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Life Technologies and Religious Views*

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Preface

In this paper I would like to survey religious views on life technologies, especially ES cell research and examine the role of religious views when discussing the acceptance of this kind of technology. (Here life-technologies refers to technologies which 1) make use of human organs, tissues, cells, and embryos for the curative purposes or for medical research, 2) physically assist human reproduction, 3) use genetic manipulation for the curative purposes or enhancement of humans. These include transplantation technology, tissue engineering, ES cell research, artificial reproductive technology (IVF), human cloning, and human genetic manipulations.)

1. Divided U.N.

On the 18th February 2005, the 6th (legal) committee of the U.N. approved a resolution calling on nations to ban all forms of human cloning incompatible with human dignity and the protection of human life. 71 member states voted for and 35 states were against the resolution. 43 states abstained. This resolution calls on nations to ban all forms of human cloning. The resolution went on to the U.N. General Assembly for a final vote and was adopted by vote of 84-34-37.¹

When an ad hoc committee on international convention against the
reproductive cloning of human beings was set up in 2001, the committee's mission was to elaborate an international convention against the reproductive cloning of human beings. However, there was a severe division among the U.N. member states as to whether the convention should ban all forms of human cloning or only reproductive cloning and not therapeutic cloning. The former view was supported by Costa Rica, Italy, Philippines, Portugal, Spain, U.S.A, and other countries. The latter view was supported by Belgium, China, Japan, South Korea, Switzerland, U.K., and others. The division was so severe that the committee abandoned efforts to draw up a legally binding treaty on reproductive cloning and the 6th committee decided the political declaration by vote.

It is obvious that religious differences have influenced this division in the U.N. Roughly speaking, Christian, especially predominately Catholic states tend to support the total prohibition of human cloning, while non-Catholic states tend to support the partial prohibition of human cloning which targets only reproductive cloning. It is true that the decision of the 6th committee of the U.N. is a rare case where religious views strongly influenced the political decision on life-technologies. In fact, some member states, which supported the total prohibition of human cloning haven't yet enacted effective legal regulations on human cloning - not only on therapeutic cloning, but also on reproductive cloning! Looking back from the U.N. political declaration to each member state's domestic legal regulations, it is difficult to say that religious views dominate political decisions on issues raised by life technologies.

However, it is also true that we pay special regards to religious views when discussing life-technological issues. They seem to be difficult to resolve by secular ethical and regulative solutions. The aim of this paper is to shed light on the question of why we take religious views into account when dealing with life technological issues. For this purpose, I
would like to discuss the characteristics of life technologies and limitations of the ethical theories that we can apply to them (section 2), then take a look at the interpretation of scriptures on the beginning of human life (section 3 and 4). In conclusion I will discuss the role of religious view on life technology when discussing the acceptance of this kind of technology.

2. Self-referential structure of life technologies and ethical theories

Different from animals, which adapt themselves to the natural environment, human beings are relatively independent from the natural environment and alter it using tools. Tool use is usually based on cultural tradition. Conversely speaking, we may say that the shared form of tool use constitutes cultural areas. In this regard, tool use is bound to cultural forms. Like tool use, technology also alters the environment while technology is not bound to cultural forms. It propagates over diverse cultures and destroys them in part. Moreover, technology is self-sufficient in that it can produce artificial industrial materials, contrary to the tool use, which can only transform natural materials. In this sense, technology can achieve a completely artificial environment.

Human beings not only change the environment but also themselves. In this regard Johann Gottfried Herder said “(human beings are) no more an infallible machine in the hands of nature, they themselves become the aim and goal of working.” Moreover, on the transformation of human beings through technology, Hannah Arendt says “if the human condition consists in man's being a conditioned being for whom everything, given or man-made, immediately becomes a condition of his further existence, then man 'adjusted' himself to an environment of machines the moment he
designed them.”

Life technologies also change human beings themselves, however, in a different way from ordinary technologies. While ordinary technologies change human beings through creating an artificial environment and by adjusting human beings to such an environment, life technologies could change them through making use of the human body, by changing the concept of reproduction, and by changing the human genes. While tools and technologies change human beings through changing the environment indirectly, life technologies change human beings directly.

It seems to be difficult for ethical theories to offer a unilateral resolution on the life technological issues. Traditional ethical theories such as liberalism or Kantian deontology view rational adult persons as ethical subjects. They can neither deal with entities before becoming rational persons, nor with genetic manipulation, which may destroy human genetic integrity. Modern ethical theories also do not seem to be able to deal with life technological issues. The so-called “theory of personhood,” which was developed in the 1970's, seems to be able to deal with pre-person entity. However, on closer observation, this theory is also based on the traditional concept of the “person.” Ethical issues raised by life technologies are inevitably related to problems such as “When does human life begin?” “When do we obtain human status and dignity?” and “What is human dignity?” There is no doubt that fertilization, implantation, and birth are crucial steps towards becoming human. However, there is a question whether fertilized eggs hold human dignity, and it is difficult to draw distinct ethical boundaries in the continuative period between implantation and birth. (How do we decide exactly when the embryo or fetus gains human status — at the 14\textsuperscript{th} day or the 120\textsuperscript{th} day or the 22\textsuperscript{nd} week after fertilization?) It is true that ethical theories may give grounds to support some opinions, but there is no
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logical connection between ethical theories and such opinions. It is because life technological issues question the ontological status of ethical subjects that ethical theories become insufficient for the life technological issues.

This is why religious views are often drawn on in discussions about the development and use of life technologies. However, it is also true that religious views are not consistent or as well-grounded as one might expect. In the next section I would like to show this briefly taking Catholicism, Judaism, Islam, and Buddhism as examples.

3. Religious views

Current religious views on life technologies seem consistent and univocal. The Catholic Church, in particular, shows a definite stance concerning life technologies. It repudiates all research using fertilized eggs and in-vitro fertilization (IVF), because they think that the instant of fertilization is the instant that a human life is created and in-vitro fertilization is “in itself illicit and in opposition to the dignity of procreation and of the conjugal union”.5

However, this view was established only recently. Patristic and medieval theologians of the Catholic Church held the view that in the development of fetuses, there are two distinct periods, namely before and after the ensoulment. They thought abortion is a thin, but that abortion before ensoulment is not homicide.6 However in 1588 Pope Sixtus V decreed that contraception and abortion at any stage were considered homicide and both were subject to excommunication.7 While the next Pope Gregory XIV rejected this interpretation three years later, in 1869 Pope Pius IX determined that life begins at conception (fertilization).8 It is worthwhile of attention that the development of human embryogeny
and genetics has influenced the views of the Catholic Church. Modern human embryogeny and genetics made clear that the process of human embryo-genesis is continuous development and individual genetic traits are determined at the moment of fertilization. Currently the Catholic Church teaches clearly that “[f]rom the time that the ovum is fertilized, a life is begun”.

Contrary to Catholicism, Judaism doesn’t admit human dignity to the embryo till the 40th day after fertilization. Moreover Judaism doesn’t attribute any special status to fertilized eggs outside the human womb. For Judaism, fertilized eggs produced by IVF are not part of the human body and therefore don’t hold any special status. In Judaism it is important to maintain and keep a healthy human body as “the temple” of God. From this view, abortion is admitted if it is done for the sake of the health of the pregnant woman. ES cell research also can be allowed if it will contribute to restoring human health.

As for Islam, while religious views on the beginning of human life are different depending on sects and schools, the majority of Muslims think that ensoulment occurs on the 120th day after conception. Therefore, traditionally Islam has allowed abortion up until the 120th day after conception however some schools think that abortion in this period is impermissible. ES cell research is also permissible in Islam if it will contribute to the enhancement of human health.

Different from Christians, Jews, and Muslims, Japanese Buddhists have paid less attention to the problems of abortion, IVF, and ES cell research than to the problems of brain death, transplantation, and euthanasia. For them issues concerning death of adults seem to be more important than issues concerning reproduction and fetuses. Regarding the beginning of human life, many Japanese Buddhists think that conception is the beginning while some think that it is the 14th day after concep-
tion because during this period the embryo gains the potentiality of shiki (consciousness). However many Japanese Buddhists allow abortion under certain conditions. It seems strange when we remember that one of the important doctrines of Buddhism is not to kill any life form. This could be explained by two incompatible backgrounds of thought. The first is that in Buddhism human life has no special status over other lives. The second is that in Japan, the traditional popular thought surrounding mizuko, which refers to aborted fetuses, avoids this problem. Japanese have not regarded mizuko as human life. While this interpretation isn't completely compatible with Buddhist doctrine, it seems to have influenced Japanese Buddhists' attitude towards abortion.

4. Resources in the scriptures

As Catholic views illustrate, religious views change historically and are influenced by scientific knowledge. Moreover, as Buddhism illustrates, religious doctrines are not always dominant in actual behaviors and beliefs concerning issues of life. Of course, religious views show their characteristics against scientific views, ordinary thinking, and philosophical and ethical theories. There is no question that the most important resource for religious views is scriptures. We may say that the integrity and characteristics of religious views come from interpretations of scriptures. However it is seldom that the scriptures of traditional religions give clear answers to the life technological issues. The main reason is, of course, that scientific knowledge of human life, especially human embryogeny was unavailable to the writers of scriptures. Therefore scholars and churchmen are obliged to draw on a few vague sentences of scriptures.

For example, the late Catholic Pope John Paul II refers to the
following sentence to validate its view on the dignity of human embryos: “The word of the Lord came to me saying: ‘Before I formed you in the womb I knew you, and before you were born I consecrated you; I appointed you a prophet to the nations’” (Jer. 1: 4-5). Drawing on this sentence, the late Pope says “[embryos are also] objects of God’s loving and fatherly providence.” However, it cannot be determined from this citation if embryos are included as objects of God’s loving or not. The late Pope also refers to verses in the book of Exodus (21: 22; 22: 20-26) concerning miscarriage. However, while we may read into the verses the prohibition of abortion, it is difficult to determine the status of embryos or fetuses drawing on the verses.

Remarkably, Judaism thinks that above-mentioned verses in Exodus indicate that the early fetus is not to be viewed as a full-fledged human being. Moreover, Judaism bases its attitude about abortion and ES cell research on a phrase in the Babylonian Talmud saying that the embryo during the first 40 days of gestation is “simply water.”

On the other hand, Islam draws on a section of the Koran saying “I am going to create human from clay. And when I have given him form and breathed into him of My life force, you must all show respect by bowing down before him” in order to validate their understanding that there are two distinct periods in the development of human life in the womb.

As discussed above, Buddhists are not so concerned with the discussion on when human life begins however some scholars draw on primordial scriptures which refer to the development of human fetus:

“If consciousness (shiki) doesn’t enter into the womb, do name and form realize in the womb?” — “No, they don’t, dear reverend.”

This passage indicates that human life doesn’t begin at the fertilization, but after shiki enters into the womb. However, it is not clear when
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*shiki* enters into the womb.

5. Closing Remarks

In any religion, scriptures say little about the status of the fetus or embryo and passages are open to various interpretations. However, it is worthy of attention that most religions pay special regard to the sanctity of life. In early Judaism abortion in general was objected to despite the actual widespread acceptance of abortion and infanticide.19 As mentioned above the current teaching of Catholicism prohibits abortion at any time and attributes the status of full-fledged person to embryos. While Islam states that the fetus before ensoulment doesn't possess human life, it protects human life.20 In Buddhism the problem of the status of human embryos seldom become religious issues, for Buddhism doesn't give any special status to human beings. Instead it pays special regards to life in any form.

Similarly to ethical theories, religious views cannot offer a unanimous resolution for the problems raised by life technologies, for their resources are limited and open to various interpretations. However, different from ethical theories which offer principles from the human perspectives, religious views can offer resolutions from outside of the human perspectives. This is why religious views are regarded as being capable of giving helpful advice when discussing self-referential structured life technologies, which may cross the boundaries between natural materials and human life, in an effort to redraw these boundaries.

*This paper is a slightly altered version of the paper presented at the symposium “Life Death and Technology” of The 19th World Congress of the International Association for the History of Religions, held on March 26, 2005.*


Ibid, p.42.


Ibid.; Elliot N. Dorff “Testimony of Rabbi Elliot N. Dorff for National Bioethics
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