlers, had already mowed through in her terrified but unswerving effort to save her own life. Not the Internet research and clinical trial reports, all citing the grimmest of statistics. Not the fierce, frantic journey she made, leaving home in Wisconsin to visit cancer centers in Texas and California.*

*Now, just about out of options, Ms. Gaines faced an excruciating decision. Her last-ditch chemotherapy*

<sup>1</sup> Some suggest we could further distinguish between several types of uncertainty (Politi et al, 2007: 682). In this paper, however, we use the simpler conventional way of understanding risks, since this is the kind of information patients usually receive from medical providers or other sources.

<sup>2</sup> The observation that the word “value” is often used to explain or justify the choice already made will be instructive in light of the following argument in this essay.

regimen did seem to be working. Three medical oncologists thought she should stick with it. But two surgical oncologists thought she should first try cryosurgery, injecting liquid nitrogen into the tumors to shrink as many as possible, and then following up with chemotherapy, allowing it to be more effective.

The catch? Ms. Gaines's chances of even surviving the procedure were uncertain.

"Who will decide?" she asked a surgeon from Los Angeles.

The doctor then recited what has become the maddening litany of medical correctness: "We're in the outer regions of medical knowledge," he said, "and none of us knows what you should do. So you have to make the decision, based on your values."

Ms. Gaines, bald, tumor-ridden and exhausted from chemotherapy, was reeling. "I'm not a doctor!" she shouted. "I'm a criminal defense lawyer! How am I supposed to know?"...

Ms. Gaines was out of time. She had to make a decision. She felt the chill of mortality and the full weight of nearly a year of drastic operations, blood clots, a punctured lung, chemotherapy, research, traveling, countless specialists and unanswerable questions bearing down on her.

"Who's in charge here?" she thought that night, wishing someone would just issue her marching orders. "Oh. I am."

She endured a long ordeal of fighting ovarian cancer, and now again she had to choose one from two treatments: continuing the chemotherapy which seems to be working on one hand and cryosurgery first, to be followed by chemotherapy on the other. There is some sign that the present chemotherapy will improve her conditions, but there is no guarantee of its effectiveness. The other option seems more promising, at least in theory, but it has a devastating risk: death. Then how did she reach a decision?:

"When Meg Gaines was a little girl, her father, a lawyer, was transferred to Belgium; the family arrived scarcely 20 years after the end of World War II. She grew up keenly aware of European history, visiting concentration camps and battlegrounds, learning about military strategies.

What was the best way to fight her war against cancer, she asked herself that night in 1995, as she struggled to decide about treatment. Stay the course with chemotherapy or risk the cryosurgery first, which, back then, was a relatively experimental and possibly lethal procedure?

"What made sense to me was to bring in the air force and bomb the hell out of the tumors and weaken them," Ms. Gaines said. "Then go in with the infantry. And so I decided to do surgery plus chemo, not just chemo."

As it happened, the Los Angeles surgeon found only one big tumor. The others, which had earlier scared off the liver surgeon in Wisconsin, were just blood density irregularities and benign cysts.

Eighteen months after Ms. Gaines's cancer was detected, she returned to her job, teaching criminal law and supervising students defending prisoners...."

She gives a reason for her choice: in World War II, the Allied Forces adopted the strategy of bombing German cities first and then attacking the weakened Germany with land forces, with much success. The same strategy would work in her war against cancer, she hoped. Yet a little reflection will uncover how unreliable this war analogy is. In wars, this strategy does not always

lead to victories. For instance, during the Vietnam War, the American military used the same strategy, and failed miserably on Vietnam soil. If she had been only a bit more objective and rational, she could not have made the treatment decision, which was based simply on this World War II episode. Moreover, as a criminal defense lawyer she must have been familiar with litigations and the various strategies employed there (which are wars, so to speak). A strategy which was successful in one case will not necessarily be successful in another case, and everyone is aware of the diversity of such situations. Every new case requires examinations of its characteristics and comparisons with past cases.

Thus, we could say that her decision was not the result of rationally comparing and ranking the alternatives, based on her "values," as is envisioned in the standard informed consent doctrine. Then, how did she reach the decision and what role did the reason of the war analogy play in her decision making process? I will present two possible scenarios which, hopefully, are not so implausible.

Let us recall that the choices presented to her were a) chemotherapy alone or b) cryosurgery to be followed by chemotherapy, both with potential benefits and risks. One possible scenario is that somehow she recalled the successful war strategy during World War II, and hoped the same strategy might work in her case. But, as we saw above, there was no guarantee that this would be the case. This suggests that she decided to look away from the severe risks involved in the cryosurgery and to hope for its success in her case. She decided to narrow her perspectives and focus only on the possible positive results of the surgery. Another possibility is that she was worried about the benign improvements from the present chemotherapy, and she hoped a more drastic intervention might open up a new horizon. But how did she make the jump to this new level, against the advice of some professionals? At that time, she recalled the war strategy and told herself that there are cases where drastic measures bring forth good rewards. She relied on this example, as if grabbing at a straw, to convince herself that there is a good reason to go through with the surgery.

Indeed, there may be other possible scenarios, but I would like to contend that generally speaking, at the time of decision making, the patients decide to mainly look at the promising aspects in the choice they make, and to discount, or look away from, the risk factors: the risk factors which they needed to know so badly in the initial stage of information gathering. At first, they try to gather as much and as accurate information as possible pertaining to their own problems, but that intellectualistic attitude cannot be maintained until the end, since there is no theoretical solution to find a sure way to success and recovery in their own particular case, because of the risk factors in any alternatives they encounter. They are forced to choose one treatment, and yet cannot decide by simply tossing a coin. They need a reason for a treatment, however thin and one-sided it may seem to other people, and once they find one, they

decide to stick to it. This is to gamble, or to take a chance, on one treatment, hoping it will succeed. Here the original intellectualistic attitude is transformed into a more emotive attitude, not unlike prayer.

### 5. How other theories see the decision making process

In their definitive work on informed consent, Faden and Beauchamp discuss a lot on "substantial understanding" but do not say much about the decision making process itself. They mention factors like novel and alien information, lack of time, and stresses coming from anxiety or fear, as barriers to substantial understanding. Yet once the patients achieve sufficient understanding about their condition and treatment choices, the authors seem to imply that autonomous decisions follow naturally for the patients. They do mention the difficulty of making decisions, describing "such specific task-oriented competences as the competence to decide while in agonizing pain whether to undergo a specific medical procedure that carries a risk of a particular type and degree" (Faden and Beauchamp. 1986: 289) but this kind of observation is found rarely and is mentioned only in passing.

The following passage may be instructive to see the general orientation of their approach, and also to test my hypothesis:

*"Both of these factors—time in which to make a decision and the belief that there are alternatives—are typical features in informed consent situations that professionals frequently can manage for the better but often do not. In many clinical situations, especially in surgery, consent is formally solicited and information given immediately prior to treatment, when there is little time to make a decision. By this point the patient has already made a decision for surgery, perhaps by default. A major behavioral commitment to taking some action is made merely by voluntarily entering the hospital. It is not surprising that a typical response in such a situation is to distance oneself from information that challenges the original decision for surgery—including, paradigmatically, the kinds of risk information typically included in a core consent disclosure. This style of coping with acute decisional stress helps explain why many patients' capacity for remembering the risks of treatment is lower than for any other category of information. Who would want, on the eve of surgery after having disrupted one's life, gathered one's courage, and entered the hospital, to change one's mind? And thus who would want to pay attention to information that challenges the wisdom of the decision."* (Faden and Beauchamp. 1986: 325)

The authors suggest that the kind of information disclosure a patient receives just before surgery should have been given before hospitalization. This would have improved the patient's understanding and would have led to better decision making. But "better" in what sense? It is better only if we can assume that substantial understanding leads to a more autonomous

decision and then further to a better outcome. However, as we saw in the above case, an autonomous decision is not possible simply because a patient obtains substantial understanding. Indeed, substantial understanding may make an autonomous decision making more difficult. Furthermore, it is not necessarily definitely better, in terms of a good outcome of a chosen treatment, which is the main concern for the patients. There is no assurance of success in any chosen course in the world full of uncertainties.

Rather, this passage suggests more about the psychological state of the patient after making the decision. As pointed out in the text, the decision for surgery was made prior to hospitalization. The information the patient used when making the decision might have been far from substantial, but still he made the decision and entered the hospital. When he was an outpatient, he must have received some information about the proposed surgery, including the benefits and major risks attending it. In addition, quite naturally, he must have weighed the merits and demerits of going through the surgery. Even though he knew there are risks, some potentially life-threatening, he finally gathered his courage and decided to take the recommended course. Having made up his mind, there is no point in reviewing the decision making process or in comparing various risks and benefits all over again. This will simply destabilize his state of mind. Instead he would be better off not dwelling on the possible adversities. That is, he decided to gamble on the surgery and to pray for the best possible outcome. This may well be true even of the people who made decisions after receiving "substantial" information about their diagnosis and treatment options. There is no alternative which guarantees the best result, and the substantial understanding of alternatives will serve to show more vividly the uncertainties inherent in each option.

Becky Cox White, in her book, *Competence to Consent*, takes into account what I call the gambling factor. Among the capacities that she mentions define competence to consent is, in addition to the familiar capacities like that of processing information and of reasoning about alternatives, "the ability to resign oneself to the choice."

*"People rarely face situations in which there is one, and only one, perfect choice. Rather, they must usually make "the best choice, all things considered." They may, therefore, harbor doubts that their choices really were the best ones. Their cognitive emotions may be in flux and their felt emotions may include ambivalence, and if their choices are unpopular, others may repeatedly attempt to persuade them to reconsider.... Nonetheless to proceed with the tasks ahead, he must persevere in his choice. Persistence in one's decision, both publicly and privately, is necessary for all parties to get on with what needs to be done. This persistence is particularly difficult if the ensuing course is in any way onerous, because it will require him to undergo disagreeable experiences. Such choices are best undertaken*

*with a sense of purpose and commitment to the designated end. Persons are more likely to succeed if they can dedicate themselves to a course of action. Their perseverance, especially in the face of uncertainty or dismay at what may follow, is what is meant by resignation.”* (White. 1994: 178-179)

She goes on to discuss “Its relationship to decision making.”

*“Many choices are only one among several possibilities. Often estimates of burden to benefit ratios and probabilities are uncertain; often the database is incomplete. There is, therefore, a certain amount of hesitation about the correctness of any serious decision. Insofar as possible, information deficits ought to be corrected; but it is probably never possible to eliminate them completely. Ultimately it becomes necessary to proceed in spite of these limitations. That one makes a choice does not, in and of itself, erase the concerns that attend it. As a result, persons may find themselves in the position of having to reassure themselves on an on-going basis about their choices.*

*The decision maker can usefully review the process that led to the decision, recalling the factors that told both for and against the ultimate choice. (Clearly, this review will require the same capacities that went into making the decision in the first place.) Resignation to a plan allows decision makers to undertake the tasks required for its successful completion. The relationship of resignation to decision making, then, is that this capacity empowers persons to act on their decisions. Persisting in one’s choice allows its implementation and, hence, the promotion or preservation of the values that are the aim of the decision.”* (White. 1994: 179-180)

She rightly points out that patients have difficulties making medical decisions and, even after making decisions, remain skeptical as to whether their decisions are sound and appropriate, due to uncertainties surrounding medical interventions. Furthermore, to proceed in this environment, they need some kind of reassurance at all times.

Still, we might wonder if we could call the attitude of resignation a capacity. From the viewpoint of medical providers, the patients who change their decisions quite often or who express doubts or anxieties about the decisions many times are hard to manage, hence those who persevere are seen to be more capable of receiving medical treatments. From the viewpoint of the patients themselves, however, they are more or less forced to follow the course they have chosen, in spite of various uncertainties, and that attitude may not be something they could proudly call a capacity. Also, it is doubtful whether they “are more likely to succeed if they can dedicate themselves to a course of action.” If one’s subjective attitude alone could greatly influence the outcomes of various undertakings, the world would be a far happier place than it is now. Finally, again it seems unlikely that the patients, once resigned, are willing to “review the process that led to the decision, recalling the factors that told both for and against the ultimate choice.”

Such a review would lead to facing again the doubts and confusions they had to go through before making the decisions. People are unlikely to want to navigate in this uncertain world over and over again, as can be seen from the previous quote taken from Faden and Beauchamp.

If the above comments on White are acceptable, the kind of reassurance patients obtain must come from discounting risk factors in medical interventions and hoping for the best possible outcome in their particular cases. This is exactly what is proposed as the gambling phase in the decision making process.

## **6. Implications**

There are several implications if the above argument is plausible and there is an element of gambling or taking a chance in many decision making processes.

The first could be called the paradox of information: information is sought only to be forgotten. Initially, the patients want to have as much accurate and objective information as possible. But at the time, or around the time, of crucial decision making, they try to sort out the information and to retain only the part they need: benefits of the chosen intervention, and possibly the risks of other interventions. This is necessary on her part to get started with the chosen course; otherwise they will stay tormented by possible adverse events, or remain ambivalent about the choice they made.

Physicians today take pains to give the patients accurate information about their medical condition, hopefully in lay language, so the patients can make decisions on their own. Often, however, physicians express frustrations, since the patients do not seem to understand their own conditions well enough, or even to be eager to listen attentively. But we should notice that no one decides a matter which seriously affects one’s life, simply by tossing a coin. In every decision making process, there are phases of information gathering, and also of gambling and praying (sometimes they may coexist in the same mind simultaneously). The amount of knowledge required for moving from the former stage to the next varies from person to person. Some need a very little, while others a lot, like second or even third opinions. It is not surprising, therefore, that the knowledge of some patients at the gambling phase may well be insufficient or even distorted from the professional point of view.

From this observation follows a second implication. Silent consenters are often seen as an obstacle to implement informed consent in medical settings. In order to respect, or promote self-determination on the part of the patient, physicians are supposed to inform the patient of as much information as necessary concerning his medical conditions and possible medical treatments. However, there are a sizable number of patients, everywhere, who do not pay enough attention to the disclosure, and seem to listen passively to whatever is told to them and further to consent without enough understanding to whatever is proposed by physicians. For physicians, there is every reason to come to

believe that informed consent is almost a ritual or necessary evil which could not be skipped in case there should be some complaints afterwards from the patients or their relatives.

Yet it is unrealistic to suppose that seemingly passive patients do not care about their own health. The only difference between them and the so-called informed consenters may be in the amount of information needed before making decisions. Silent consenters may have blind trust of professionals in general, or some good reputation of the medical facility may be enough for them to gamble on the possible treatments they may receive. Observers may be quick to point out that this attitude is myopic or too one-sided, and that patients should be aware of the pitfalls. However, do informed consenters decide on the basis of omniscience? Both silent and informed consenters live within human limitations, and both at some point in the decision making process decide to leave matters of life and death to others and luck. In sum, silent consenters do make decisions on their own about matters which affect their lives a great deal, just as informed consenters do, even though their attitude may look vastly different from that of informed consenters.

A third implication is that some studies concerning informed consent may in fact be misguided. Once informed consent is adopted as public policy, it has to be evaluated objectively and reforms should be undertaken, if there is room for improvements. For this purpose, some scholars undertake research to measure the level of understanding on the part of patients. Some studies concentrate on how much patients remember the information they received before and during treatments periods. If they remember less than they received, it is taken to be a sign of insufficient understanding, and this is supposed to represent a need for reform, both in the way the information is disclosed and in the patients' attitudes.<sup>3</sup>

However, if the above analysis is plausible to any degree, patients do not simply weigh the risks and benefits of treatments and then decide to take one course based on their own values. They take intellectualistic and objective approaches and also, more importantly, gambling approaches at the crucial moment of decision making. During the latter approaches, the information they received is transformed in patients' minds and may take a different shape. Hence they may answer the same question differently, depending on which phase they are in. The "scientific" research about

patients' understanding often misses the dynamic structure in decision making processes.

### 7. A modest proposal

The implications mentioned in the last section may sound quite critical of the standard informed consent doctrine, but it does not mean that we should give up its whole idea. Instead, the above argument simply implies that the official doctrine puts too much emphasis on the element of understanding, as if people can reach a decision simply through understanding their situation and their own values. Though it is beyond the scope of this paper to work out a new theory of patient-medical provider relationships, some practical suggestion may be in order.

The implications above suggest that informational needs vary, first from person to person, and second within the same person from time to time. It may be too difficult for medical providers to accommodate the diverse or ever-changing informational needs of the patients in satisfactory ways. As a compromise it could be suggested that they have several information disclosure models, from simple to exhaustive, rather than one model, for representative diseases. Then, the patient can start from the simplest one and, if he wants further information, could have access to the more exhaustive explanations. Of course the preparation of such materials requires a lot of work and is beyond the capacity of individual medical providers. It will be possible only by the joint effort of medical societies. Still, by adopting this way of information disclosure, physicians could be sure whether the message they are trying to get across is received by the patients more or less accurately, and further escape the frustrations they encounter when facing "silent consenters."

In this connection, we may recall what was at issue in the history of informed consent litigations in the United States from the fifties till the seventies. The focus was how much physicians should disclose to patients about the risks of any medical intervention: whether a risk of 1 % should be disclosed or it should be withheld since it may scare away the patients, and thus prevent them receiving necessary treatments. First the professional standard was proposed, i.e. the amount of information physicians usually disclose to patients. Dissatisfied with the professional oriented nature of this standard, next the reasonable patient standard was proposed: what average reasonable patients want to know should be disclosed. However, this patient oriented standard, on one hand, did not solve the difficulties of demarcating the amount of information to be disclosed, since it was hard to see the needs of the reasonable patient in general. On the other hand, it was criticized for not accommodating the needs of each individual patient.

What was common in these proposals was that they centered on the duty of physicians to disclose. My proposal above is more patient oriented: if the patients want to know more, they can easily have access to a more exhaustive version, while if they want to stop at a minimum

<sup>3</sup> E.g. Bowling & Ebrahim, 2001. This is the introductory essay to the Supplement titled "Engaging Patients in Decisions." What they consider the general framework of decision making processes consists of the following 4 phases: 1) background factors such as Information, Personality, Experience etc, 2) the combination of Understanding risk, Patient preferences and Professional preferences, 3) Decision making and 4) Outcomes. Here again, there is no discussion about the process from phase 2 to phase 3 and it is assumed that once patients have clear understanding and preferences, they can reach the final decision naturally. This and the other papers in this supplement do address the difficulties arising from risk perceptions, but generally assume that they are the matters of communication and further empirical research.

level that is also acceptable. True, there are cases where patients regret wanting to know more since the more knowledge made them more confused or discouraged, as could be seen from many patients' memoirs. But at the level of public policy, this will meet the informational needs of various patients and also decrease the troubles, legal or informal, stemming from the physicians' specific disclosures.

Those who want to define medicine as a helping profession may not be satisfied with this lukewarm compromise. They emphasize that they should also address the spiritual needs of patients. But it is doubtful how much help they could offer to the patient at the crucial moment when he has to choose one of the risky interventions. So-called professional advice is usually based on statistics, while, as contended above, the patients are concerned about their own individual cases. Indeed, however compassionate the professional wants to be to the patients, it is the patients themselves who have to sustain the consequences of possible adverse events, not the professional who aspires to help. Therefore, there is a limit to what physicians could do, and they have to stay in the peripheral area of the patients' inevitable agony and anguish.

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## The Patient as Subjectivity: Toward a Medical Hermeneutics

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### Medicine as Doctoring

Medicine is generally defined as the art of healing illnesses by whatever supernatural, natural or artificial means are available to healing practitioners in their individual particular cultures. With the globalizing advancement of the empirical-analytical method, medicine has come to be widely regarded as a scientific discipline, and as such, it can be used to diagnose, treat and prevent diseases and injuries regardless of the diverse

cultural traditions found throughout the world today.

Medicine, scientific or otherwise, involves a doctor and patient relationship. In scientific medicine, the doctor usually begins an examination of the patient by way of tracing the patient's past medical history and records. Then, if deemed necessary, the doctor orders medical tests, pathological and radiological, and is able to identify the illness, inform the patient of all relevant facts, and treat the patient with all possible available means to restore his health and/or relieve suffering. The adjective "medical" in this context pertains to the rational procedure of diagnosing and treating, the initiation of which constitutes what is called "doctoring."

### Doctoring and Empathetic Ability

Doctoring typically starts with a dialogue between doctor and patient. This initial encounter requires highly skilled communication on the part of the doctor. The patient is easily taken as an object to be measured by thermometer, indexed in blood tests, portrayed in X-rays and so on. However, the patient is not different from the doctor. He, like his caretaker, is a living being. He relates to the surrounding world and his fellow-beings in thought, feeling and action. The doctor puts himself into the stream of the patient's consciousness, and strives to grasp the pains and anxieties being lived by him. This cognitive process is empathy (Einfuehlung). As we all know, we do not and cannot perceive directly the mental state of the other, alter-ego. However, we always behave as though we can perceive it as if it were a material object we could walk round and round, viewing from all aspects. But the alter-ego has no front or back to show.

Mornings in the kitchen and evenings at the dining room, I interact with my family members as though the doors of their minds were open to me. This sense of openness to others seems quite normal in daily life. Yet, in reality the consciousness of another is closed to my perception. We cannot directly see the subjectivity of the other. The meaning of my fellow human beings is not something demonstrable.

Due to this aporia of intersubjectivity we are always suspicious of strangers, and this makes any intimate interaction with them difficult. It may here be said that this very fact could be attributed to one of the determining causes of the denigration and abuse of human dignity and rights among different ethnic groups found in every society on the planet today. In the absence of intersubjective dialogue, the other can readily appear to me as an object, a mere thing. Consequently, it becomes clear that the chasm between the other and me can be bridged only by demonstrating the coexistence of you and me as two subjects by applying the empathetic ability, which we are born with.

### Medical Hermeneutics

Empathy is a cognitive ability, and it undergoes a series of refinement through our daily encounters with fellow beings as well as through deliberate self-cultivation. A doctor well versed in

the humanities and social sciences will be in a better position to understand symbols and signs coming from the social and cultural background of a patient. It is the empathetic method with which the doctor has access to the psychic phenomena of the patient through deciphering the verbal symbols uttered and bodily movements, such as facial expressions and gestures exhibited during the course of conversation. This empathetic understanding is very much akin to the text-interpretation used in hermeneutics. The ideal doctor-patient relation can be compared with the process of convergence of the horizon of the writer's motif and that of the reader's comprehension. For instance, the reader of *Hamlet* and *The Crime and Punishment* comes to grasp the nature of the types of mental anguishes felt by Hamlet who avenges his father's murder, and Raskolnikov who kills a much hated, parasitic pawnbroker just as their respective authors, Shakespeare and Dostoevsky, intended they be grasped.

When a male doctor interviews a cancer stricken male patient, for example, both doctor and patient find themselves in a face-to-face situation sharing a common sector of time and space. Yet, both do perceive each other's psychic phenomena. The doctor begins to interact with the alter-ego of the patient by availing himself of a common scheme of interpretation in understanding the latter's stream of consciousness. The patient appears in personhood, and as a unified field of expressions, i.e. of symbols through which his mental state supposedly manifests itself to the doctor, and eventually there emerges the horizon of intersubjectivity on which both can meet. While the inner state of the patient's consciousness does not present itself, the doctor can only imagine that the despaired patient is reflecting upon himself looking down the dark abyss with such meanings as death, destructiveness, nothingness and transience of human life, and, in due course, the doctor makes the patient believe how deeply he empathizes with his agonizing moments, thus developing a we-relationship of mutual trust.

Hermeneutics claims that with the interpretative procedure we are able to step into the conscious life of the other when we are engaged in a concrete we-relation. The other is, like me, a subject of thought, emotion and action, and who also endows meanings to the surrounding world in which he lives with other fellow human beings. It is through the interpretative method that the meanings of the world for the other are accessible. The fears and agonies the patients are entertaining are meanings. Most positivists, on the other hand, would argue that these meanings are covert and hence not accessible to us, by demanding that only empirically verifiable data provided by laboratory tests need to be admitted to medical examination.

While informing the patient of all objectively relevant facts is always an important aspect of doctoring, the hermeneutical approach is concerned with those clinical cases where some patients tend to experience these aspects of doctoring, which are solely based on laboratory

data, as dehumanizing for the simple reason that their bodies have been severed from their actual life context. What is important here in doctoring is the development of total trust through acknowledging the integral unity of consciousness and body in patient.

### **The Body as Intermediary of Consciousness**

Hermeneutics attempts to overcome the Cartesian divorce of consciousness and body in the art of healing. The argument sets out from the assumption that my consciousness opens its door by manifesting itself through my bodily movements. Anger and sorrow are internal states of consciousness to which facial muscular movements give expression, and we assume that by means of the other's bodily movements such as facial expressions and gestures we can enter into the innermost part of his consciousness whereby the other and I encounter each other as two subjects.

All living human beings are aware of our own eventual demise. Here arises a question: how do I know I am mortal? We all know that we can never experience the moment of our own end while we witness enumerable instances of other fellow beings' passing away. Yet, we become aware of my own mortality (Eigentod), and also of being-toward-death (Das Sein ZumTode) as one of the fundamental modes of human existence only through the death of the other (Fremdtod). We know that death means the nullification of the other being in the world. Death takes away beloved ones from my presence and never brings them back. In the dread of death the entire world reveals itself as nothingness

. Doctoring needs to be capable of handling the question of death because every illness, internal or external, light or severe, evokes in each of us the dread of death, the fear of being no longer in this world. As soon as the body ceases its functions, consciousness loses its intermediary connection to life. And what remains is darkness. The doctor should not let the patient become engulfed by the dread of death by allowing the world to collapse right before him. He must inject the "courage to be" into the patient's mind so that the patient can stand up and reclaim his existence in the world letting the dread recede into oblivion.

As I encounter the other in his bodily movements of glances, gestures, speeches and so on, I do not see the bodily realities, but I see a living person whom I can work, play and sing with or, at times, shout at and quarrel with. The other's body is the embodiment of his subjectivity by virtue of which he can only exist as being-in-the-world. Within the frame of a doctor-patient relation, the doctor needs to focus only on improving the condition of the patient's existence in the world. Accordingly, the question of morality on the doctor's part would revolve around searching for ways to invigorate and prolong the sound state of corporealization of the patient with all available means.

### **Doctoring as Paradigm of Intersubjectivity**

The doctor and the patient are two individual human beings who have lived from the cradle to adulthood in the social relationships of some kind. Although they were born into a particular community, inheriting a particular language and culture, they have been living in common social relationships involving love and hate, domination and subjection, work and play, and death. These relationships have seemingly infinite forms and variations and they make up ways in which humans coexist. Through these modes of coexistence with others, individual human beings progress in their intellectual capacities of observation and judgment and they develop ways and habits of dealing with self, society and nature.

The modes of human coexistence enumerated here are, of course, not models or blueprints but descriptive of what humanity is. They are intertwined and bound together in all cultures and the lives of all of us in the most intricately experiential and complex ways. No matter how these modes of coexistence are manifest, they are intrinsically the same in every society. In the warm bosom of the caring mother we learn the meanings of oneness and peace. In childhood, we may squabble maliciously with our siblings over toys thus acquire the meanings of conflict and division. Even in childhood, we become aware that small quarrels could lead to bodily destruction of the other, and we also learn to be wise and rational enough to avoid such calamity and to find ways to peaceful coexistence among fellow humans.

More importantly, through the social relationships of work and play we learn the magnitude of human potentialities. Since time immemorial work has been in a form of cooperation. Hunting, and tilling lands, harvesting, building dam, temples, monuments, cities, states, and lastly civilizations of complexity are forms of working together whereby human potentialities are being realized. And play is also a communal activity. After long day's hard work, family and neighbors get together sharing food, and drink drowning the pains of the body, thus lifting the spirit. Wining invites singing and dancing into the land of fantasy where the make-believe is brought to the status of reality. The capacity to imagine and to create alternative realities in the act of play is that through which we learn the true meaning of freedom of self-actualization.

It is a complex of these meanings which we have acquired through social relationships that constitutes the basic structure of inter-subjective communication between the doctor and the patient. For the dying patient, all those ideas about human potentialities and freedom of self-realization would certainly appear insignificant. Nevertheless, self-realization, the dignity of the self does not end in dying. The relationship between doctor and patient can enable a patient to bear the indignities the body suffers in dying because the dignity of the self, the life lived within the dying body are recognized and respected by the doctor. Thus the doctor always seeks to establish intersubjectivity with the patient that allows the patient freedom for self-realization and dignified interaction in the modes of co-existence.

## History of ancient medicine in Iran

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### 1. Pre-Islamic ancient medicine

The Persian Empire from 8<sup>th</sup> century B.C to 7<sup>th</sup> century A.D extended from parts of Middle East to south Asia. In this period Vendidad (the surviving text of the Zend-Avesta) was one of the references of medicine in ancient Persia. From the text of Gathas we learn that: "*clean environment and health are the best for living world*" (Y48.5) and "*Purity for man from birth is best*" [10]. In Vendidad fargard 20, all the herbal plants that remove sickness have been praised. Various parts of the plants were used: root, stem, scale, leaves, fruit and seeds.

In vendidad we can find a total of 282 laws known as the code of Hammurabi that made by the Babylonian king, Hammurabi (1728-1686 B.C). By law, physicians lost their lives when the result of treatment has not been satisfactory [2, 3], or "If a physician performed a major operation on a patient with bronze lancet and caused the patient's death, or he opened up the eye-socket of a patient and has destroyed the patient's eye, they shall cut off his hand" (Law no: 218 states [11]). They used some plants as PAITI (Anti toxin), like Sweet marjoram, Chicory, Star flower and Fenugreek. Nowadays Iranians use these plants as relaxants, anti-headache medicines, and for some skin diseases. A mixture of Garlic and Rye (Seer and Sedab) were used to lower cholesterol, reduce blood pressure and combat heart disease. Aloe wood was used in case of cardiac disease and irregular heartbeat. Bangha was used because of hallucinating effects.

To prevent the epidemics of infectious diseases Vendidad suggested drinking and using Bull's urine. Bull's urine has high acidity effect. So mothers who delivered a dead fetus, must spent some days out of sight of the community and family, drink 3, 6, or 9 bowls of bull's urine and wash their body with it. After that they could come back to family and community. There were some rules for women who were in their menstruation period too. Also using camel's urine was reported between Islamic people.

There was some Archaeological studies in Shahr-e-Sukhteh (Burnt City, Figure 1) in south eastern of Iran that showed evidence of surgery dates to 3<sup>rd</sup> century B.C when a 13 year old girl was suffering from hydrocephaly and she had undergone surgical therapy. Studies showed she lived at least 6 months after surgery [4].

Study of medicine in Persia has a long history. The building of the first academy named the Academy of Jundishapur was started by the Sasanian Emperors in 271 A.D. It was an

academic center for scientists among different lands. The academy of Jundishapur developed as a first educational hospital in the Persian Empire, too [6, 7] (Figure 2).



Figure 1: Remaining part of Shahr-e Sukhteh (Source: [14])

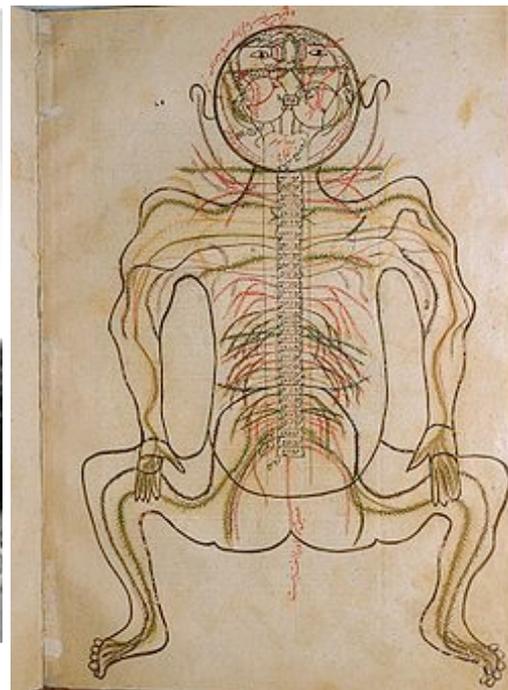
Some of them such as Avicenna and Rhazes were not only responsible for accumulating all the existing information on medicine of the time, but adding to this knowledge by their own astute observations, experimentation and skills. "The Canon" of Avicenna and "Continens" of Rhazes were among the central texts as standard medical texts in Western medical education from 13<sup>th</sup> to 18<sup>th</sup> centuries [5,8].

Rhazes developed several chemical instruments that remain in use to this day. He is known to have perfected methods of distillation and extraction, which have led to his discovery of sulfuric acid and Alcohol.

"The Canon" of Avicenna advises pregnant women: Be careful of constipation, so use *Cotoneaster* as an anti constipation remedy. Do exercise and walking continuously, do not jump nor do severe exercise, do not be angry or sad. Eat fresh bread and soup without spicy taste, using clothes made from wool. He advises mothers to do breast feeding for babies, using musical sounds as a relaxation item for sleeping baby and Starting meal little by little with light soup and light meat. He noticed that sucking in babies is useful against some diseases.



Figure 2: Remaining part of Jundishapur Academy (Source: [13])



At the time of the Arab invasion (630 A.D.), Persian and Iranian science was interrupted. Arabs destroyed educational buildings like universities and libraries, burned books and killed educated people. Scientists tried to keep the science of Persian and resurface them. So in order to save books they tried to translate them and write in the Arabic language.

## 2. After Islamic ancient medicine

Iranian physicians and scientists Avicenna, Rhazes and mathematicians such as Kharazmi and Omar Khayyám collected and systematically expanded the Greek, Indian, and Persian ancient medical heritage and made further discoveries.

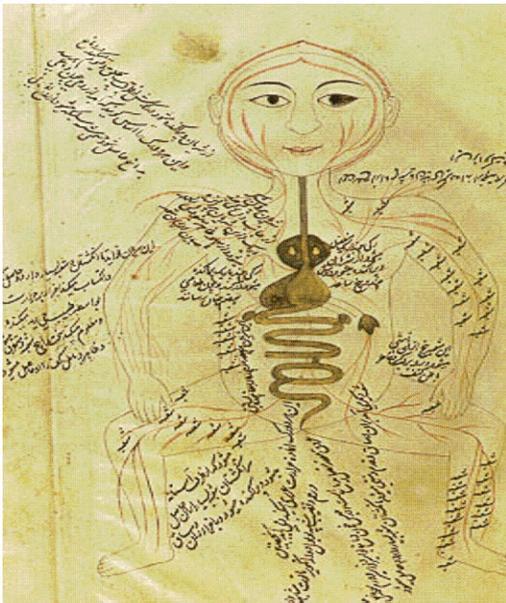


Figure 3: Diagrams of the body's structural, nervous and circulatory systems (Source: [12]).

In order to refresh skin, he advises: Drink milk as breakfast, eat dried figs, dates, onions, garlic, cabbage, and radish and use saffron in meal.

Avicenna by combination of his own experience with Islamic medicine and medical system of the Greek physician Galen, and Aristotelian metaphysics and ancient Persian, Mesopotamian and Indian medicine, developed a medical system [5]. He was a pioneer in neuropsychiatry. In *The Canon of Medicine* (c. 1025), he first described numerous neuropsychiatric conditions, including hallucination, insomnia mania, nightmare, melancholy, dementia, epilepsy, paralysis, stroke, vertigo and tremor.

In the 14th century, the Persian language medical work *Tashrih al-badan* (*Anatomy of the body*), by Mansur ibn Ilyas (c. 1390), contained comprehensive diagrams of the body's structural, nervous and circulatory systems [9] (Figure 3).

In the 10th century Ferdowsi a great Persian writer describes a Cesarean section in *Shahnameh* that the passage illustrates working knowledge of anesthesia and surgery in ancient Persia:

*"An expert Mobed arrived, By the wine made the moon-faced (beautiful Rudabeh) drunken (anesthetized), Without pain her side was cut open, He brought the boy's head in view (delivered the head), It was done so harmlessly, That no one had seen such a marvel".*

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# What is medical for 'resourceful patients'<sup>4</sup> and doctors in the 21st century?

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## Introduction

Scientific methodology has become the major medical paradigm in the 20th century, and it caused major changes in the use of research evidence in medical care compared to 19th century medicine, which was based on experimental knowledge. In the 19th century, research evidence was very simple, and doctors' clinical practice was driven referring to just a few cases they knew. Particularly in the late 20th century, the situation was dramatically changed by statistics. Clinical research methodology was developed to conduct trials on populations, which share common healthy nature, and doctors adapted research evidence, which was obtained from such population based studies, to 'tailor' medical care for individual patients; this is called as the evidence-based medicine, EBM.

In the late 1960s, Feinstein in Yale University propounded the clinical decision making methodology for diagnosis and therapeutic option based on probability theory, rather than previous determinism. It developed into clinical epidemiology in the late 1970s by Fletcher in Harvard University and Sackett in McMaster University. Later, in the late 1990s, synergistic results of several events, such as the growth of Internet, PubMed, a free public database by US National Library of Medicine, Cochrane Library, a worldwide activity to share information of scientific papers with systematic evaluation, encouraged the development and expansion of EBM worldwide.

This movement had a significant impact on medical community, and showed further development in the society. In this paper, the medical care for patients and doctors in the 21st century with the new paradigm, which was emerged by EBM caused movement, will be discussed.

## Impact of EBM

After its introduction at the end of the 20th century in Japan, EBM made a major impact in Japanese medical community to change the clinical research methodology, as well as medical care tradition. Evidence-based approach became common among medical practitioners, as well as

in the process to develop medical practice guidelines.

From the social perspective, so far in Japan, since EBM was originally demanded by, and also of interest to, the medical profession, they mainly drove EBM without active or direct involvement of patients and citizens. By contrast, in other countries, such as in the UK and the US, EBM shows further development in the society beyond the medical community. It was accompanied by the social requirement of reliable medical evidence for valuable medical care for patients, society's valuation of medical services as social welfare, as well as the respect to patients' right of self-determination. To fulfill such requirements from society, huge quantities of medical relevant information need to be evaluated its quality, and be made widely available, so that every stakeholder will be enabled to share same information with experts and participate in the decision-making process in medical practice scene.

For instance in other countries, a wide spectrum of efforts to develop social frameworks have been seen (Muir Gray, 2002). The medical or technical information, such as the results of clinical research, those are evidence, and healthcare technology, have been assessed its reliability and value from EBM perspective. And those certified information has been organized in platforms to make it accessible by anyone in society. Also the systems or skills, which support patients and citizens to access and utilize information sharing the same intelligence sources with experts, have been developed.

This can be understood as an effort to develop the 'resourceful patients', who collect and scrutinize their necessary information to face to their diseases autonomously in the 21st century, EBM age. This movement will encourage cooperation by experts and non-experts, patients and citizens, in medical practice scene based on shared use of information. That is to say, it will change the relationship of traditional experts and patients and citizens, as well as the role of experts in the medical care scene. The patients can know, and actually know everything necessary for them.

## Patients' demand and doctors' role in medical care

Traditionally, the role of doctors in medical care has been basically understood as an aspect of logical operation. It includes to diagnose and to evaluate available therapeutic options. Also doctors 'tailor' research evidence for patients in EBM, give information to them, and communicate with them to make decisions on the direction of patients' treatment.

But doctors' role in the medical care scene doesn't merely follow logical considerations and operation; it shows just one face of medical care. Healing illness doesn't mean only recovering, but also relieving, and to be relieved is sometimes the more significant and central component in the medical care for some patients, especially in

<sup>4</sup> The word 'resourceful patients' was taken from J. A. Muir Gray's book (2002), *"The resourceful patient"*, which shows the general ideas and actual movements mainly in the UK and the US, regarding medical care in the EBM age. A Japanese language edition was published by Saio et al. in 2004, titled *"The patient knows everything"*. The discussion in this paper stems from the information and suggestions of these books.

modern society. For instance, in many irrecoverable illnesses, chronic diseases, or progressive diseases, such as many lifestyle diseases, the after effects of apoplexy and cancer, all of which are very common in today's society, patients often cannot return to their previous physical status completely, even if the effective approaches are available. In such cases, patients need particular support to accept persistent and sometimes progressive symptom and disorder. Patients need particular help to face their emotional response toward events on their body, such as "why such terrible event happens to my life?"

Also patients often need particular care for their anxiousness caused by uncertainty of medicine. By taking scientific nature in the 20th century, medicine could have developed plentiful fruits, such as EBM, but it was accompanied by negative side of science, such as uncertainty relevant issue. Of course medicine has been intrinsically included uncertain nature as other various matters in our life have. But it has not been necessarily recognized that although science definitely contributes to improving the accuracy of diagnosis or prognosis of therapeutic performance by minimizing uncertainty, what science can provide in medical care is still probability, not assurance. Modern doctors calculate probability or the options to minimize uncertainty, but they cannot provide assurance for all patients.

Doctors may actually realize those various aspects of medical care, however patients' demands and what they can or would like to do in it, means that significant dilemmas have emerged in the EBM age (Rushton, 2001). It is a concern if the human nature of healthcare is neglected by the 'EBM revolution', which excessively emphasizes evidence and information, and if the essential element of medical care is abandoned rapidly as 'old-fashioned' in EBM age.

As Michael Balint mentioned, doctors can heal illness, as medicine, by working with patients properly in medical care. Medical care is based on the personal interaction between patients and doctors, and human nature element in healthcare is equally central function as science-based logical feature for patients to be relieved. Doctors may be more than medicine in medical care, which may be far beyond the scope of diagnosis or treatment practice.

EBM inspires clinical practice, which is beneficial for individual patients by 'tailoring' research evidence, obtained from population-based clinical research, for the maximal benefit for the patient. To that end, it is essential to respect patients' individuality also, which includes their preferences and values, as well as the comprehensive medicine perspective, not only a scientific one, to 'tailor' beneficial medical treatment for patients. Also patients often need particular care for their disease considering relevant social matters in their life. Therapeutic options might include not only conventional medicine, but also various approaches, such as complementary and alternative medicine (CAM) or even not to treat sometimes.

For instance, in narrative based medicine (NBM), patients' individual experiences and interpretations regarding his or her illness are also respected with scientific information, and health care providers listen carefully to support patients to develop their new narrative in medical treatment. It has been considered as irreconcilable with EBM in early times, but currently, it is recognized to reciprocally complement with EBM in medical care scene.

Meanwhile, it's getting tough for doctors in the EBM age to cover rapidly advancing and complicated medicine, technical information, and research evidence. Doctors cannot work alone to settle every dimension of patients' illness, including psychological and social dimensions, as well as to be a highly expert medical practitioner. Doctors also need certain assistance by other players including patients in various scenes of decision-making in clinical practice.

### **What is medical care in new paradigm?**

Smith claimed that there has been a 'bogus contract' between patients and doctors, and it needs to be replaced by a new contract (Smith, 2001). Modern medicine includes great possibility and limits, as well as dangerous risks. Uncertainty is medicine's intrinsic nature, even it can be minimized or controllable in modern medicine, and it often causes anxiousness toward patients, which is one of major issues to be faced in clinical practice today. Doctors also have limits, and they need certain assistance by other players in medical care practice. However, such sorts of facts have not necessarily been faced by both patients and doctors. Patients kept their unrealistic views toward modern medicine and doctors, such as that they know everything and can do remarkable things to solve any problems of them. And doctors have not faced and spoken to patients in a straightforward manner regarding such aspects of modern medicine and themselves. This 'bogus contract' between patients and doctors often caused a miserable relationship of them, with disappointment or sometimes angry patients and unhappy or defensive doctors.

The new contract suggested by Smith is that both patients and doctors know and face those facts. Medicine has limited powers and dangerous or risky aspects, and doctors should be open regarding that. Doctors don't know everything, and patients cannot leave their problems to doctors. Doctors need certain support in decision-making in medical care, where patients and doctors are together. Everyone should concentrate on reality, and know each role, what to do in medical care.

Under the new contract, patients and doctors need to work together to develop patients' desirable, and also beneficial, medical care through mutual dialogue and cooperation. In the process, patients need to create and share a picture of their expected medical treatment with doctors. Then patients need to explore measures for it, estimate its feasibility, and take decisions with doctors.

It will be enabled by the systems to support patients and citizens by providing necessary resources and skills, to access to reliable and

valuable intelligence sources, and collaborate with experts in decision-making process, as 'resourceful patients'. These resources should cover a broad range of fields, such as modern, scientific medicine, complementary and alternative medicine (CAM) and other alternative options, and at the same time, should be assessed or certified its reliability and value from medical care perspectives. Resources or support systems for patients, citizens, and healthcare providers, built or provided by not only the government, but also citizens, patients' or patients' families' networks, and so on, are also significant and valuable. Based on such systems, doctors should work as expert players with the responsibility of experts to complement the cooperative process.

'Resourceful patients' collect and scrutinize information using above described resources and skills to face their diseases autonomously. Patients should be put at the center of medical care scene supported by doctors' and experts' complement of processes; it is new patient-centrism. Under the new patient-centrism, such patients are recognized as major players in medical care scene, instead of the traditional 'central position', in which patients are passively blessed with medicine.

This is not an idealistic theory or hypothesis, but an actual movement approached strategically as part of national healthcare policy in the UK, for instance (Muir Gray, 2002). Actually the circumstances are becoming feasible for development of 'resourceful patients' these days, in the Internet era. Information disparity between doctors and patients is getting narrow. Patients can start the efforts toward 'resourceful patients' once they desire the cooperative relation with doctors, and it is almost impossible to stop them and such a movement today. And patients, who can focus on their particular illness, and scrutinize their own problems from every dimension, can become even more knowledgeable in some aspects than doctors, as medical science experts, regarding that particular disease of particular patient.

However, some ethical issues of new contract and 'resourceful patients' should not be left to be examined. Thoughtful consideration is necessary toward the rights of vulnerable people and groups in the society, who will have problems in the new paradigm accompanied by new frameworks. Appropriate support structures should be built for their information access, cooperation with experts, and their self-determination.

The digital divide issue should be also considered. The cooperative relationship with doctors, as 'resourceful patients', should not be the right of privileged patients. As described above, the movement toward 'resourceful patients' by desired people is impossible to stop in modern information-based society. Therefore, the framework to support every patient, who desires a cooperative relationship with doctors, should be prepared. Otherwise this movement may furthermore increase the existing economic and social disparities caused by the digital divide.

At the same time, some patients, who may not be a small minority, may wish to exercise their right not to desire this dialogue and type of cooperation relationship, and their will should be also respected.

Also it is significant to recognize doctors' responsibility as technical experts; any sort of patients' desire doesn't mean shifting responsibility away from fulfillment of the professional duties of medical staff.

### Conclusion

In medical care in the 21st century, 'resourceful patients', or we can call 'empowered health care consumers', and doctors will have dialogue and cooperation to share the decision-making process in clinical practice, realizing a new contract to inspire new patient-centrism.

Mutual dialogue-based cooperation between experts and non-experts may provide certain influences toward patients and doctors. Through the process, patients can be empowered to shape their views toward their disease and develop confident informed choice. And the reflection from direct and mutual dialogue can stimulate both patients and doctors to know one's own self and the other side, their role and the relationship with other players in medical care, which will contribute sharing decision-making process in clinical care more productive.

Although it is still an earlier step currently in Japan, some patients or patients' groups are struggling to face their diseases autonomously as 'resourceful patients' in these days. Appropriate systems are demanded to support every patient, who desires a new relationship based on dialogue and cooperation with doctors. Patients will decide what is medical.

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## Biomedicine as the all-embracing science: Biocosmological perspective

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*"For, truth is rightly named the daughter of time, not of authority. It is not wonderful, therefore, if the bonds of antiquity, authority, and unanimity, have so enchained the power of man, that he is unable (as if bewitched) to become familiar with things themselves."*

Francis Bacon (from "Novum Organum", 1620)

### Introduction: The need of an 'Evidence Based Philosophy and Ethics'

The Author's primary claim (already advanced in the previous publications: Khroutski, 2001–2008) is that we actually need, equally with the progress of modern scientific (i.e. modern conventional Western medicine), including its main foundation of EBM (evidence based medicine) – we likewise actually need the introduction of a kind of the EBPE ('evidence based philosophy and ethics') for the Bio-medicine<sup>5</sup> as the all-embracing science.

Using a medical language, – we currently are experiencing 'a disease' which diagnosis is the 'Cosmological insufficiency' of our global cultural evolution, including the incompetence of our 'cultural organs' that are responsible for the organization of an effective exploratory activity, firstly, – for the realization of efficacious medical aetiological explorations, capable to disclose the causes of all the existing diseases.

Indeed, on the one hand, at present we are enjoying the modern (Western) biomedicine that uses hi-tech approaches and is based on the scientifically proved facts, for, – we daily are taking the advantages (with respect to the maintenance of our health) from numerous achievements of the evidence based medicine (i.e. – from the modern "scientific" or physicalist biomedicine). In general, modern medicine has brought us to the high level of our capabilities for treatment of diseases: A. Of healing – restoring to health – from acute diseases; and B. Treatment – management – of chronic diseases: i.e. CNID – chronic non-infectious diseases, and CNTD – chronic non-traumatic diseases.

### 'Global Aetiological Paradox'

However, on the other hand, – we have run (long ago) into the so-called 'global aetiological paradox' in our 'modern' philosophical and scientific development. This paradox means that modern medicine, notwithstanding its hi-tech scientific achievements in the treatment (of acute)

and management (of chronic non-infectious and non-traumatic) diseases, in spite of this, – modern biomedicine is unable to disclose the aetogenesis of the CNID (CNTD) and, hence, is impotent, in principle, – to realize a healing approach (that makes complete recovery) for the (radical) treatment of chronic diseases. Indeed, from the essential point of view, – this is a human rights abuse.

A gist is that the theory of causation was founded by Aristotle and, hence, – Aristotle originated and founded aetiology on the whole. However, in fact, modern notion "aetiological" has the insignificant reference to Aristotle, but basically means the explanation in terms of causal precedents that are opposed to the intentions of an agent (thus deleting the main Aristotelian *causa finalis* from the scope of biomedical search) and, hence, – factually overturning the theoretical bases of Aristotle. Hence, paradoxically, although modern philosophers and scientists explore causation on the basis of Aristotelian conceptual framing (and, paradoxically, – on behalf of Aristotle's theory), however, – they all place now the basic principles of the founder (Aristotle) in a contrary order and direction – "upside-down".

### "To Throw the Baby out with the Bathwater"

The conclusion of a famous American philosopher (objectivist) Ayn Rand is really noteworthy: "If there is a philosophical Atlas who carries the whole of Western civilization on his shoulders, it is Aristotle. He has been opposed, misrepresented, and – like an axiom – used by his enemies in the very act of denying him. Whatever intellectual progress men have achieved rests on his achievements." (1963).

Likewise, the finding of an eminent explorer Prof. J.H. Randall (1960) is valuable, – he disclosed that the early scientists (including Bacon and Descartes, and further Kant) had discarded Aristotle in rebellion against his religious interpreters, although (as Professor Randall points out) their scientific achievements had, in fact, partially an unacknowledged Aristotelian base and were carrying out the implications of Aristotle's theories.

Indeed, the gist of the 'global aetiological paradox' boils down to the evident fact – modern biomedicine has radically reduced aetiology: It does not use at present the full (but applies the reduced) set of the known active natural (cosmic) forces (causes); i.e., notwithstanding its inability to grasp and explore the essence of the CNID and CNTD, – modern medicine has deleted Aristotelian *causa finalis* and *entelechy*. At the same time, a great paradox is that these (purposeful and whole-organizing) causes, in reality, – is the main essential property of a living subject.

Another great paradox is that we have the objective (natural sciences' – evident) truth that all living forms (all life processes) are absolutely universal – ultimately are reducible to the same basic molecules of DNA and the other common structures and their functional reactions (at least, this is an evident fact since the discovery of the structure of DNA by Watson and Crick in the 1953). Likewise, this discovery has disclosed the

<sup>5</sup> The type of '...'-brackets, or the typing from capital letter is used for the designation of author's own terms, metaphors, expressions, etc., whereas "..."-type – for citing and the use of generally accepted words. As regards "Bio-" (that is taken from Gk. *bios* "life"), it signifies, herein, – all forms and levels of life: biological, ecological, personalist, sociocultural.

evidence of the psychosomatic unity of a living subject (for instance, of genetic transmission of the psychic properties to the human being through the tangible molecules of DNA).

However, modern biomedicine still (and definitely) lacks both the full aetiological search and universal scientific approaches, and, in the natural outcome, – modern biomedicine actually needs a universal theory (i.e., its own theory) – that could explain the phenomenon and process (ontogenesis) of the entire human's life (personalist ontogenesis), but which still is absent and unavailable.

### **Global Aetiological Paradox Calls for the Cosmological Substantiation of Modern Biomedicine**

On the contrary, still, modern medicine is based on the fundamental physicalist principles (which are natural, but which relate, in principle, to the non-organic world). Likewise, modern biomedical theorizing is fully man-made, i.e. – is the entire product of human reason and, hence, – is unnatural or artificial (not determined by the order of nature). In the result, the present situation shows an extreme scientific pluralism and relativism, – that "reflections on the meaning of the complex dynamical nature of living systems show an overwhelming multiplicity in approaches, descriptions, definitions and methodologies" (Van de Vijver 2003:101).

As already stated above, we now rightly praise evidence-based medicine (evidence based healthcare), but, paradoxically, – we pass over in silence that modern medicine totally lacks its own realistic (evidence based) philosophical principles – 'evidence-based truths – *realistic philosophical foundations*' – that could build on a needed own (of universal essence) theory of biomedicine (precisely, – theory of the Individual's health during her/his entire life span or ontogenesis). Inasmuch as aetiology (etiology, aitiology, – from αἰτία, *aitia*, "cause"; and -λογία, -logia) – the study of causation, or origination – is the first issue of cosmology, and inasmuch as we have the 'global aetiological paradox' in modern medicine, – we actually need the advancement of new cosmological foundations in biomedicine.

A key point is that Aristotelian aetiology is the expression (development, product) of his fundamental cosmology. Aristotle's cosmos is exactly "bio-"cosmos – i.e. organic, whole, hierarchical *Cosmos*, in which every (living) entity has its inherent place and destination in the one whole (organic) self-evolving cosmic world. Substantially, likewise, modern (rational) aetiology started exactly from Aristotle's theorizing who had originated the cosmological conception of four main natural causes – *material, formal, efficient and final* (likewise, he distinguished accidental and essential causation).

However, in modern medicine (in modern science on the whole, with its basic relation to the so-called "scientific method"), – we do not meet the name of Aristotle and the references to his originative influence on the development of the whole issue. In medicine, for instance, aetiology

refers exclusively to the causes of diseases or pathologies that refer to the tangible factors (mainly of the surrounding, i.e. external world) like infectious pathogens or various traumatic (of any physical origin) influences.

### **'New Cosmology' instead of the "New Scientific Method"**

This example – of the expulsion of Aristotle, founder of the modern aetiology and the "philosophical Atlas" for the entire Western rational cultural edifice, – this example shows clearly (to author's firm conviction) that we deal (in the Modern era) rather with a *new cosmology* than with the new "*scientific method*"<sup>6</sup>.

In other words, exactly the cosmological foundations (that are inherent to Aristotle's philosophy) had been overturned in the beginning and during the evolution of the current (post)Modern era. What had been radically changed – firstly, these were exactly the cosmological foundations, while the scientific method was (and is, and will be) one the same (invariable, uniform) in all times, being constituted of the three main structures (stages):

1. INPUT: of the empirically tested and rationally organized data;

2. CENTRAL PROCESSING: intellectual processing of these data by using this or that approach and method (that exactly are dependent from the cosmological disposition of an explorer);

3. OUTPUT: of the results of scientific (practical) work, which are open for the empirical and rational testing and are realized in the forms of rational construction of theories; or the advancement of methodologies for practical activity, or in any other 'product' that will be used in the effective practical activity.

### **Aristotelian Cosmology is Quite Antipodal to Modern Astrophysics**

Really, Aristotle's cosmos is quite different (opposite, polar) to the modern treatment (notion) of cosmos that has the astrophysical meaning (of the empty space that is filled with material objects and physical processes). The latter comprises a fully *antithetical (antipodal)* significance to Aristotle's cosmos. Indeed, Aristotle's cosmos is substantially *finite, qualitative and hierarchically differentiated*. Actually, Aristotle's "cosmos" (precisely in metaphysical meaning) is substantially more than a planetary model and is quite distinct from the modern concept of Universe (infinite, quantitative and homogeneous, where space, time, matter, and cause are absolute and uniform).

On the contrary, in Aristotle's Cosmos there is no space (only place) and everything ever is the whole combination (integration) of matter and form (*hylomorphism*), wherein any change (movement and development in Cosmos) is based on the entire and inseparable set of the main causes –

<sup>6</sup> Likewise, the hint by famous Francis Bacon might be taken into consideration (which is put into the epigraph) – that the dominant bases of science (and culture on the whole) are to be replaced regularly.

i.e. on the Four Causes: material, formal, efficient, final. In this order, *causa finalis* has the decisive significance – all entities in the world are basically moved and are (self)evolving due to their inner immanent (natural) goals. Thus, Aristotle has made teleological explanation the most fundamental of the four interacting and integrated ways of explaining nature.

### The decisive significance of the use of 'essential metaphor'

In the proposed *Bio*-realistic (Biocosmological – neo-Aristotelian) approach that puts into practice the universal philosophical and scientific exploration, – the role of the so-called '*essential metaphor*' takes on the decisive value. The gist is, due to the evident universality of the entire living world on Earth, – we can (and ought to) stop "invent the wheel" (by maintaining the "overwhelming" amount of conceptions for the explanation of the one universal world of our real living in), but start to transpose the already explored and gained scientific data and laws from one sphere (level) of life processes into the other level wherein we have actual issues for the resolution.

For instance, the evident reality of the triune synchronous activity (but with the successive domination) of three autonomous nervous (sub)systems (within a whole organism and integrated into the one vegetative (super)system) – of parasympathetic, sympathetic and metasymphathetic (sub)systems – is a valuable clue for the understanding of natural (normal, healthy) processes with respect to the personalist ontogenesis or social history on the whole.

### The original notion of cosmology

At any rate, we are to restore the original notion of 'cosmology'. This field of exploration naturally deals with four main issues:

1. A study of the Universe in its wholeness (including life processes) – for the resulting presentation and development of a complete ("global") outlook, i.e. fundamental rational representation about the world as a whole;

2. A definite rational resolution of the issue about active (driving) forces in the cosmic whole, which foremost cause wholesome evolutionary processes in relation to the conscious subjects, including ontogenesis of each person and ascending cycles-stages of the evolutionary process of social and ecological development;

3. A definition of fundamental (universal) laws in respect of both physical (Non-Organicistic) phenomena and processes, and equally, – in relation to life (Organicistic) phenomena and processes, and, herein, – universally referring to all spheres of life (biological, ecological, anthropological, psychological, personalist, social, culturological, etc.);

4. Elucidation, in the accepted cosmological sphere, of the place and role of a person in current evolutionary processes of the one cosmic universal evolution of the life on Earth.

In this light, it is necessary to recognize modern "astrophysical" representation of cosmology (as the section of modern astronomy and physics, that studies properties and evolution of the material

Universe) – as a natural scientific field, but, in its current dominating status, – only as a certain successive cycle-stage (of the Western civilization) in the evolution of the one global culture.

### Indirect and direct arguments for the actuality of Biocosmology

The aforementioned global paradoxes in biomedicine (and science on the whole) are the clear (although *indirect*) arguments for the actuality (and the urgent need) of the adequate cosmological exploration and the advancement of proper cosmological (philosophical) foundations for the cultural (scientific) present-day activity.

In turn, we have the evident *direct* argument of the need for new cosmological bases in the global cultural development. Indeed, "cosmology" – from the realistic standpoint – is ever Biocosmology. In a straightforward way, the evident truth is that the Earth itself (and, hence, – all the Earth's processes, including life evolutionary processes and personalist ontogenesis as well) – all and at all times are naturally the product (and the inseparable integrated part) of the one whole Cosmic evolution. Therefore, logically, – if we have the organic evolution of the life on Earth (which is the product and integrated unit of the one whole Cosmic evolution), – then Cosmos is actually the organic whole (any other statement is contradictory, i.e. false).

Hence, our modern ('scientific') separation of Earth from Cosmos (Nature-natural from Cosmos-cosmic) is one more artificial construction and artificial termination (of the one whole evolution of the world culture) by modern Western ('global') philosophy and science. As a matter of fact, every process (every process of life) on Earth is essentially Cosmic (at that, independently of an ontological standpoint we prefer: astrophysical or theological, or mystical, or any other: of panspermia, or self-origination, etc., – every life (Bio-)process on Earth always originates from Cosmic matter and energy, always is integrated into the whole Cosmic processes, always is the product of the one Cosmic evolution, and always is the inseparable unit of the Cosmic whole, i.e. – always is the Biocosmological process. Therefore, equally, – the human's (personalist) ontogenesis is essentially the inseparable unit of the one self-evolving organic Cosmos, essentially the product of the universal Cosmic evolution and essentially (naturally) is subdued to the universal Cosmic laws, – i.e. always (basically and ultimately) is the subject for Biocosmological exploration.

### Universal cosmic laws (Bio-realistic fundamental principles)

Modern physics is based on the natural fundamental (cosmic) principles like gravity, electromagnetism, affinity, etc., while *Bio*-sciences, paradoxically, still lack their own natural (i.e. Cosmic – universal – underlying every life phenomenon or process) principles. It is very noticeable, that these Organicistic universal principles (laws) are quite evident and easy for disclosure (especially, by using the method of 'essential metaphor'). First of all, the aforementioned global paradoxes (as 'indirect')

and the ‘direct’ argument itself serve as a valid basis for the advancement of the fundamental *Cosmist* and *Biocosmological* principles for biomedicine (and any other science that deals with life processes) – every life process on Earth (including personalist ontogenesis) has the Cosmist origination and naturally is the subject for Biocosmological exploration.

The author highlights 16 universal principles (i.e. realistic fundamental laws, of the caliber like “gravity” for physics or “affinity” for chemistry), i.e. that refer to (underlie) each life process on the Earth, including the personalist wholesome ontogenesis. In the given context, the Biocosmological fundamental principles of ‘*bipolar unity*’ and ‘*evolutionary triadicty*’ are of special value. Factually, already on the basis of aforesaid (with respect to the philosophy of Aristotle and its historical transformations), – we are to recognize the real existence of a bipolar sociocultural world, both poles of which are based and integrally constructed on their own (opposite – polar) cosmological foundations.

Herein, the first example is the aforementioned Aristotelian cosmology and its antipode – modern Western cosmology (that is quite polar – anti-Aristotelian – AntiCosmist). The other example comes from the physiological sphere, e.g., – the evident universal synchronous functioning of the two poles – parasympathetic and sympathetic autonomic (sub)systems – of a one vegetative involuntary nervous (super)system. Likewise, we have the polar spheres (and cycles) of Awake activity and Sleep processes within the given organismic wholeness.

In this exploratory perspective, however, we are to recognize, firstly, the incredible scientific contribution (in the historical, sociological and culturological fields of research) by Pitirim Sorokin – the eminent Russian-American sociologist and thinker. Already in the 1930s, resulting really the titanic empiricist work (for instance, – he and his assistants processed more than 100,000 scientific sources on the research topics), Sorokin had made a startling discovery – the disclosure of the *three-dimensional* (and *three-stage cyclic*) – evolutionary dynamic essence of a sociocultural reality. His other essential conceptions are: “law of polarization”; “autonomy in social (super)systems” and basically inherent self-regulation of sociocultural systems (Sorokin’s notion of the «*immanent determinism of a sociocultural system*»); his famous “integralism” principle; the basically immanent inherent interrelations between Culture and Personality, and other. Substantially, however, Sorokin’s main philosophical-ethical ideas are still beyond the due attention and study.

**Bipolar and Three-Dimensional Sociocultural World**

Firstly, Pitirim Sorokin had revealed these great laws in his *magnum opus* – the *Social and Cultural Dynamics* (1937–1941). In this work, Sorokin had unveiled the three-dimensional and evolutionary dynamic essence of a sociocultural reality – the synchronous existence of the three essential types of sociocultural reality – three vitally necessary sociocultural supersystems: Two polar (“ideational”

and “sensate”) and one intermediate or transitional – (“integral”) type, as well as their inherent self-regulation and natural alternation in the dominance (i.e., the interchange of their dominating activity, while all three universal types of sociocultural supersystems are always and synchronously active, i.e. all three always synchronously symbiose in the integral active form).

In this light, Sorokin’s basic generalization is likewise significant, – that each of the three supersystems (revealed by him) embraces in itself the corresponding type of the constituting basic cultural systems (they, according to Sorokin “are language, science, philosophy, religion, the fine arts, ethics, law, and the vast derivative systems of applied technology, economics, and politics”). Therefore, as Sorokin stated, the Sensate supersystem is made up of: sensate science, sensate philosophy, sensate religion of a sort, sensate fine arts, sensate ethics, law, economics and politics, along with predominantly sensate types of persons and groups, ways of life and social institutions. Likewise, the Ideational and Integral supersystems consist respectively of Ideational and Integral types of all these systems.

Although Pitirim Sorokin explored sociocultural reality, it is important to highlight that his achievements are essential for the true evolution of biomedicine – the attainment of its own universal theory, first of all, – of a *Bio-medical* theory that is capable of resolution the issues both of ailment (bodily or mental disorders) and health (“a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”, due to the WHO’s definition of Health in 1948). Primarily, Pitirim Sorokin has substantiated, in essence, the (cosmological) foundations for the entering a new scientific ‘cosmos’ – of applying the three-dimensional dynamic (evolutionary) approach to the rational (scientific) exploration of the actual world. Basically, he advanced the scientific (and philosophical) comprehension of the triune essence of a sociocultural reality – every sociocultural organization exists synchronously in the three universal autonomous forms. However, now, we are to unfold this great principle into a more apprehensible rational form.

Initially, it is relevant to conduct a comparison between the basic notions of P.A. Sorokin’s theorizing and the key ideas of author’s BioCosmological conception (this idea is implemented in the form of a comparative table):

<i>In the theory of P.A. Sorokin (3 main types of sociocultural supersystems)</i>	<i>In metaphor</i>	<i>In the author’s BioCosmological conception</i>
<i>Sensate</i>	<i>Sleep processes of organic reconstruction and growth</i>	<i>AntiCosmism (Humanistics)</i>
<i>Integral</i>	<i>Transition (Awakening, or the transition from Awake to Sleep)</i>	<i>ACosmism (Holistics)</i>
<i>Ideational</i>	<i>Awake goal-directed activity</i>	<i>RealCosmism (Realistics)</i>

Table 2: Triune Universal (All-Embracing) Bio-medicine

<b>Criteria</b>	<b>Western medicine</b>	<b>Eastern (CAM) medicine</b>	<b>Biocosmological medicine</b>
<i>Cosmological basis</i>	AntiCosmism ( <i>Humanistics</i> ) – ‘Ontological Pluralism’	ACosmism ( <i>Holistics</i> ) – ‘Metaphysical Dualism’	RealCosmism ( <i>Realistics</i> ) – ‘Cosmological Monism’
<i>The main cosmological driving force</i>	‘ <i>Causa efficiens</i> ’	‘ <i>Causa formalis</i> ’	‘ <i>Causa finalis</i> ’
<i>The type of essentialism (main cosmic driving forces)</i>	<i>Transcendental subjective</i> (dualistic) essentialism – realization of the a priori abilities of a human reason to construct (firstly, adapt to) the world	<i>Transcendent teleological</i> essentialism – Absolute-determined, purposeful driving forces that are realized by a person	<i>Immanent teleological</i> essentialism – subject’s and personalist goal-directed inherent needs, intentions and activities (uppermost, of its/her/his ontogenetic entelechy)
<i>The ultimate, true reality-value</i>	<i>The human’s Transcendental (a priori)</i> abilities ( <i>reason</i> ) that realizes survival (adaptation to) and development (construction of) the surrounding material world	<i>The Absolute</i> – a <i>Transcendent substance</i> that determines the harmonic order of the given (“ <i>in situ</i> ”) life phenomenon	<i>The Universal (Organic) Hierarchical Cosmos</i> wherein every life subject self-realizes its/her/his immanent telic Basic Cosmist Evolutionary Functionality (BCEF)
<i>Type of universality</i>	Universal in the physicalist – reductionist – relation, or the subjective transcendental ‘atomization’	Universal due to the wholesome integration of an Individual into the given milieu – “ <i>in situ</i> ”	Universal in the praxeological evolutionary relation (of the subject’s ontogenetic self-realization)
<i>Basic rational philosophy</i>	Platonism, British Empiricism, French rationalism, German Idealism (Kantianism), American Pragmatism	Thomism, Modern integralism (including systems science), as well as the sources from Ayurvedic and traditional Chinese medicine	Aristotelism, Russian Organicism (Functionalism). After the year 1917 – Russian philosophy was realized by the exiled (living abroad) Russian thinkers
<i>Position of a subject in the cosmos</i>	Outside ( <i>without</i> ) the material (physical) cosmos	<i>Integrated</i> into the given organic wholeness (the wholeness of mind-body-milieu)	Inside ( <i>within</i> ) the organic (self-evolving Organicistic) Cosmos
<i>Gnoseology</i>	‘Epistemological Dualism’	‘Gnoseological Monism’	‘Gnoseological Pluralism’
<i>The kind of the philosophical bases of science</i>	Rational, but non-realistic (transcendental, idealistic)	Realistic, but non-rational (transcendent)	Realistic and rational
<i>Exploratory essence</i>	<i>Bio-logical</i> , reducible to the physicalist structural-functional units or the ‘ <i>Transcendental subjective</i> ’ experience of a person	<i>Bio-philosophical</i> , all the units are integrated by the ‘ <i>Transcendent Absolute</i> ’ (God, Matter, Spirit, System, Information, Field, Energy, Pattern, etc.	<i>Bio-realistic</i> , reducible ultimately to the subject’s (personalist) ‘ <i>ontogenetic entelechy</i> ’ and the goal-directed ‘ <i>causa finalis</i> ’
<i>The basic topic of reference (primary issue of research)</i>	The <i>physical-chemical</i> structures and their (causal) interactions; as well as the <i>Human’s</i> (anthropocentric) needs (rights) that are opposed to the surrounding world, and which satisfaction (on the physical, societal and spiritual levels) is the highest goal	The <i>Holon</i> , i.e. the organism, person or society (in turn, each is a unit of the Holarchy), – its/her/his/ harmonious condition and wholesome contribution to the integral well-being and the sustainable development of the holarchy (supersystem) under exploration	The Subject’s (Personalist) ‘ <i>ontogenetic entelechy</i> ’ (BCEF) and the derived ‘ <i>causa finalis</i> ’ – goal-directed and purposeful life processes and behavioral activities
<i>Regarding the position of an explorer</i>	A kind of ‘ <i>external</i> ’ (causal) epistemology	Subject of cognition (equally with the object of cognition) is included into the systemic integrity (that is determined by the transcendent Absolute)	A kind of ‘ <i>internal</i> ’ (teleological) gnoseology
<i>Exploratory interrelation of an explorer with the world</i>	<i>subjective-objective</i> , which is the dominating form in the current (global) scientific milieu	‘ <i>Subject-Absolute-Objective</i> ’	‘ <i>Subject-Subject</i> ’ – from the ‘Cosmist Organicistic Hierarchical’ standpoint
<i>The leading method (mechanism) of exploration</i>	‘Explanatory’	‘Understanding’	‘Definitive’
<i>Methodology</i>	Physicalist–(Bio)Logical (Scientism)	Integrativist (Holistic, Systemic), founded on a Transcendent basis	Bio(Cosmo)Realistic-Functionalist
<i>Anthropology</i>	Anthropocentrism	Anthropoholism	Anthropo(Person)Cosmism
<i>Ethics</i>	<i>Deontologism</i> – anthropocentric and society-centric – Ethics of inner personalist Obligation for the realization of extrinsic societal Duty. Herein, the reverse side of the medal is always the individualist hedonism	‘ <i>Moral holistic utilitarianism</i> ’ – deliberate transcendent harmonization of interrelations of the man or society with the world, doing it “ <i>in situ</i> ” and “ <i>now and here</i> ”	<i>Eudamonism</i> – PersonCosmist teleological self-realization of the one’s virtual (inherent specific) talents – Ethics of universal Personalist Love and Happiness

## The main thesis

In the light of what is stated above, my main claim is that we actually need to advance and realize (develop into the effective forms) the triune nature of biomedicine, and that the triune *Bio*-medicine is precisely capable of implementation the all-embracing medical theory and practice, primarily dealing with the subject-matter of the Individual's health but essentially covering the entire range of issues in respect to the person's well-being.

At the present point, the crux of the issue is the definition (by revealing the essential characteristics) of the three cosmologically autonomous types of biomedicine. Naturally, in the light of the aforesaid, they realize the triune essence of the *Bio*-sociocultural world, and, in the author's proposal, – accordingly represent the forms: A. Of the current Western (so called "conventional") medicine; B. "Complementary and alternative" (Eastern, CAM) medicine; and C. The proposed 'Biocosmological' or 'Bio-realistic' medicine.

## Triune Universal (All-Embracing) Bio-medicine

Their characterization (and comparison) might be drawn in the form of a Table 2, in relation to the various criteria of their characterization.

## In conclusion

Although the basic idea is simple – to restore Aristotelian aetiology in its full meaning, i.e. of the integrated wholeness of all four causes (material, formal, efficient and final) but with the leading role of the *causa finalis* (and *entelechy*), – basically, the presented matter is aimed at the realization primarily of the cosmological project, for, the first need is to rehabilitate Aristotle's cosmology on the whole, i.e. his treatment of the world (cosmos) as exactly "*bio*-"cosmos – i.e. organic, whole, hierarchical cosmos, in which every (living) entity has its inherent place and destination in the one whole (organic) self-evolving cosmic world. The most remarkable feature of Aristotelism (Aristotelian cosmology) is – to be rehabilitated – that it restores (reinstates) the natural unity of philosophy and science (metaphysics and physics), for, they both naturally belong to (reflect) one the same universal (organic) world.

The author's main thesis is: "*What is medical*" exists *synchronously in the three autonomous realms* which (in the integrated organicistic mode) realize the *all-embracing* knowledge and possibilities (perspectives, vectors, trajectories) – aimed at the actualization of the person's whole individual evolutionary (ontogenetic) health.

Encountering these complex tasks (in the proposed Biocosmological perspective of development), the author is glad to inform colleagues (who become interested in the project) about the preparation of the regular scientific meetings on Biocosmology, in Novgorod Velikiy, Russia. The first seminar is planned in the July, 2010. The main idea, herein, is to apply Biocosmology (firstly, the three-dimensional cyclic evolutionary approach) to all spheres and levels of the exploration of living processes (biological, ecological, anthropological, personalist (personological), sociological, culturological,

philosophical, ethical, etc.), including the launching of the initial stages for a true medicine (as the universal all-embracing science) – in the form of autonomous (but organized by common ideas and ultimately integrated – with respect to the Individual's health) directions of exploration (this goal naturally includes and integrates all other directions of scientific research).

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# Medical treatment and Buddhism – Reflections from the discussion on brain death and organ transplantation in Japanese Buddhism

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## Introduction

This paper approaches the question "What is medical?" from the viewpoint of religious studies. Religious factors seem to play a significant role in discussing whether a certain mental or physical condition should be considered to require or justify human interference by means of medical treatment or not. In the current debate on medical ethics, religious aspects exert their influence not only through attitudes and beliefs of individuals, but also in the form of answers that religious organizations and denominations try to formulate in response to the new challenges in the medical field. To shed some light on how religious denominations engage in this debate on the boundaries of the legitimacy of medical treatment, this paper focuses on the discussion of brain death and organ transplantation in Japanese Buddhism. After some preliminary remarks on the links between Buddhist tradition and medical treatment in general, arguing that Buddhism is in principle affirmative of medical practice, this paper analyzes some of the arguments introduced by Buddhist denominations into the Japanese debate on brain death and organ transplantation. Its main focus lies on the analysis of the official position

announced by the Sōtō-school (*Report on the Problem of 'Brain Death and Organ Transplantation'*, Sōtō-school Head Office 1999), a major sect of Japanese Buddhism, as one example of how Japanese Buddhists refer to their traditional patterns of thinking and reasoning and how they actualize and reinterpret their view against their traditional doctrine (for example, soteriological conceptions, views of body, life and death, ethical concepts such as the forbidding of harming/killing, etc).

### Early Buddhism and medical treatment

Even a cursory glance at possible links between medical treatment and the history and doctrine of Buddhism strongly suggests that Buddhist tradition not only makes use of medical rhetoric and metaphors to expound its teachings, but also from its beginning shows a genuine concern not only with spiritual salvation but also with the physical and mental wellbeing of the people it tries to save.

An early doctrinal source often related to medical practice can already be found in the "Four Noble Truths", the fundamental doctrine of Buddhism clarifying the cause of suffering and the way to deliverance through the cessation of suffering. Said to be expounded by the historical Buddha during his first sermon after attaining enlightenment, the Four Noble Truths assert that, "(1) life is suffering, (2) suffering is caused by craving, (3) suffering can have an end, and (4) there is a path which leads to the end of suffering" (Keown 2000, p. 45), namely the discipline of the "Eightfold Path" of Buddhist practice. To illustrate the intrinsic correlation of the Four Noble Truths, Buddhism frequently resorts to a medical metaphor, wherein the Buddha is compared to a physician (1) diagnosing the disease, (2) clarifying its cause (3) asserting the existence of a cure allowing for the restoration of health and (4) pointing out the therapy needed.<sup>7</sup>

A closer look at the first of the Four Noble Truths reveals that the links between Buddhism and medical treatment are not confined to a mere metaphorical level. Rather, it suggests that – as Damien Keown argues in the beginning of his *Buddhism and Bioethics* – "good health and freedom from pain are important aspects of human well-being and are highly valued by Buddhism" (Keown 2001, p. 2). The First Noble Truth which states, "Birth is suffering, sickness is suffering, old age is suffering, death is suffering; pain, grief, sorrow, despair and lamentation are suffering" (Keown 2001, p. 2), asserts that all forms of existence are unsatisfactory and productive of suffering (skt. *duḥkha*). Thereby it is – according to Keown – not only drawing attention to the fundamental frustration with this mode of

embodied existence subject to the repeated cycle of birth and death, but also to the fact, that this cycle of transmigration is accompanied by (at least the permanent risk of) physical or mental pain and suffering, involved in the "Four Afflictions" birth, aging, sickness and death. Although Buddhism ultimately strives for a permanent cure from this constant threat of suffering through the physical and mental afflictions inherent to this embodied existence, these symptoms of suffering are in no way neglected. Rather, methods of its eradication are in fact thoroughly discussed in the Buddhist scripture.

Thus, when the historical Buddha is referred to as a "Great King of Doctors", this epithet not only can be considered as a reference to the abovementioned analogy of his spiritual doctrine with medical treatment, "the healing process as metaphor for spiritual growth" as Raoul Birnbaum terms it (Birnbaum 1989, pp. 3, 15-19), but at the same time points to the ambition of Buddhism to eradicate the roots of mental and physical suffering. As well as the actual engagement in medical practice by the historical Buddha.

In early Buddhist scripture such as the *Vinaya* of the Pāli Canon, the historical Buddha is frequently depicted to have been well versed in the science of medicine (as one of the five sciences to be mastered) due to the education he received prior to his renunciation of the world as a descendant of an aristocratic family. In addition to the often-cited records on the famous physician named Jīvaka, considered a contemporary of the historical Buddha, who is said to have even further advanced his competency in medical science under the guidance of the Buddha, the textual corpus of early Buddhism contains numerous other accounts on the Buddha's engagement in medical treatment. Further, a sophisticated and complex system of healing methods, explanations on the causes and symptoms of various diseases and even references to ethical issues of the various forms of medical treatment can be found for example in the *Vinaya* of the Pāli Canon. In particular, early Buddhism focuses on maintaining the physical and mental health of its followers through dietary, hygienic and medical means as a prerequisite for effective spiritual practice: "The four requisites for life, stated repeatedly in the various texts of the Pāli Canon, are robes, food, lodging, and medicine. It is not surprising that medicine bears such significance, for surely great strains were placed upon the physical well-being of monks due to their austere life and strenuous meditative practices. Since illness and indisposition tend to weaken the mind, often causing it to lose its focus on its function as a liberating faculty, the prevention or proper treatment of illness held (and continues to hold) a great importance for the Buddhist monk" (Birnbaum 1989, pp. 3-4).

### Buddhist positions on brain death and organ transplantation in Japan

Turning now to the recent bioethical debate and the Buddhist perspective on the ethical implications of modern forms of medical practice as one concrete example of how Buddhism's fundamental affirmation of medical treatment is

<sup>7</sup> To cite one example, this metaphor is referred to in the *Iwanami Dictionary of Buddhism* (Nakamura et al. 1999, p. 360). Although the structure of this metaphor is said to resemble a pattern used in traditional Indian medicine, scholarship offers differing ideas as to whether Buddhism drew on an existing medical pattern in formulating its Four Noble Truths (for example Sugita & Fujiwara 2004, pp. 36-37). Or that this pattern of Indian medicine was rather initiated by the historical Buddha (for example Schlieter 2003, p. 12). For a critical discussion see also Anderson 1999, pp. 189-190.

actualized and reevaluated, the positions of Japanese Buddhism on the problem of brain death and transplantation medicine appear to be highly instructive.

The current, ongoing debate on the concept of brain death and organ transplantation in Japan is considered to have been “the most contentious ethical debate of the last thirty years” (Lock 2002, p. 3).<sup>8</sup> Especially the legislative process, leading to the passage of the Organ Transplant Law in 1997, was accompanied by an intense, controversial debate. It was also in the 1990s when some of the Buddhist denominations of Japan stepped forward and announced their point of view on this kind of medical treatment, revealing a wide spectrum of arguments and statements on the problem, ranging from categorical rejection to affirmation under certain conditions or in general.<sup>9</sup>

The reception of this broad range of positions, demonstrating that even contradictory conclusions on this problem can be derived from one and the same Buddhist doctrine, was not only confined to the clergy or followers of the respective Buddhist denominations or academic-Buddhological circles. To cite a recent example, an article in *Asahi Shinbun*, one of the largest daily newspapers in Japan, introduced the statements of four of the major denominations of Japanese Buddhism to provide background information on the discussion on the revision of the Japanese Organ Transplant Law in 2009 to a wider public (*Asahi Shinbun* 2009a). Pointing out the fact that controversial opinions are derived from Buddhist doctrine, it states that the Tendai-school – despite its rejection of the concept of brain death – in its communiqué of 1995 approves of “cadaveric” organ donation since this renunciation of one’s life for the benefit of others could, from a Buddhist perspective under certain circumstances be interpreted as an “act of generosity” (j. *fuse*). Likewise, the position of the Nichiren-school announced in 1994 considers organ donation as being consistent with Buddhist doctrine, interpreted specifically as an act based on the Buddhist “spirit of compassion” (j. *jihishin*), while also taking a critical stance on the concept of brain death. The Jōdo-school, however, takes a far more cautious stance towards the problem (1992). Although not categorically rejecting organ transplantation, the Jōdo-school nevertheless considers it as an unnatural form of medical treatment, demanding an appropriate lifestyle of the receiver of an organ, recompensing his indebtedness. The Ōtani-branch of the Shin-school finally, clearly opposes the concept of brain death and the medical practice of organ transplantation and has expressed its views in a statement expressing its “regret” at the imminent approval of the Organ Transplantation Bill in 1997.

In another critical announcement on the occasion of the first transplantation carried out on the basis of the new law in 1999, it demanded the restoration of the “dignity of life”, which it sees threatened by this form of medical treatment, frivolously putting matters of life and death at human disposal (*Asahi Shinbun* 2009a).

Besides such “official” statements made public by the various Buddhist denominations, also positions brought forward by individual Buddhist thinkers along with the findings of the academic-buddhological discussion on this topic contribute to the debate. Here, compared to the “official” positions, a much more in-depth treatment of the various Buddhist concepts and the analysis regarding their applicability to the problem of brain death and organ transplantation is presented. A closer examination of this Buddhist discourse suggests that the arguments that are provided to support the various positions can broadly be categorized as follows.

Firstly, the reference to “general” Buddhist concepts naturally plays an important part, i.e. Buddhist teachings shared by most of the Buddhist traditions in Japan, such as basic concepts of Mahāyāna Buddhism. One example for a doctrine frequently cited by different Buddhist traditions in their discussion of the permissibility of organ donation is the abovementioned concept of “generosity” (j. *fuse*), wherefrom both affirmative as well as skeptical stances are deduced.<sup>10</sup> Secondly, most positions at the same time also draw on doctrinal concepts that are more or less distinctive to a particular sect of Japanese Buddhism. One example would be the concept of the “indifference regarding one’s life” (j. *fushaku-shinmyō*), which is used by the Tendai-school to argue in favor of organ donation and is taught in the Lotus-Sutra, the most authoritative text of the Tendai-school (Tendaishū ‘Nōshi oyobi zōki ishoku’ ni kansuru tokubetsu iinkai 1996, p.11). Further, also hagiographic accounts are cited to argue for or against organ transplantation. Followers of the Jōdo-shin-school for example, sometimes draw on the following quotation for their argument, ascribed to Shinran (1173-1262), the founder of the Jōdo-shin-school, in which he orders his disciples: “When I die, throw my body into the Kamo river, to feed the fish”<sup>11</sup>, interpreted as Shinran’s wish for his physical remains to be used for the benefit of other beings. This passage is frequently quoted to support the affirmation of cadaveric organ donation, resulting in an interpretation of organ donation as an act of non-attachment and self-sacrifice of one’s own body.<sup>12</sup> Thirdly, it can be observed, that some of the attempts to provide a Buddhist rationale for either a positive or negative evaluation on the problem of brain death and organ transplantation, at times

<sup>8</sup> See also Lock 2002 for a detailed account on the course of the Japanese debate.

<sup>9</sup> For an overview of some of the official statements announced by the denominations of Japanese Buddhism, see for example Olschina 2008 (in German), for online references also Kimura 2007, pp. 194-195 (in Japanese), for an analysis of the reactions of the Japanese religious world in general Ikoma 2002, pp. 86-143 (in Japanese).

<sup>10</sup> For a discussion of the controversial opinions on organ donation derived from the doctrine of “generosity” in the context of Japanese Buddhism, see Bauer 2006.

<sup>11</sup> Passage cited from the *Gaijashō (Notes Rectifying Heresy)* composed by Shinran’s great-grandson Kakunyo.

<sup>12</sup> One example of the use of this quotation in the context of the discussion of organ donation can be found in Nabeshima 2007, p. 185.

also include references to religio-ethical concepts without explicit or obvious foundation in Buddhist tradition. One example would be references to formulations such as “dignity of life”, which at first glance seem to stem rather from a Christian background and are severely criticized by the Buddhist philosopher Ōmine Akira. Ōmine is arguing that such terms – if superficially used to refute organ transplantation – lack genuine religious essence or even contradict the Buddhist spirit of non-attachment and compassion (Ōmine 1990, p. 204).

Lastly, as being part of the general debate in Japan on this topic, Buddhist positions also incorporate, to a considerable extent the arguments brought forward in the secular field, especially reiterating arguments based on the characteristics and specifics of Japanese culture. For example, the Japanese view of life and death of the human body or peculiarities of Japanese funeral customs – mostly to strengthen the case against the concept of brain death and organ transplantation. This also includes arguments that focus on criticizing brain death and organ transplantation as allegedly based on the premises of scientificism, westernism, overemphasis of reason and a mechanistic view of the human body, as advocated for example by the conservative Japanese culture critic Umehara Takeshi (Umehara 1989).

### Position of the Sōtō-school ...

Returning to the “official” positions announced by some of the denominations of Japanese Buddhism, the statement made public by the Sōtō-school, one of the sects of Japanese Zen-Buddhism, seems to be particularly instructive. In two respects, this statement, published in 1999, stands out among the communiqués of Japanese Buddhist sects. Firstly, it does not attempt to formulate an authoritative solution to the problem, nor intends to impose a fixed point of view on its clergy or lay followers, but rather provides material for the individual process of decision-making. Secondly, it therefore discusses at length and – compared to most of the official positions of other sects – in a rather extensive and deeper going way, the various positions and arguments possible to derive from its doctrine and authoritative texts.

At first, the statement *Report on the Problem of ‘Brain Death and Organ Transplantation’* was published after a two-year period of research into this problem at the sects “Research Center for Contemporary Dogmatics” in one of the Sōtō-schools periodicals by the Sōtō-school Head Office in 1999 (Sōtōshū Shūmuchō 1999).<sup>13</sup> It comprises of nearly 50 pages, supplemented by a substantial appendix, also including a detailed discussion of the specific Zen-Buddhist perspective on the topic as well as an annotated bibliography. Although this statement seems to be originally intended to provide primarily the clergy of the Sōtō-school with the necessary knowledge to be able to participate in the debate (Sōtō Shūmuchō 1999, foreword), it is currently also made public on the sect’s homepage to announce

the stance of the Sōtō-school to a wider audience. In fact, the *Report on the Problem of ‘Brain Death and Organ Transplantation’* is at present prominently mentioned on the main welcome page of the Sōtō-school (<http://www.sotozen-net.or.jp/>), from where it can be directly accessed. This fact indicates also the high significance, this statement is attributed to by the Sōtō-school itself even a decade after its initial publication, obviously regarded as an integral part of the sects social engagement, involving – besides the discussion of bioethical problems – environmental issues or human rights as the denomination’s contribution to solve problems of contemporary society.<sup>14</sup>

At the beginning of its report, the Sōtō-school points out its conviction, that the problem of brain death and organ transplantation is not a question easily to be answered with a clear yes or no – the decision rather has to be entrusted to each individual (Sōtō Shūmuchō 1999, foreword). Since admittedly both positive as well as negative stances on this problem could be deduced from the doctrine of Buddhism and Zen-Buddhism, the Sōtō-school deems it impossible to proclaim a binding evaluation of the problem and therefore refrains from announcing a particular stance to its followers (ibid, p. 3). In this regard, the Sōtō-school even warns against the exploitation and improper use of Buddhist teachings to justify a particular position for or against brain death and organ transplantation, and to impose that position on other people (ibid, p. 6). It does however acknowledge the important role of religious concepts in the process of decision-making, emphasizing that a decision on this problem by the individual members of the Sōtō-school should be thoroughly based on an individual religious self-consciousness (ibid, p. 3). Further, the statement indicates that to wholeheartedly engage in the discussion of such bioethical problems from the standpoint of being a follower of Buddhism is considered to be a necessary contribution of the sect’s members to society.

### ... on medical treatment

In its discussion of the parts of the Zen-Buddhist doctrine considered as instructive on the problem of brain death and organ transplantation, the Sōtō-School also expounds on the relation between Buddhism and medical treatment in general. It acknowledges that although physical ailments are part of the inevitable and natural human ageing process, they can (and should be) cured by means of human medical knowledge. As arguments supporting this affirmative position on medical treatment, the report refers in particular to the appreciation of medical knowledge since the times of early Buddhism, citing the example of medical science as an integral part of the abovementioned Indian curriculum, the “Five Sciences” (j. *gomyō*). In terms of the specific practice and doctrine of the Sōtō-school, the report points to the custom in

<sup>13</sup> A German translation of the report is forthcoming (Bauer 2010).

<sup>14</sup> Under the category “Various Problems of Contemporary Society”, the homepage of the Sōtō-school (<http://www.sotozen-net.or.jp/>) lists statements on the notorious new religion Aum-shinrikyō, the report on brain death and organ transplantation, and “Keywords of Bioethics”; the category “Teachings and Activities” amongst others texts on “Human Rights”, “Peace”, and “Environment”.

Zen-monasteries of appointing one monk as “Dispenser of Medicines” (j. *tōyakujisha*), responsible for the medical treatment of the members of the monastery (ibid, p. 23). In an article referred to in the list of literature appended to the report to provide material for further reading, also a hagiographic account is presented to further argue in favor of the positive evaluation of medical treatment from the perspective of Zen-Buddhism. According to this account, Dōgen (1200-1253), patriarch of the Sōtō-school, is said to have taught on the importance of medicine on his deathbed. Dōgen is said to have considered life as something valuable, which should be highly respected. As his illness worsened, he is said to have instructed his followers that if afflicted by an illness, one should not remain passive. Rather that they should help each other and provide each other with medical treatment (Kasai 1991, p. 128).

### ... on the concept of brain death

Concerning the question, whether or not a Buddhist rationale for the concept of brain death can possibly be deduced from the authoritative sources of the Sōtō-school, the report avoids to give a final judgment, although it takes a very cautious stance, stating that it would be difficult to find scriptural evidence supporting “brain death” as a criterion for human death (Sōtō Shūmūchō 1999, p. 4). Under reference to Buddhist burial rites, considered to play an important role in helping the bereaved to overcome their grief and to come to an acceptance of death through contemplating on the impermanence of all things and the transience of this existence, the Sōtō-school implicitly seems to favor an intuitively comprehensible definition of death over a definition understandable only to a small circle of specialists. (ibid, pp. 5-6, 16-17, 24). For a Buddhist definition of death, the report therefore draws upon an often cited passage from the *Samyutta-Nikāya*, a part of the Pāli Canon, identifying vitality, heat and consciousness as the signs of life and considering the absence of them as death – a definition allowing to establish easily verifiable and intuitively acceptable *signa mortis* (ibid, pp. 23-24). As for a definition of the exact moment of death however, the Sōtō-school admits, that virtually no statements on this aspect can be found in the authoritative scripture of the Sōtō-school or even in the Buddhist canon in general (ibid, p. 23). The most important aspect the Sōtō-school wants to contribute to the discussion on the definition of death is however to highlight the fact that there exists a fundamental difference regarding the dimensions of the Buddhist conception of life and death and the diagnosis of death on a purely medical level. It further states, that the religious consideration of the problem of life and death has to be a task of utmost importance for the individual Buddhist, whereas the search for the precise moment of death seems to be considered – at least from a soteriological point of view – a more or less secondary problem: “Dōgen Zenji states that one’s own impermanent life is the act of ‘the venerable life of the Buddha’ (j. *hotoke-no-on’inochi*), the solemn workings of Nature’s life itself. To live ‘the venerable life of the Buddha’ is said to be nothing

but to eliminate the thought of life as a ‘thing’, meaning it is not at the free disposal of an individual person, and that they should live their life thoroughly in the ‘here and now’. This view of life and death by Dōgen transcends the present-day notion separating life from death and is entirely different from the context of the medical diagnosis concerning life and death” (ibid, p. 5).

### ... on organ donation

In accordance with its intention not to establish a fixed authoritative solution on the problem of organ transplantation, the report introduces Buddhist arguments both in favor as well as against organ donation. As to pros, the Soto-School at first refers to the fundamental Buddhist ideal of non-attachment, demanding to free oneself from the various attachments of life as they are considered as roots for craving, delusion and – ultimately – suffering. Since this ideal is thought to also include the attachment to one’s body and life, donating one’s body or parts of it for the sake of a person in need could be valued in principle (ibid, p. 27).

The second argument given in favor of organ donation is therefore the Buddhist concept of “generosity” (j. *fuse*, skt. *dāna*), a term commonly used to refer to the offering of alms to the Buddha or the Buddhist order. Applied to the question of organ donation, this concept, in association with Buddhist accounts on self-sacrifice, “throwing away one’s body” (j. *shashin*), seems to provide a sound Buddhist rationale for sacrificing one’s body or its organs – it is however tied to the compliance with certain requirements. A genuine “act of generosity” that can be acknowledged to be in accordance with Buddhist doctrine is said to require “threefold purity” (j. *sanrin-shōjō*), i.e. purity and emptiness of almsgiver, receiver of the alms, and the alms itself. In the interpretation of the Sōtō-Schools report, this means for the case of organ transplantation that the almsgiver (i.e. the donor of an organ) must be pure in his intentions. For example his deed should not be motivated by self-complacency or the expectation of gratitude from the receiver. Also, the organ itself has to be pure – the practice of organ trafficking, which the Sōtō-school vigorously opposes (ibid, p. 4), could be cited as an example for spoiling the pureness of the organ. Finally the receiver of the organ also has to be pure, which could be interpreted to imply that his motive to receive an organ should not be the result of a deluded attachment to life or accompanied by the hope for the death of a potential donor. The most important premise for a legitimate interpretation of organ donation as an “act of generosity” is however considered the prerequisite, that the donor as well as the receiver must have made their decisions on grounds of the Buddhist teachings – it has to be a consciously religious decision based on a thorough reflection of the religious implications of this act. Given these strict terms, the Sōtō-school further warns, that this interpretation of organ donation as a Buddhist “act of generosity” by no means should be misused to obligate other people to organ donation (ibid, p. 27).

Arguments against organ donation (or the extraction of organs from a brain dead body) discussed by the Sōtō-schools report refer to the “unity of body and mind” (j. *shinjin-ichinyo*) and the “non-duality of life and death” (j. *shōji-funi*), doctrines emphasizing the ideal of the integrity of the human body and the inseparability of organs from a body even if declared brain dead. Further, the report draws on a passage of Dōgens main work *Shōbōgenzō* (*True Dharma Eye Treasury*), stating that life and death, and therefore also the human body itself should be interpreted as the “venerable life of the Buddha”. Due to this inherent sanctity, the human body – as well as its parts – should not be thrown away frivolously (ibid, p. 26).

### ... on receiving an organ donation

Turning finally to the assessment of organ reception, which is also briefly dealt with in the statement of the Sōtō-school, one argument in favor of receiving a donated organ clearly stems from the principal affirmation of medical treatment in Buddhism in general as well as in the doctrine of Zen-Buddhism. Since this embodied existence is deemed as valuable to pursue the Buddhist path, it should not be prematurely wasted and it is considered legitimate to use all available means to prolong one’s life in order to put it to further use in the strive for awakening. The wish to live is declared to be fundamentally different from craving for fame or worldly possession. On the other hand, the report warns that the wish for an organ could be a mere expression of a deep-rooted, delusive attachment to life. If a potential recipient would develop hopes for the death of a potential donor, this would contradict the spirit of Buddhism (ibid, p. 27).

### Conclusion

The analysis of the Sōtō-school’s statement on the problem of brain death and organ donation introduced here as one example of the engagement of Buddhism in the field of medical ethics, sheds some light on the diversity and the broad spectrum of Buddhist concepts that could be utilized in the discussion of the ethical legitimacy of this form of medical treatment. It remains to be seen however, whether the revision of the Japanese Organ Transplant Law of July 2009, further trying to promote the transplantation medicine currently stagnant due to the shortage of cadaveric donors in Japan, prompts the denominations of Japanese Buddhism to react by reviewing their statements of the 1990s or issuing actualized, more accentuated positions.<sup>15</sup> It can be said though, that especially the premises on which the revised Organ Transplant Law is based on, namely the equation of brain death with human death (Asahi Shinbun 2009b), definitely pose a further challenge to the anthropological and ethical doctrines of Japanese Buddhism. To monitor the Buddhist denominations of Japan in their future attempts to define the boundaries of Buddhism’s

principal affirmation of medical treatment might also contribute to a deeper understanding of the question “What is medical?” in general.

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<sup>15</sup> Although the Japanese Association of Religious Organizations issued a number of critical statements on the revision of the Japanese Organ Transplant Law published on the association’s homepage ([http://www.jaoro.or.jp/activity/state\\_zouki.html](http://www.jaoro.or.jp/activity/state_zouki.html)), up to the present (November 2009) still no “official” reactions from Buddhist denominations are made public.

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