"Beyond Biotechnology: Human Enhancement Technology and Pursuit for Happiness" (An Islamic perspective of bioethics case study)

"Dibalik Keunggulan Bioteknologi: Aplikasi teknologi human enhancement, apakah jalan menuju kebahagian umat manusia" (Prespektif islam dalam kasus bioetika)

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Abstrak

Teknologi yang paling sukses berkembang dengan cepat pada awal tahun 2000 adalah teknologi kloning terapi dan reproduksi, teknologi ini sudah dapat dimanfaatkan pada manusia, dengan harapan akan dapat mensejahterakan kehidupan manusia, tetapi disisi lain memberikan dampak pada nilai-nilai kemanusiaan. Dampak positif dan negatif tersebut menyebabkan banyak ilmuwan untuk mengaktualisasikan kembali akan keberadaan Tuhan sebagai Sang pencipta dan konsep etika pada tataran aplikasinya. Perkembangan bioteknologi terutama teknologi human enhancement yaitu teknologi yang memanfaatkan bagian tubuh manusia, yaitu berupa bagian tubuh saja, sel-sel untuk dibiakkan dalam tabung atau membuat klon kembaran manusia utuh sudah merupakan teknologi yang sangat aplikatif diterapkan pada manusia. Teknologi ini dapat bermanfaat pada manusia, tetapi juga mengancam eksistensi nilai-nilai kemanusiaan. Islam sebagai ajaran yang diyakini punya makna universal, ternyata tidak memberikan inspirasi para ilmuwan muslim ataupun ulama untuk secara bersama-sama membahas masalah ini. Ilmuwan muslim dan ulama berjalan sendiri-sendiri dan menikmati status masing-masing tanpa memperhatikan perkembangan teknologi yang menyebabkan dunia lain, menghadapi diskursus pemahaman di era biologi seperti sekarang ini, tetapi kita tetap tertinggal dan tidak punya peran pada perkembangannya. Sehingga terkesan Islam bukanlah ajaran alternatif untuk menjawab tantangan perkembangan teknologi. Bioetika pada akhirakhir ini sedang mengalami perkembangan yang cukup pesat dan batasan domain keilmuannya semakin luas. Apakah domain hanya untuk mengevaluasi pada masalah etika percobaan-percobaan di bidang biologi dan kedokteran manusia atau meluas menyangkut semua percobaan ataupun riset yang membahayakan eksistensi kehidupan? Moralitas ini termasuk untuk mengurangi rasa sakit, rasa takut, baik pada binatang dan manusia, biohazard, dan pengakuan adanya sang pencipta dan ciptaannya. Islam sebagai agama yang mengajarkan tentang universalitas sebenarnya mempunyai pandangan yang cukup sempurna yang dapat digunakan sebagai pandangan dasar untuk mengembangkan bioetika, ada 4 dasar yang dapat dikembangkan menjadi landasan Ilmuwan muslim untuk mengembangkan bioetika yaitu tauhid sebagai landasan dan acuan kebebasan berfikir yang bersifat sunatullah, semua kehidupan pada hakekatnya selalu beribadah pada Allah S.W.T., pada hakekat setiap kehidupan mempunyai hak untuk hidup dan dihargai, sekecil apapun kehidupan itu, dan semua kehidupan pada hakekatnya dapat dimanfaatkan oleh manusia, tetapi harus dimanfaatkan dengan orientasi jangka panjang (dunia dan akherat).

Kata kunci: bioteknologi, human enhancement technology, Islam

Abstract

The most successful technology in early of 2000's were reproductive and therapeutic cloning, this technology were already implemented in human, it was giving prospective impact for human happiness and prosperities on one sides, but on the other side giving fundamental question for human dignity. It was giving positive and negative impact; it was rooted in either theological or ethical consideration. Ironically, almost all Muslim aware that Islam is teaching universalities, but not

so many Islamic scholar both scientist and clerics were gathering to solving such problem. Scientists were doing by their selves and clerics enjoying their social status without doing anything, if such condition still working on Muslim countries without any conclusion, science and technology will be left Muslim behind on the age of biology. Today, the field of bioethics struggles with its proper scope. Should it concern itself with the ethical evaluation of all questions involving biology and medicine? Some bioethicists would narrow ethical evaluation only to the morality of medical treatments or technological innovations, and the timing of medical treatment of humans. Others would broaden the scope of ethical evaluation to include the morality of all actions that might help or harm organisms capable of feeling fear and pain, biohazard, and include within bioethics all such actions if they bear a relation to medicine and biology, the existence of creator as well. In Islam as universal religion, it was concluded that to solve its problem, Islamic bioethics were base on 4 principal for arrange bioethics as follow, the first Tauhid as spiritual freedom, Every living things have a duty to worship Allah, every living things have a right to exists, and Utilizing of living things should be used utilitarian approach. From the case of ethical problem, Islamic construction was arranged with base on ontological judgment, First step to analysis philosophies issues by assuming and framing logically with ontological approach that means tawhid is starting point to arrange the construction Islamic knowledge, with this construction of knowledge human happiness will be come in reality, it is the essence of life, Al Qur'an and sunnah as supreme of knowledge not only of religious law, but of very nature of existence and beyond of existence of the very source of existence.

Key word: Islamic bioethics, human enhancement technology

The age of biology and its problem

Since the mid of 1970's, after test tube baby was born, the scientist were facing ethical problem, bioethics, a relatively new area of ethics (Ilmu akhlaq), has emerged at the fore front of modern biological more over on clinical science. Many philosophical arguments were against organ donation or stem cell from this field. Generally, the arguments are rooted in either theological or ethical considerations.

Naisbitt and Aburdene (1990), predicted that in next millennium human kind will facing global term what they call it "the age of biology", it will be indicated by the rapid growth technology base on molecular biology. Biotechnology will be alternative solution for human kind to improve their quality of life, even though such improvement giving negative impact in term environment, especially genetic modified organism and human dignity.

The late of 1990, Naisbitt and Aburdene prediction were true, Scientist were surprised

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with announcement by Wilmuth (1997), he was succeed to transfer the nucleus of the egg of sheep for making cloning embryo and the embryo transferred to the foster mother and the "dolly was born", this technique already applied in Human, it was called Human reproductive cloning, cloning also it might produce benefits to create a fertility treatment that allows parents who are both infertile to have children with at least some of their DNA in their offspring. Almost in the same time Johnson published in science journal, the high ranking of impact factor journal, that he succeed to established "immortal cell lines culture" for human embryonic stem cell, this effort to harness embryonic stem cells versatility continuing, since then the scientist have continued to pursue embryonic stem cells because of their ability to transform into blood, bone, skin, or any other type of cells (Leshner and james, 2007), this technology will be giving positive impact to improve therapeutically technology, some scientist predicted that the stem cell embryo will be useful as "spare part cell", it was called Human therapeutic cloning, ones of most prospective therapeutic approach in human health problem for ageing disease, such as cancer, heart disease, and diabetes, as well as improvements in burn treatment and reconstructive and cosmetic surgery, are

areas that might benefit from such new

Basically from both advance technology above, inspired new technology namely Human enhancement technology, It is refers to any attempt, whether temporary or permanent, to overcome the current limitations of human body, whether through natural or artificial means. The term is sometimes applied to the use of technological means to select or alter human aptitudes and other phenotypical characteristics, whether or not the alteration results in characteristics that lie beyond the existing human range. Here, the test is whether the technology is used for non-therapeutic purposes. Some bioethicists restrict the term to the nontherapeutic application of specific technologies those are neuro-, cyber, gene, and nano-technologies to human biology (The Royal Society and The Royal Academy of Engineering, 2004).

Life extension refers to an increase in maximum or average lifespan, especially in humans, by slowing down or reversing the processes of aging. Average lifespan is determined by vulnerability to accidents and age-related afflictions such as cancer or cardiovascular disease. Extension of average lifespan can be achieved by good diet, exercise and avoidance of hazards such as smoking and excessive eating of sugar containing foods. Maximum lifespan is determined by the rate of aging for a species inherent in its genes and probably by certain environmental factors. Currently, the only widely recognized method of extending maximum lifespan is calorie restriction. Theoretically, extension of maximum lifespan can be achieved by reducing the rate of aging damage, by periodic replacement of damages tissues, or by molecular repair or rejuvenation of deteriorated cells and tissues (Roco and Brainbridge, 2004).

Whether the maximum human lifespan should be extended is the subject of much ethical debate amongst politicians and scientists. But the life extension movement, which began in the early 1980s, continues to grow rapidly in popularity and momentum among scientists and the general public opinion and interest (Djati, 2007).

The scientist were facing on term of ethics, they living in western culture where the technology were development rapidly,

and on the other hand Muslim country biotechnology were still under developing, not so many scientist were doing such work, but some of them also already aware that they will also facing the same problem, if they not prepare it earlier, human kind will facing future problem, such unbalance of thermodynamical law in universe, environmental problems, endanger of biodiversity, genetic mutation, unpredicted new organism, human existence and dignity, etc. It will be giving unpredicted impact and unsecured future, so that endangered human life and believes.

Today, the field of bioethics struggles with its proper scope. Should it concern itself with the ethical evaluation of all questions involving biology and medicine? Some bioethicists would narrow ethical evaluation only to the morality of medical treatments or technological innovations, and the timing of medical treatment of humans. Others would broaden the scope of ethical evaluation to include the morality of all actions that might help or harm organisms capable of feeling fear and pain, and include within bioethics all such actions if they bear a relation to medicine and biology.

The issues rose by bioethics as a distinct area of academic inquiry (why must it exist apart from philosophy? isn't everyone an 'ethicist'?) are largely answered by the needs of institutions. Bioethicists today are not hired or engaged in conversation (and thus "named") because of their opinions or because they have special skills of reasoning, but because they know and can put to work the enormous body of research and history of discussions about bioethics in a fair, honest and intelligent way, using tools from the different disciplines that "feed" the field. Training programs in bioethics differ in skill sets of faculty and size of program, but across the developed countries such US and UK, and increasingly globally, they do seem to share a commitment to that goal with few exceptions.

Nonetheless, many claim to work in bioethics, and indeed can feel free to do so, in just the same way that self-help book authors claim to work in philosophy. However, those not working in and trained in bioethics in the now fairly well established range of ways typical of bioethicists, more over in many Muslim countries that under struggling to

developed science and technology for their prosperity. The scientist and clerics (ulema, preacher, or hojatul islam) working separately, even though the science and technology will be improve rapidly, the Islamic ethics or ilmul akhlaq just working on domain of worship such praying, pilgrimage to holly shrine or Mecca, etc, it was naiveté. Ironically, almost all Muslim aware that Islam is teaching universalities, but not so many Islamic scholar both scientist and clerics were gathering to solving such problem. Scientists were doing by their selves and clerics enjoying their social status without doing anything, if such condition still working on Muslim countries without any conclusion, science and technology will be left Muslim behind on the age of biology.

First step to analysis philosophies issues by assuming and framing logical with ontological approach as starting point to solving the problem. We assuming that according to the religious book outlook, if there exist any divine compulsion in respect of man, that compulsion is in regard to his having volition and freedom, and if there is any predetermination by Allah, that mean that man should exercise his choice with consciousness and freedom. Hence divine will necessarily implies the freedom of man and not his predestination.

"Lo! We offered the trust unto the heavens and the earth and the hills, but they shrank from bearing it and were afraid of it. And man assumed it. Lo! he hath proved a tyrant and a fool (Qs 33:72)."

We know that natural Urges, divine guidance and even environmental conditions effects man's choice and his freedom. But their role is not compelling; they only create the tendency and pave the way for taking action. It is Always man's own free will which gives a definite shape to these tendencies and modifies them. It is up to him to identify the truth and take advantage of the guidance with insight. We have already said that Divine revelation is guidance which is enlightening, instructive helpful. It is a blessing of Allah which guides man to the right path.

We have opinion that the universe has not been created without purpose and in vain. Man and life also cannot be without a purpose. He has been created to make an evolutionary progress in all the dimensions of his existence and ultimately to make a journey towards absolute perfection (Djati, 2003).

It is man who is responsible to make himself and his environment. But responsible to whom man is? Some schools of thought give no answer to this question, for they maintain that beyond man there is no conscious authority to Exists a responsibility and that too towards the almighty, the wise and the All-knowing, who will call every ones to account and recompense him (Djati, 2003). Base on logical frame work of thinking that mention above in the case study of bioethics as recent problem of rapid development of science and technology, we should be reconstructed Islamic knowledge. The proper construction of Islamic knowledge will be fundamental answer so many technological case of future ethical problem that predicted will be facing not only Muslim and non-Muslim scientist.

Ideology and methodology

Bioethicists often focus on philosophy to help analyze issues, and philosophical ethicists are tends to treat the field as a branch of moral or ethical philosophy. However, this approach is sometimes challenged, and bioethics is becoming increasingly interdisciplinary. Ethics is not simple thing, it depend on culture where someone life, way of life, experience and spiritual journey, but in this article, we try to minimize differences by comparing western experience with their base culture alongside with their develop research and technology but living under secular and liberal system, they has experiences and facing unanswered question (Djati, 2003²).

In the case of most non-Western cultures a strict separation of religion from philosophy does not exist. In many Asian cultures, there is a lively (and often less dogmatic, but more pragmatic) discussion on bioethical issues. The discussion often refers to common demographic policies which are criticised, as in the case of China. Buddhist bioethics, Muslims, in general, is characterised by a naturalistic outlook that leads to a rationalistic, pragmatic approach. Buddhist bioethicists include Damien Keown. In India, Vandana Shiva is the leading bioethicist whose speaks from the Hindu tradition. In Africa, and partly also in Latin America⁸, the debate on bioethics frequently focus on its practical relevance in the context of underdevelopment and (national or global) power relations, in Muslim Countries Al Azhar Cairo and Indonesia already have been discussing among scientist routinely to established regulation concerning bioethics (Djati, 1999).

Many bioethicists come from backgrounds outside of academic philosophy, and some even claim that the methods of analytic philosophy have had a negative effect on the field's development. The percentage of bioethicists with professional backgrounds in health care, especially physicians, has been steadily increasing over time. In fact, the last two Presidents of the primary academic society for bioethicists in the U.S. (the American Society for **Bioethics** Humanities) have been physicians (Roco and Bainbridge, 2004). Some bioethicists, especially those who perform ethics consultation in clinical settings, emphasize the practical aspects of bioethics, and view the field as more closely related to clinical practice or public health than philosophy.

Religious bioethicists have developed rules and guidelines on how to deal with these issues from within the viewpoint of their respective faiths. Many religious bioethicists are Jewish and Christian scholars. Since the Indian traditions of Hinduism, Buddhism, and Jainism considers the sanctity of all life, there is much literature related to the philosophy and ethics related to life in each of these traditions. A growing number of religious scholars from Islam have also become involved in this field. There has been some criticism by liberal Muslims that only the more religiously conservative voices in Islam are being heard on this issue (Parens, 2003).

Although there are a number of eminently who qualified philosophers approach bioethics from a religious perspective, some Western secular bioethicists are critical of the fact that religious bioethicists are often religious scholars without an academic degree or training in disciplines that pertain to the issues, such as philosophy (wherein the formal study of ethics is usually found), biology or medicine. From the standpoint of bioethicists whose work is secular, the central cause for caution as regards religious

bioethics work is that tools and methods should be brought to bear on problems, rather than starting with conclusions, and then looking for justifications. Of course, this criticism does not apply solely, of even to all, forms of religious bioethical work.

Islam is universal religion with actual life in many Muslim countries, biotechnology has not improved yet, even their culture has more tightly with Islamic way of life, that's mean, and some Muslim has not implemented secular way of life (Djati, 2005). The approach of the article that's not mean western way of life against Islamic way of life, comparative approach of two different cultures, it will make complement system, which west has many experience and Islam or many Muslim countries where religious values has more implemented in daily activities, on other side they has not much experience yet. Yet, the problem facing west that has unveiled should be answered by Islamic bioethics with fundamentally different approach, Islam as Muslim way of life should be determined by Muslim in their actual and real activities including bioethics.

Western basic principal of bioethical **Philosophy**

Since 1990s, several academics (such as some of the fellows of the institute for ethics and emerging Technologies have risen to become cogent advocates of the case for human enhancement while other academics (such as the members of President Bush's Council on bioethics have become its most out spoken critics.

While in some circles the expression "human enhancement" is roughly synonymous with human genetic engineering, it is used most often to refer to the general application of the convergence of nanotechnology, biotechnology, information technology and cognitive science to improve human performance.

Advocacy of the case for human enhancement is increasingly becoming synonymous with "trans-humanism", which is a controversial ideology and movement which has emerged to support the recognition and protection of the right of citizens to either maintain or modify their own minds and bodies; so as to guarantee them the freedom of choice and informed consent of using human enhancement technologies themselves and their children.

Neuro-marketing consultant Zack Lynch argues that neuro-technologies will have a more immediate effect on society than gene therapy and will face less resistance as a pathway of radical human enhancement. He also argues that the concept of "enablement" needs to be added to the debate over "therapy" versus "enhancement" (The Royal Society and The Royal Academy of Engineering, 2004).

Many critics argue that "human enhancement" is a loaded term which has eugenic overtones because it may imply the improvement of human hereditary traits to attain a universally accepted norm of biological fitness (at the possible expense of human biodiversity and neuro-diversity, and therefore can evoke negative reactions far beyond the specific meaning of the term. Furthermore, they conclude that enhancements which are self-evidently good, like "fewer diseases", are more the exception than the norm and even these may involve ethical tradeoffs, as the controversy about ADHD arguably demonstrates (Roco and Bainbridge, 2004).

However, the most common criticism of human enhancement is that it is or will often be practiced with a reckless and selfish shortterm perspective that is ignorant of the longterm consequences on individuals and rest of society, such as the fear that some enhancements will create unfair physical or mental advantages to those who can and will use them, or unequal access to such enhancements can and will further the gulf between the "haves" and "have-nots" (Djati, 2003).

Accordingly, some advocates, who want to use language which provides a minimum of offense, and advance the public interest in socalled "human enhancement technologies", the term "modification" prefer "enablement" over "enhancement"; defend and promote rigorous, independent safety testing of enabling technologies; as well as affordable, universal access to these technologies.

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Beyond An application of biotechnology research, hundred thousand maybe more were sacrifice for glamour research of biotechnology. Ethicist of Animal rights is argue to opposed such research, the concept that all or some animals are entitled to possess their own lives; that they are deserving of, or already possess, certain moral rights; and that some basic rights for animals ought to be enshrined in law. The animal-rights view rejects the concept that animals are merely capital goods or property intended for the benefit of humans. The concept is often confused with animal welfare, which is the philosophy that takes cruelty towards animals and animal suffering into account, but that does not assign specific moral rights to them.

The animal-rights philosophy does not necessarily maintain that human and nonhuman animals are equal. For example, animal-rights advocates do not call for voting rights for chickens. Some activists also make a distinction between sentient or self-aware animals and other life forms, with the belief that only sentient animals, or perhaps only animals that have a significant degree of selfawareness, should be afforded the right to possess their own lives and bodies, without regard to how they are valued by humans. Activists maintain that any human being or institution that commodities animals for food, entertainment, cosmetics, clothing, animal testing, or for any other reason, infringes upon the animals' right to possess themselves and to pursue their own ends (Djati, 2003).

In the late 1960s and early '70s, Martin E. Seligman demonstrated that dogs Ρ. repeatedly exposed to inescapable electroshocks are very similar to severely depressed humans. He wrote: So there are considerable parallels between behaviours which define learned helplessness and major symptoms of depression. Helpless animals become passive in the face of later trauma; they do not initiate responses to control trauma and the amplitude of responding is lowered. Depressed patients are characterized by diminished response initiation; their behavioural repertoire is impoverished and in severe cases, almost stupor us. Helpless animals do not benefit from exposure to experiences in which responding now produces relief; rather they often revert to passively accepting shock. Depressed patients have strong negative expectations about the effectiveness of their own responding. They construe even actions succeed as having failed underestimate and devalue their own performance. In addition, evidence exists suggests which that both learned helplessness and depression dissipate in time, are associated with weight loss and anorexia, or loss of libido (syahwatun nafs), and norepinephrine depletion.

Finally, it is not an accident that we have used the word "helplessness" to describe the behaviour of dogs in our laboratory. Animals that lie down in traumatic shock that could be removed simply by jumping to the other side, and who fail even to make escape movements are readily seen as helpless. Moreover we should not forget that depressed patients commonly describe themselves helpless, hopeless, and powerless (Bailey, 2006).

In contrast, animals like jellyfish have simple nervous systems, and may be little more than automata, capable of basic reflexes but incapable of formulating any ends to their actions or plans to pursue them, and equally unable to notice whether they are in captivity. But the biology of mind is largely a black box and claims regarding the existence or absence of mind in other animals, based on their physiology, are speculative. American writer Sam Harris, currently writing a doctoral thesis on the neuroscience of mind, argues: Inevitably, scientists treat consciousness as a mere attribute of certain large-brained animals. The problem, however, is that nothing about a brain, when surveyed as a physical system, declares it to be a bearer of that peculiar, inner dimension that each of us experiences as consciousness in his own case, The operational definition of consciousness, the experiment is reportability. But consciousness and reportabiltiy are not the same thing. Is a starfish conscious? No science that conflates consciousness with reportabilty will deliver an answer to this question. To look for consciousness in the world on the basis of its outward signs is the only thing we can do (Bailey 2006).

And so, while we know many things about ourselves [and other animals] in anatomical,

physiological, and evolutionary terms, we currently have no idea why it is "like something" to be what we are. The fact that the universe is illuminated where you stand, the fact that your thoughts and moods and sensations have a qualitative character, is an absolute mystery (Roco and Bainbridge,

Some researches argue that animal rights are questionable because humans cannot understand the subjective state of animals. Opponents of animal rights have attempted to identify morally relevant differences between humans and animals that might justify the attribution of rights and interests to the former but not to the latter. Various distinguishing features of humans have been proposed, including the possession of a soul, ability to use language, consciousness, a high level of intelligence, and the ability to recognize the rights and interests of others; even though western bioethics still on debate, it was concluded that basic principal of western bioethics drawn up as follow:

1) Utilitarian approach

Although Singer is said to be the ideological founder of today's animalliberation movement, his approach to an animal's moral status is not based on the concept of rights, but on the utilitarian principle of equal consideration of interests. His 1975 book Animal Liberation argues that humans grant moral consideration to other humans not on the basis of intelligence (in the instance of children, or the mentally disabled), on the ability to moralize (criminals and the insane), or on any other attribute that is inherently human, but rather on their ability to experience suffering. As animals also experience suffering, he argues, excluding animals from such consideration is a form of discrimination known as "speciesism."

Singer uses a particularly compelling argument called the Argument from Marginal Cases. If we give rights to humans based on some quality they possess, then we cannot argue that humans that lack that quality should have rights. Such a quality may be sentience or ability to enter a social contract or rationality. But an infant born with a defect so that it will never have those qualities cannot be granted rights without invoking speciesism. Singer argues that the way in which humans use animals is not justified,

because the benefits to humans are negligible compared to the amount of animal suffering they necessarily entail, and because he feels the same benefits can be obtained in ways that do not involve the same degree of suffering(Howard, 2001).

A substantial multiple parts debate between Singer and senior US Judge Richard Posner on Animal Liberation is listed online. In it, Posner first argues that instead of starting his philosophy on the idea that consideration of pain for all animals is equal, his moral intuition tells him that humans prefer their own. If a dog threatened an infant, and it required causing more pain to the dog to get it to stop than the dog would have caused to the infant, then we, as humans, spare the infant. It would be "monstrous to spare the dog." Singer challenged Posner's moral intuition with ethical arguments that formerly unequal rights for homosexuals, women, and those of different races also were justified using moral intuition. Posner replies that equality in civil rights did not occur because of ethical arguments, but because facts mounted that there were not significant differences between humans based on race, sex, or sexual orientation that would support that inequality. If and when similar facts mount on the differences between humans and animals, those differences in rights too will erode. But facts will drive equality, and not ethical arguments that run contrary to moral instinct. Posner calls his approach soft utilitarian in contrast to Singer's hard utilitarian, in which the terms hard and soft refer to the power of the logic of the ethical arguments to overpower moral intuition. Posner concludes his philosophical arguments The "soft" utilitarian position on animal rights is a moral intuition of many, probably most, Americans. We realize that animals feel pain, and we think that to inflict pain without a reason is bad. Nothing of practical value is added by dressing up this intuition in the language of philosophy; much is lost when the intuition is made a stage in a logical argument. When kindness toward animals is levered into a duty of weighting the pains of animals and of people equally, bizarre vistas of social engineering are opened up (Ryder, 1985).

2) Rights-based approach

Tom Regan (The Case for Animal Rights and Empty Cages) argues that non-human animals, as "subjects-of-a-life," are bearers of rights like humans. He argues that, because the moral rights of humans are based on their possession of certain cognitive abilities, and because these abilities are also possessed by at least some non-human animals, such animals must have the same moral rights as humans. Although only humans act as moral agents, both marginal case humans and at least some non-humans must have the status of moral patients.

Animals in this class have "inherent value" as individuals, and cannot be regarded as means to an end. This is also called the "direct duty" view. According to Regan, we should abolish the breeding of animals for food, animal experimentation, and commercial hunting. Regan's theory does not extend to all sentient animals but only to those that can be regarded as "subjects-of-a-life." He argues that all normal mammals of at least one year of age would qualify in this regard (Singer 1989).

The predation reduction argument is often applied to Regan's rights-based approach. If we are to protect animals with rights from moral patient humans, must we also protect them from other animals? This raises the issue of whether giving animals 'moral patient' status condemns extermination certain classes of predation.

While Singer is primarily concerned with improving the treatment of animals and accepts that, at least in some hypothetical scenarios, animals could be legitimately used for further (human or non-human) ends, Regan believes we ought to treat animals as we would persons, and he applies the strict Kantian idea that they ought never to be sacrificed as mere means to ends, and must be treated as ends unto themselves. Notably, Kant himself did not believe animals were subject to what he called the moral law; like Aquinas and Locke, Kant recommended kindness towards animals not for the sake of animals themselves, but mainly because he thought that those who are cruel towards animals are likely to tend to be cruel towards human beings too (Singer, 1989).

Despite these theoretical differences, both Singer and Regan largely agree about what to do in practise. For example, they agree that the adoption of a vegan diet and the abolition of nearly all forms of animal testing are ethically mandatory.

3) Rights require obligations

Critics such as Carl Cohen, professor of philosophy at the University of Michigan and the University of Michigan Medical School, oppose the granting of personhood to animals. Cohen wrote in the New England Journal of Medicine in October 1986: that " the holders of rights must have the capacity to comprehend rules of duty governing all, including themselves. In applying such rules, the holders of rights must recognize possible conflicts between what is in their own interest and what is just. Only in a community of beings capable of self-restricting moral judgments can the concept of a right be correctly invoked."

Cohen rejects Peter Singer's argument that since a brain-damaged human could not exhibit the ability to make moral judgments, that moral judgments cannot be used as the distinguishing characteristic for determining who is awarded rights. Cohen states that the test for moral judgment "is not a test to be administered to humans one by one."This is also known as the Argument from Species Normality (Spira, 1985).

The British philosopher Roger Scruton has argued that rights can only be assigned to beings who are able to understand them and to reciprocate by observing their own obligations to other beings. Scruton also argues against animal rights on practical grounds. For example, in Animal Rights and Wrongs, he supports foxhunting because it encourages humans to protect the habitat in which foxes live. However, he condemns factory farming because, he says, the animals are not provided with even a minimally acceptable life.

The Foundation for Animal Use and Education states that "[o]ur recognition of the rights of others stems from our unique human character as moral agents-that is, beings capable of making moral judgments and comprehending moral duty. Only human beings are capable of exercising moral judgment and recognizing the rights of one another. Animals do not exercise responsibility as moral agents. They do not recognize the rights of other animals. They kill and eat one another instinctively, as a matter of survival. They act from a combination of conditioning, fear, instinct and intelligence, but they do not exercise moral judgment in the process (Sunstein, and Nussbaum, 2004)." In The Animals Issue: Moral Theory in *Practice*, the British philosopher Carruthers argues that humans obligations only to other beings who can take part in a hypothetical social contract. thus animals are excluded from the group of beings to whom humans have moral obligations.

Social contract arguments do not address the problem of animals acting as if they have entered into such contracts with others of their species. Cooperation and relatively peaceful coexistence in group situations are characteristics of many species. Jules Masserman (1905-1989), past president of American Psychiatric Association, concluded in 1964 that: "A majority of rhesus monkeys will consistently suffer hunger rather than secure food at the expense of electroshock to a conspecific (Rachels, 2007)."

4) Abolitionist view

Gary Francione's work (Introduction to Animal Rights, et.al.) is based on the premise that if non-human animals are considered to be property then any rights that they may be granted would be directly undermined by that property status. He points out that a call to equally consider the interests of your property against your own interests is absurd. Without the basic right not to be treated as the property of humans, non-human animals have no rights whatsoever, he says. Francione posits that sentience is the only valid determinant for moral standing, unlike Regan who sees qualitative degrees in the subjective experiences of his "subjects-of-a-life" based upon a loose determination of who falls within that category. Francione claims that there is no actual animal-rights movement in the United States, but only an animalwelfarist movement. In line with his philosophical position and his work in animalrights law for the Animal Rights Law Project at Rutgers University, he points out that any effort that does not advocate the abolition of the property status of animals is misguided, in that it inevitably results in the institutionalization of animal exploitation. It is logically inconsistent and doomed never to achieve its stated goal of improving the condition of animals, he argues. Francione holds that a society which regards dogs and cats as family

members yet kills cows, chickens, and pigs for food exhibits what he calls "moral schizophrenia (Mc Gee and Caplan, 2007)."

5) Analogies to human rights

Writer Robert Bidinotto said in a 1992 speech to the North eastern Association of Fish and Wildlife Agencies: "Strict observance of animal rights forbids even direct protection of people and their values against nature's many predators. Losses to people are acceptable ... losses to animals are not. Logically then, beavers may change the flow of streams, but Man must not. Locusts may denude hundreds of miles of plant life ... but Man must not. Cougars may eat sheep and chickens, but Man must not."

However, many other animal rights activists believe that human rights and animal rights are closely connected. Ronnie Lee, the founder of the Animal Liberation Front, talked of Gandhi and Martin Luther King as inspiration. Robin Webb, the press officer for the A.L.F. in Britain, has referred to animal rights as "the ultimate liberation movement", and an extension of the human rights struggle. Steven Best, who was a human rights activist before becoming involved in animal rights, has written several essays on the links between the two movements (Eckenwiller and Cohn, 2007).

Islamic philosophy principal for arranging the concept of bioethics

Optimism is the first effect of religious faith from viewpoint of the creation of happiness and delight. A faithful man is optimistic about the world, the life and the creation. Religious belief gives a particular shape to man's attitude towards the world. As religion maintains that creation has a goal and that its goal is nothing but betterment and evolution, naturally belief affects the outlook of man and makes him optimistic about the system of the universe is similar to the attitude and the laws governing it(Mutahherri, 2003). Knowledge is the heart of life (Majlisi, 2005).

Human rights has already explain in many countries, human kind Animal has been protected on constitution in all independent countries, base on this concept, the philosophical concept of human has not deeply discussing in the article, in Islamic bioethics, utilization of human bodies or part of human body should conducted base on

(Islamic law) that has been sharia implemented even only a part of human embryo, such as human embryo manipulation, depend on embryo has gotten, if the source of embryo form Islamic marital couple, if and the embryo from wasting embryo resulted from IVF such patient, it is permitted, but if embryo from unmarried couple, it was strictly prohibited, and so on, in this article doesn't discuss such detail, but only basic principal for arrange the bioethics concept.

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In Islamic philosophy principal was base on explanation above that every living thing have their own goals, that means the utilization of living thing should be base on the meaning of life, human life, animal life, or plant life, they have right to exists in universe, with justice and balancing of equity and access for their life. Their life should be useful each other and should be meaningful for its own life and properties as well as their own happiness. The every living thing should worship to Allah without exception, the term of worship is general term, that means every living thing should be ready to sacrifice to creator base on the law of nature (sunatullah).

"5. The sun and the moon (run) to allprecisely reckoned (courses); 6.And the star and the trees prostrate themselves; 7. And the heaven, He raised it up, and laid down the balance (Qs 55:5-8)."

Everything in the cosmos is moving forwards towards its goal. There is nothing disorderly and haphazard. From the order found in a smallest living things and the heart of an atom to the accurate system of the body of living being, to the precise balance found between the planets of the solar system as well as the galaxies and to the marvelous laws governing the entire world, which are being discovered and put to use by science, everything indicates that there exist a calculated system and organization.

On the basis of what Imam Ali has said, justice means putting everything in its place. In contrast, injustice means putting a thing out of its due place. Any deviation from the general rules and relations governing the world, will cause confusion and disorder, and will disturb the balance maintained by the firm natural laws. Everything has to move in its own orbit and advance towards its evolution.

Balance and order are the inevitable laws governing nature. The natural phenomena are not free to choose what kind of mutual relationship they should have or whether they should or should not maintain a balance. Even the reaction was produced by short disturbance in nature in the way of evolution. This reaction also follows an inevitable course already prescribed. In facts even any disturbance in the natural disorder has its own special method and procedure when order in a wider sense is disturbed, nature itself produces some correctives from within or without.

The penetration of the germs or viruses of a disease into the human body causes cramps and pain, but the reaction caused by white globules or outside medicines fights the germs and viruses and at last restores the health and general equilibrium of the body. This is an example of the combat of evil.

"Whatever in the heavens and whatever is in the earth extols to Allah; He is The Ever-Mighty, The Ever wise (Qs 61:1)."

Human or animal rights is the concept that all living thing has right to exist as creature, but every living thing has difference position and duty, as well as its goal of their life in Universe. Human as a creature that has capability to be a leader to manage other living material, he has a duty utilize the natural resources with full of responsibility as leader, human already has established human right by United Nations, on the other hand animals have different position, they are entitled to possess their own lives; that they are deserving of, or already possess, certain moral rights; and that some basic rights for animals ought to be enshrined in law. The animal-rights view rejects the concept that animals are merely capital goods or property intended for the benefit of humans. The concept is often confused with animal welfare, which is the philosophy that takes cruelty towards animals and animal suffering into account, but that does not assign specific moral rights to them.

The animal-rights philosophy does not necessarily maintain that human and nonhuman animals are equal. For example, animal-rights advocates do not call for voting rights for chickens. Some activists also make a distinction between sentient or self-aware animals and other life forms, with the belief that only sentient animals, or perhaps only animals that have a significant degree of selfawareness, should be afforded the right to possess their own lives and bodies, without regard to how they are valued by humans. Activists maintain that any human being or institution that commodities animals for food, entertainment, cosmetics, clothing, animal testing, or for any other reason, infringes upon the animals' right to possess themselves and to pursue their own ends. Base on Qur'anic spirit to arrange Islamic bioethics it should be base on principal as follow:

1) Tauhid as spiritual freedom.

Islam is religion base on spiritual freedom, it was cause by innate character (fitrah) of humanity, without freedom of thought, freedom of speech, and freedom of spirit as well, human kind will not reach the truth, with reaching the spiritual truth mankind will reaching the real truth, happiness and prosperity, not only in material but also in spiritual domain, the consequences the truth of Islamic massage, such freedom should be as one basic principal in Islamic teaching, the truth should be free from dogmatic thought, indoctrination, dependency as well, those innate character of humanity (Ibrahim and al-Shahin, 2004). Islam as religion of fitrah has a basic principal of believe, what we call it freedom to choice, as Allah says in Al-qur'an:

"There is no compulsion in religion, rightmindedness has already been evident (distinct) from misguidance. So, whoever

disbelieves in taghut and believes in Allah, then he has already up held fast the most binding grip, with no disjunction (ever); and Allah is ever hearing, ever knowing (Qs 2:256)."

What does freedom mean? Normally, when we think of freedom we consider two things, one which is to be free the other. What does a human being want to free him from in the case of spiritual freedom? The is that, as opposed to social freedom in which one is to free from others, in spiritual freedom, one must free himself from his own self' spiritual freedom is special kind of freedom. It in fact, means to free a person from his own bondage (As-Sadr, 2005). Animals cannot capture or free themselves, but a human being is a very special kind of being who is capable is such actions. Religion, philosophy, psychology, and science verify the complexity of human character. Concerning the creation Allah says to Angel (Mutada, 2005).

"So after I Created him and formed him (as human being) breathed into him a spirit, from presence then you all bow down before him! (Qs 15:29)."

He says man is an earthly creature. I created him from earth, He is a natural and material being. But this mixture of water and earth, whose corps and material is the same as other animals is equipped with something of my soul.

2) Every living things has a duty to worship to Allah

Fundamental principal to utilize natural resource should be understood everything in universe is under Allah control, the consequence of this principal is that every command of Allah should be as guidance for making decision, the action to decide to make decision it was term as worship.

"...surely You Ever-Determiner of over everything (Qs 3:26)."

Worship in this term not just religious terminology such as pray, pilgrimage, as well as zakat, but it is also giving widely meaning like how to respect to Qur'an and hadith as a source of law in any kind of action including the action on biological experiment, such action we call it bioethics. For example if scientist will doing human embryo for their experiment, they should be guide by Qur'an and hadith guidance and its all interpretation by Islamic law scholar or trust worthy (Ulema, Hojatul-Islam, Fugoha, etc).

"O you who have believed, obey Allah and obey The Messenger, and the ones endowed with the trust worthy among you (Qs 4:59)."

In western view, the problem of bioethics was often facing on fundamental issues, for example, when the scientist manipulate human embryo, such experiment against by preacher because they intervention of God domain, it was strictly prohibited, they have facing definition of God, God just have limitation power. However, In Islam view, they were not intervention of God domain, because the God domain is unlimited, Allah is Ever-Determiner of everything. So that, if human kind who have believer and done righteousness, they should under guidance of Allah via Qur'an and Hadith as well as trustworthy. Even though, Final decision was similar or same, it was prohibited, but logical frame was much deference. Western view is base on rationality but Islamic view is base on revelation.

" Have you not seen that to Allah prostate themselves whoever are in the heavens, and whoever are in the earth, and the sun, and the moon, and the stars, and the sun, and the moon, and stars, and mountains, and its trees, and all beast and many of mankind? And too many torments will come true; and whomever Allah degrades, then none will honour him. Surely Allah performs whatever He decides (Qs 22:18)."

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3) Every living has a right to exist Our world is full of phenomena, that is the thing which is exist as created by Allah, no other existence which was lost of control by sunatullah, their existence has meaningful and has own goal. Even though human kind has duty as khalifah (successor) in the earth, it is means that human kind has to honour the existence of every living thing, and Islam came is the massage to be merciful of universe, as Allah says in Qur'an,

"And in no way have We sent you except as a mercy to the worlds) (Qs 21:107)"

What does merciful means? It is means that every living and non living thing in universe should have a right to be meaningful each other and its own goal. The existence of everything has a part of universe, without the existence even only by one thing the universe was nothing. That's mean every part of the universe has to exist, one part giving partially impact to another part, smaller part be a bigger part, bigger part be more bigger one, and so on, finally all part be particular part in universe. So that, a thing that even only small part has to participate to arrange universal system. Moreover, a living thing, that's creature with more complex structure as compare with non living material, they have instinct, intelligence, psycho, and especially human who has spirituality quotient should be have right to exist, their existence will contributed the whole system in universe. Destroying the living thing will be endanger of universal system, unbalancing of universal system is the impact the un-respectful of the right living things.

4) Utilizing of living things should be used utilitarian approach.

As explain above that human kind has duty as khalifah (successor) in the earth, as explaining in Qur'an that Allah made everything for Human kind happiness, but it was not means that a man can utilize everything that exist in the earth as they want to do without any reason. A man who living in the earth has duty preserve natural resources balance, on the other hand utilizing the natural resources even in simple meaning has negative impact in the term of thermodynamics law, every changing and utilizing or conversion of natural resources will be giving wasting energy, what we call it as entropy, that is energy which uncertainty formation, in general means it was waste energy. In utilitarian principal, efficiency and

effectively should be standard as measurement to utilize natural resources, waste should be minimizing, even in some condition we cannot avoid it. In Islam wasting is evil obedience, wasting in this term not just physical, or material waste, but also psychological, mentality, spirituality term, that's why utilizing of living should be pay attention to care psychological of animal or human who they are treated on experiment or medical treatment (Ispahany, 2007). if we want to reach real happiness, we should utilize natural recourses as efficiency as possible and suppress with minimum wasting for every utilization of natural resources, This principal should be implemented by the scientist as successor in the earth.

"And (remember) as your Lord said to the angel: 'Surely I am making in the earth successor' (Qs 2:30)."

"And Allah has made for you of what He created shades, and He has made for you mountains nestled, and He has made for you apparels to protect you from heat and apparels to protect your own violence. Thus He perfects His favor upon you, that possibly you would be Muslim (Qs 16:81)."

"26. And bring to a near kinsman his true (right) and to the indigent and wayfarer; and do not squander wantonly;27. Surely the squanderers have been brethren of ashshayatin and ash-shayatin has ever been everdisbelieving to his lord (Qs 17:26-27)."

REFERENCES

- As-Sadr, M. 2005. The Ahlul-Bayt; Ethical Role-Models, Translated by Badr Shahin. Qum: Ansariyan.
- Bailey, R. 2006. The Right to Human Enhancement: And also uplifting animals and the rapture of the nerds. Journal of Bioethics. North America bioethics society. Vol 74:24-47.
- Djati, M.S. 1999. The future and consequences of implementing embryonic stem cell technology. Paper presented National Seminar. Indonesian forum on Reproduction. Surabaya.
- Djati, M. S. 2003. Phylosophical Discourse on embryonic stem cell technology and cloning, bioethics and religiosity view.

- Jurnal Universitas Paramadina. Vol. 3 No. 1 September 2003.
- Djati, M.S. 2003. Holistic and reductionistic approach integration for developing biotechnology with environmental friendly concerning issues. National congress on phytophatology. Malang.
- Djati, M.S. 2005. Islamic view on genetically engineering technology. International congress on molecular biology. International conference on Biotechnology. Denpasar.
- Djati. M.S. 2007. Discourse of Human Enhancement Technology, Bioethical Discourse Base on Practical Experience. International seminar on molecular biology. Organizing by Central laboratory of Life Science. Brawijaya University. Malang.
- Eckenwiller, L.A., G.C. Felicia. 2007. The Ethics of Bioethics: Mapping The Moral Landscape. The Johns Hopkins University Press. London.
- Howard, R.L. 2001. "Parthenogenesis in debate" The inventing of speciesism as new generation of modified organism are endanger life existence. Journal of bioethics North American bioethics society. Vol 56:43-76.
- Ispahany, B. 2007. Islamic Medical Wisdom; The Tibb al-al-A'imma. Translated. edited by Andrew J.Newman. Qum-Iran Anshariyan publisher. Iran..
- Ibrahim, M., A. al-Shahin. 2004. Tawheed al-Mufadhdhal translated by Muhammad Ibrahim and Abdullah al-Shahin. Qum-Iran Anshariyan publisher. Iran.
- Leshner, A.I., A. James. Thomson. 2007. Standing in the way of Stem Cell Research. Washington Post. December 3.
- Majlisi, A.M.B. The essence of life. Translation from Ainul-Hayat, translator Sayed Tahir Bilgrami. Qum-Iran Anshariyan publisher.
- Mc Gee, G., A. Caplan. 2007. Playing with God: Prayers not a Prescription. The American Journal 112:1-15.
- Murtahhari, M. 2003. Man and Universe. Qum-Iran Anshariyan publisher. Iran.
- Mutahhari, M. 2005. Spiritual Discourse. Qum-Iran Anshariyan publisher. Iran.
- Naisbitt, J., A. Patricia. 1990. Ten New Direction for The 1990's "Megatrend 2000". Avon Books. A division of The hearst Corporation 105 Madison Avenue by Megatrend Ltd. New York.
- Parens, E. 2000. Enhancing Human Traits: Ethical and social Implication. Georgetown University Press. New York.

- Qur'an Surah; Al-Baqoroh (2) verse: 30,256; An-Nisa, Verse 59; An-Nahl (16) verse 81; Al-Isra' (17): verses :26-27; Alhijr, verse 29; Al-Anbiya (21):107;Al-Hajj(22) verse 18; Al-ahzab 33: 72; Ar-Rahman (55) verses 5-8; As Shaff (61):1
- Rachels, J. 2007. a Report from America: When Philosophers shoot from the Hip In The bioethics and Developing World Bioethics edited by Landman, U. Schulenk, P. Singer. John Wiley and Son. New York.
- Ryder, R. 1985. Speciesism in laboratory. Edited by Peter Singer. In Defense of Animals. Basil Blackwell. New York.
- Roco, M.C., W. Bainbridge. 2004. Converging Technology for Improving Human Performance. Springer. New York.
- Singer, P. 1989. All Animals are equal. Edited by T. Regan, P. Singer. Animal Rights and Human Obligations. New Jersey.
- Spira, H. 1985. Fighting to Win. Edited by Peter Singer. In Defense of Animals. Basil Blackwell. New York.
- Sunstein, C.R., M.C. Nussbaum. 2004. Animal Rights: Current Debates and New Directions. Oxfords University press. Queenslane.
- The Royal Society and The Royal Academy of Engineering. 2004. Nanoscience and nanotechnologies. John and valley publisher. London.
- Wilmuth, I. 1997. Nuclear transfer: Uses of cloning in Farm animal production. Annual Report. Roslin Institute. Edinburgh.