

Violation of dignity in human simulation

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Abstract: One of the ethical challenges in biology is simulation technology. Some simulation phenomena, in which laboratory experiments have a similar version of a living person, are believed to be disgusting, and others believe that this phenomenon has many therapeutic benefits and social benefits, and that the survival of patients. The critical point of moral criticism in rejecting human simulation is the reason for the violation of human dignity. Islamic thinkers have argued for several reasons such as violation of dignity in non-sexual reproduction, lack of consistency in individuality in simulation, the virtue of dignity in instrumentalism, and violation of dignity to explain the incompatibility of simulation with human dignity.

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Introduction:

Biotechnology has undergone various stages in its development and evolution and has faced new challenges in every stage. One of the most important and relatively recent issues in the field of medical science is the possibility of human simulation through the use of the technique of transferring the nucleus of non-sexual or somatic cells into the oocyte. The question arises whether this is consistent with the principles of morality and the right to human dignity. Does this not weaken the foundation of ethics and its obvious violation? The World Health Organization declares humans to be unacceptable in terms of social morals. Condemning the use of this technique, the organization regards it as a violation of human dignity.

The church, in a message to the biology, medicine and society conference, stated that if genetic knowledge is free from social morality, it would be a threat to human dignity. Sunni jurists at Al-Azhar University, in addition to completely forbidden simulation, demanded that the perpetrators be punished for those who are doing this (Al-Ashqar, 2001, 237) Shi'a scholars and scholars have not announced the same views. Some have ruled out such a technique or have not found any way to honor it. Some Shiite jurists have also failed to do this and, in keeping with the maintenance of human dignity, have ordered it to be respected (Islamic, 2007, p. 68).

According to the claims of many scholarly scholars, philosophers of ethics, sociologists, jurists, and religious scholars who agree on the incompatibility of simulation with human dignity, this

has led to one of the greatest challenges of science and individual morality. And social in the present day. In this research, it has been attempted to explain how incompatibility of human dignity with productive simulation based on religious teachings. Accordingly, after designing the basic concepts, some important views on the simulation relation with human dignity were expressed. In order to find its various angles, the Qur'an's perspective on the concept of human dignity and empirical findings about the simulated psychological and psychological effects of the person was discussed in order to explain the incompatibility of human dignity with human simulation.

The concept of simulation

It is clear that every word that is pronounced gives a meaning to the mind. The term "simulation" is also no exception. The term "clone" derived from the Greek clone literally means a small branch, branch or branch, for it was first used by a person called Weber in 1903 to describe plants that are reproduced in terms of vegetation and vegetation (Gunther, 2005, 194).

In the modern sense, simulations are in the meaning of non-sexual reproduction or body cells, in which the non-sexual cell nucleus is injected directly into the egg and the sperm does not interfere, whereas in the existing production, unlike the routine of the combination there is not a male cell and a female cell, but genetically similar to a human with the same human characteristics that they call clones or existing ones to any of the new beings. Scientists are also those new creatures Clone or similar, which is genetically identical (inheritance). (Saremi, 2007, 58).

Each human reproductive cell, including the male and female, has 23 chromosomes, the sperm and the adult human egg, each with its own chromosomes, as opposed to other cells in the body that have 46 chromosomes. The chromosomes that are in the human body carry genes that have genetic characteristics, and each of these genes determines the gender of the individual. Another point is that of the 23 chromosomes in this cell, including the sperm or ovule, there is a chromosome corresponding to the gender of the egg in the sperm x in the sperm as a result of the normal state when the male and female interlaced. The sperm is combined with a female ovum, which also has 23 chromosomes, and each embryo has a fertilized cell with 46 chromosomes or 23 pairs of chromosomes to form, otherwise the embryo will not be formed after fertilization. This chromosomal cell 46 can be divided and become a fetus. (Mohammadi, 2008, 328)

But in simulating, after emptying the core, the ovum replaces another cell taken from the male or female body instead of the central core inside the female ovule and then placed in an appropriate laboratory environment to begin to multiply. The cell thus becomes a new person who is exactly the same person whose cell is located within the woman's ovule, with the same inherited heritages as the original version. For example, DNA (DNA) and fingerprints are similar to those of the cell. (Sohrabi and Khoeini, 2007, 263).

Arguments based on human dignity in human simulation

Various arguments have been put forward in the attitude towards the simulation process, with the basic proposition of human dignity. Briefly, in this section, the most important are:

A: Conceptual human dignity is useless

People like Schopenhauer and Ruth Macklin have such a view. Schopenhauer believes that human dignity is a concept that, with any interpretation of it, cannot be used to justify or reject the simulation process, and in fact, it believes in the simulation of the concept of dignity as an argument. Valid theme is excluded.

McLean Ross believes that in the field of medical issues, the notion of dignity has no meaning beyond the principles of medical ethics and respect for individuals, and it can no longer be used and, therefore, because of the evident ethical observance, there is no longer a need for the concept of dignity. Not human. He adds that despite the failure of the concept of dignity in the field of biomedical issues and human simulation, this concept is still used in simulation as a slogan (Nikouei-Nezhad, 2011,33).

B. Human dignity is a vague concept

People such as John Harris and Scroton suggest this view is that human dignity, despite the fact that a concept is of fundamental value, is a value that is all ambiguous and unclear. He claims that in the simulation process, in order to prevent any abuse of the concept, the category of human dignity should not be raised at all, because what is certain is that simulation, due to its health benefits, is in accordance with the principles of democracy and the right. It is a moral justification, and therefore it cannot be in contradiction with human dignity, but on the contrary, it fully conforms (Wilson, 2004, 70).

C: Human dignity is a clear concept that is contrary to simulation

The idea that has been raised by people such as Williamson and Calefield has been influenced by some international documents such as the UNESCO Genome Declaration and the United Nations Declaration on Simulation, without distinction of the simulation process and its types, at all levels. And dimensions and types are contrary to human dignity. In this view, there is a prevailing belief that the simulation and copying of a person's genome is contrary to ethical principles and is false practice (ibid., 73).

This view, which, in its point of view, regards human simulation as a conflict between human dignity, has been confronted with a problem. Opponents say most of the disadvantages of simulation are, in essence, a disadvantage of a particular type of production simulation. However, in this view, no distinction is made. In addition, today, in many religions and scholars, many scholars and intellectuals argue that the embryo has different rules at each stage of its development, they believe that, given the valuable benefits of simulation, this process has even moral justification. Therefore, accepting the argument that simulation violates human dignity is very difficult (ibid., 78).

Reasons for Opposition Simulation

A. Disappearance of dignity in non-sexual reproduction:

The first interpretation is that the inherent dignity of man is in the way of reproduction, the form of fertility and his birth. Hence, any work that leads to manipulation and change of this method and replaces the alternative method with the alternative method has violated human dignity. According to this view, human simulation has violated human dignity by replacing the non-sexual production method (Brassagni, 1423, 183). If human dignity is in the way of its reproduction and birth, and breaking this process will violate human dignity. In that case, there are some basic problems with this narration; one is that the natural form of human being is identical with many

animals, so why do we think that humans have a keratitis that the animal does not have.

The second form of this interpretation is that, wherever the mode of production and birth is contrary to ordinary tradition, it must be a violation of human dignity and this will be problematic about the birth of Jesus Christ (AS). In addition, the issue is not exclusive to the Prophet, but the production (IVF), according to the statement of those who have been subjected to uterine fertilization, must be ruled out of their dignity, while the opponents themselves, in various cases, explicitly perpetuate fertilization rights did not consider fatwa and they did not violate human dignity (Islami, 2005,267).

B. Breach of Dignity in Instrumentalism:

The second interpretation of human dignity can be that human beings are different from other living beings and have a woven wrapper, so they should not be treated like animals. But human simulation violates this dignity, because it requires human beings to be treated like Indian guinea pigs and experimental mice, and the same experiments performed on mice should be performed on humans, and This is a violation of human dignity (Al Marash, 1997, 136).

Qaradawi, in the same interpretation of the meaning of dignity, says: It is not true that human beings are identical in terms of reproduction or practice of scientific experiments and games with their hereditary elements in such a way that its consequences are not certain. (Qaradawi, 2003, 205).

It is clear that such an argument cannot be true. By no means can any test be performed on humans. Clearly, in order to achieve new therapeutic approaches, the effects of a variety of drugs, methods, and surgical techniques will be needed to achieve a desirable solution. If a test was performed on an animal and could be generalized to humans, Man is also tested in a plant or how can an acceptable method be achieved, for example, in assisted reproductive techniques, without the human body being involved.

Therefore, it must be concluded that merely carrying out experiments does not violate human dignity. (Islamic, 2005, 123). Now, if we conclude that human experimentation is not in conflict with human dignity, then it is necessary to lay down rules in order to do any test on human beings, he will not be harmed and will be treated in dignity and preservation.

C. Human dignity and lack of integrity and individuality:

Another interpretation implies that human dignity in preserving and nullifying is the combination of a unique genetic identity for all human beings. Hence, any manipulation of the hereditary composition of man is a violation of his dignity, and because he plays human genes in human simulation,

this is why he violates human dignity and humiliates him. (Mohaghegh Damad, 2005, 38)

This attitude suggests that man is a collection of certain genes, but the International Declaration of "Human Genetic Data" deliberately avoids this coincidence (Rasekh, 2005, p. 29). Because each person has a certain genetic structure, at the same time, the identity of a person is not limited to his genetic traits, and the role of the educational, environmental and individual indicators and the types of emotional, social, spiritual and cultural relationships with others is contributing to them. The element of freedom is effective in it. Moreover, if this interpretation of the accepted dignity is correct, how can it be assessed in its matrimonial similarity?

The identical twins have the same nuclear genome and there are hundreds of identical twins annually, and it is evident that there is no difference between their human dignity and the rest of the born babies, and all of them enjoy the inherent dignity of the human (Nikoueinejad, 2011, 38).

Infertility treatment using IVF is a new method that has increased duality and led to an increase in the incidence of twenty-four times the IVF by one twin dose (Saremi, 2003,125). With the assumption that if we want to act on the basis of the opinion that having the same genome would be a disadvantage to human dignity, we should accept that all the twins born, including twins who are increasingly raised in the use of fertility methods, they do not have a distinct, unique identity, or, while removing the new method of helping infertile couples, a new theory should naturally be given to twins born naturally. Certainly none of the above can be true. Instead, it should be said that genetic identity becomes a scientific dimension in its place. That is, anyone with the totality of genes that is in his presence can still be the same as he has with his repetition, without harming his twin. However, the term "genetic identity" cannot be a reason to suppress human dignity (Al-Ashqar, 2001, 241).

D. Breach of Dignity with the Bloody Destruction:

In this approach, the concept of human dignity has two main dimensions:

1. Individual dimension, i.e. when we speak of the rights of the rightful human beings; Individuals who are individual and willing to interact with us.

2. The collective dimension; when speaking of humanity. In this approach, human embryos have dignity. Because its attachment to humanity, especially since it is a potential human being, holds some degree of dignity and respect. Therefore, the destruction of the embryo in the laboratory is contrary to human dignity (Qaradawi, 2033, 141).

The extraction of the hierarchy for the creation of man in the Bible of the Qur'an is in its most obvious form through the verses 14-12 of the Muremn Surah. Verses referring to the stages of human creation and at the end of the stages of human development, introduces a new stage that is completely different from the previous stages. This new stage is the blowing of the soul into the human body, which is referred to as "the Last of the Last Succession." (Tabatabai, 1417, 13, 219)

This interpretation has nothing to do with vegetative life since the beginning of the formation of the Zigoth, because in the universe there are a myriad of species of life and evolution of vital cycles, whose difference in dignity and respect for human life is the lack of a human spirit. In other words, human beings are no more than the substance of matter before the void of matter, which, with the blow of the human soul, will become an entity that will differ in its essence and traits and properties from its past. At the same time, this new creature is the same as the former one, which, of course, is neither in nature nor in the traits of the former, similarity and in common with each other, but only with that kind of unity and belonging to help it reach its ends, just like a means and the hand held by its owner (ibid., 15, 140). Looking at the stages of the development of the first human being, it can be seen that human dignity is conceivable to others only after the human soul has been conceived, which can be construed as "human beings". For in the relevant verses, the Divine commandment was issued on the promise of the angels upon man after the blow of the soul in the human body (ibid., 23, 120).

Therefore, the inherent dignity of man seems to depend only on his enjoyment of the human spirit. This word will result in a rational result; if human dignity is subject to its enjoyment of the human spirit, and this is a manifestation of mankind to others, then that which is not of such a spirit does not enjoy human dignity and dignity, and to others No superiority.

E. Breach of dignity by causing physical and mental disorders

Simulation is based on the effects and physical and mental effects contrary to human dignity, which is briefly summarized here:

Part One: Physical Disorders

1. Disturbances in the production of tissues and organs:

Several studies have shown that human simulations will lead to multiple physical impairments. According to the statistics, even with IVF in vitro fertilization, the chances of success for a healthy fetus decrease significantly with the increase in maternal age. In these circumstances, if the age of the mother is less than 35, the chance of success is only 30%. This is

25% for women 35 to 37 years old, women from 38 to 40 years old and 17%, and women over 40 years of age are less than 5% (Sohrabi and Khoei, 2007, 69).

Laboratory fertilization has not altered gametes, ovulation, and fertilization eggs. Instead, the only fertilization phenomenon with the help of tools and man-made in the laboratory tube occurs. While in the cloning phenomenon, it was necessary to break the egg membrane with a specific micropipette and remove the nucleus and then replace a complete somatic nucleus with the core of the egg cell. These steps are much more complicated than the laboratory fertilization method of the egg and greatly increases the chance of damage to cells and cellular organelles, including the transfer core.

In addition, the main obstacle to the development of the natural fetus is the elimination of recombination and genetic recombination resulting from gametogenesis, cryopreservation, and the process of combining the male Parenchylous with the female Proknoctose. In the Crossover Ovar phenomenon, non-circadian chromatids of homologous chromosomes are exchanged during the first division of meiosis. (Mohammadi, 2007, 34).

The crossover phenomenon ultimately leads to the breakdown of a bunch of genes or changes in gene expression in a manner less or more than the conventional one in the next generation of living organisms. For example, the skin-producing gene of the skin may increase the expression of the next generation by making the skin more blemish (darker) and, by decreasing the expression, brighten the color of the skin (Mousavi Sabzevari, 1423, 247).

It is also necessary after 12 hours of insemination to rebuild genetic information folders that biologists call it a "recombination". This rearrangement to the egg cell enables the creation of folders in the genetic space when producing tissue, organ, device, and the entire structure. (Sohrabi and Khoei, 2007, 69) The cause of cloning failure in animals as well as in humans is thus clear; the cloning phenomenon, by eliminating recombination and gene recombination, greatly increases the possibility of impairment in the production of tissues, organs, and organs of the living body and increases the chances of being competitive. In a natural environment (different ecosystems) it is heavily reduced.

Therefore, in Royan, five attempts by the Royan Institute to defeat the cloning creature from the years 1385 to 1391 failed. In this process, the embryo was lost in the womb or within a few weeks after birth. The first sheep simulated in the city of Edinburgh, Scotland, was born on July 5, 1996. Almost 24 months later, due to the destruction of the wider body of the joints, it lost its power of movement and independent life until death (2006). (Tabataba'i Hakim, 1999, 96)

Obviously, impairment in the production of tissues and organs causes Failure to achieve "the best of being a calendar" is the structure of the human body, an obstacle to the realization of dignity.

2. Decrease the gene pool:

The gene pool is weakened by the possibility of extensive manipulation of the gene pool from the effects and results of simulation. As in the 1960s, some of the greatest scientists in the United States of America of Genetics believed that human whitening should be destroyed by human beings, such as Blacks and Indians, for the promotion of human white skin. However, with the development of genetic knowledge and the presentation of the human genetic map in 1996, it became clear that many genes and alleles that are useful in the gene pool structure of a variety of human beings, such as blacks, Indians and yellow people are scattered.

So that selection based on skin color can lead to the weakening of the human gene pool in the human genome so that many of the beneficial and effective traits of human survival on the planet, such as respiratory capacity, skeletal and muscle growth capacity, and The nature of that physical strength, the resistance to various diseases that reflects the immunological structure of the human body. The rules governing the genetic environment within a gene pool do not allow one-sided selection. This means that the selection and highlighting of one or more traits in a living organism often affects the genetic expression and the occurrence of a bunch of traits in that species, which reduces the expression and even eliminates many useful genes in relation to the natural environment.

For example, in the population of vinegar flies, whenever we want to artificially choose the attribute of hairless flies. Unconsciously, the genetic selection of hairless flies in the wild fluffy wildflowers causes the eye color to change from hairless or hairy vinegar flies, from a steep red to orange. Additionally, in Orange Fine Flies, the reproductive cycle from egg to larvae, pupae, and ultimately mature flies is twice as long as the red-eye wild flies. This phenomenon itself confirms that the selection of traits apart from each other in a living creature pool such as vinegar flies reduces the chances of survival in the wheel. The broad possibility of genetic manipulation in the Homo sapiens pool ultimately leads to a severe weakening of the genetic structure of man in the nature of the body and the elimination of this kind of godfather from earth.

Because the selection of eligible people for cloning among human beings, considering that humans are not aware of many of their genetic environment, human simulation ultimately leads to human mismatch with environmental changes and the

possibility of survival for several generations it is impossible for human beings. (Saadi, 1423, 187).

Section 2: Psychiatric Disorders

1. The changed consciousness:

The emotions and passions of mankind have diverse branches. One is sadness and joy. When a person thinks fit, if he desires it, he will give him a joyful name, and if he does not deserve it, he will give him another kind of sadness. In simulation, since the entire genetic structure of a person is selected in advance and based on the will of another person, the person's psychological identity is compromised by the presence of a real or even virtual one of his own, because he is copyrighted. Another person enters the world. Copying will be part of his identity, something that will cause fundamental and fundamental suffering (Mohammadi, 2008, 134).

The sense of planning and determining the genetic fate of the pre-emptive one also affects his self-consciousness based on the will of individuals. A person looks like it will not be seen by others as a natural subject or phenomenon. Even if he considers himself unique and unique and has a special place, he will still feel that others will not understand or will not accept that he is inextricably, unparalleled and special, and this in his consciousness and form His personal identity will be impressive. Because his psychological identity has been shaken.

Moreover, if the previous twin, as well as his personality and behavioral characteristics are known to the community, he will always compare the same person with the same person (ibid., 142), and from him the same traits and behavioral characteristics of the previous twin or more It will have it. Such an attitude will resemble a person's self-deprecation and, as a result, will entail certain mental and psychological pressures on him. An issue that disturbs the acquisition of acquired dignity.

2. Lack of peace with the loss of family:

One dimension of the soul is the dimension of pleasure and happiness. A man desperately wants pleasure and follows his pleasure from various channels. One of the channels of human pleasure is the interest of the husband and the satisfaction of sexual instinct.

In Islamic terms, the wife of friendship and sex is in the text of creation. In the religious doctrine of Islam, the soul of marriage is intrinsic to man and woman. The Holy Qur'an also considers the philosophy of life with the opposite sex to reach spiritual peace (Romans 21).

Certainly, the development of the human colonizing phenomenon with the aim of producing a dialectic of selected human beings, causing the foundation of the family and the cultural and educational community to become loosed, is the most

important social structure in human societies, which is now also evolving with a variety of issues, such as decreasing inclination as a result of marriage among young people, an increase in the process of legal and emotional divorce is unwilling to have a child. Things that will lead to a lack of calm.

Therefore, simulation for not relaxing with the weakening of the family creates psychological and psychological harm. It is evident that such a process will violate acquired dignity. One of the most important arguments of some Islamic thinkers in rejecting the simulation is the reason for its incompatibility with human dignity.

Research findings, however, indicate that there is no consensus in explaining the incompatibility of simulation with human dignity, so far as it cannot be precisely extracted from the incompatibility of simulation and human dignity. Human dignity is not violated with non-sexual reproduction, because if it is accepted, the birth of Jesus and Adam will be problematic in terms of the Koran. It was also noted that the change in genetic structure is not denied by the high-level simulation of human dignity.

Conclusion:

The problem of simulating or cloning the emerging phenomena in the medical world is one of the issues that has sparked many reactions and reactions around the world. However, in general, it is not opposed to the principle of the simulation theorem, but due to the results of the ethical and ethical dimension, it should be judged more precisely and more rigorously with regard to whether it is valid or not.

In this regard, numerous evidences such as violation of dignity in non-sexual reproduction, lack of retention of unity and individuality in simulation, the good of dignity in instrumentalism and violation of dignity in Royan in the explanation of the incompatibility of simulation with human dignity were studied and criticized. The look of the Qur'an, a special attribute that deserves to be entitled to human dignity, is His Holiness. From such instruments, his creativity is in two dimensions: physical and mental. Based on the findings of the biological sciences, the simulation of the disruption of tissue production, the weakening of the human gene pool, the creation of a change in self-awareness in the simulated person and the loss of the foundation of the family will violate the dignity of the body and soul.

References:

1. Islami, Hassan, (2007), Human Simulation in Catholicism, Philosophy and Theology Magazine (Seven Skies), No. 27.

2. Al-Ashqar, Mohammad Suleiman, (2001), The Exodus of the Immaculate Conception in Beirut, Beirut: The All-New Year.
3. Bazanji, Mangar Tayyeb and Adali, Shakir Ghani, (1423 AH), Operation Alanayeb and Elstansakh al-Bashri, children in Beirut: Al-Salih Institute.
4. Teskhiri, Mohammad Ali, A Look at the topic of Human Simulation with the help of New Technology, Qom, Ahlulbaye Jurisprudence Journal, Fifty-Two, 2007.
5. Khorrami, Javad (2003), Human Simulation, Consequences and Reactions, Journal of Law and Principles of Missionaries, No. 51.
6. Rasekh, Mohammed (2005), International Human Rights Theory, Journal of Legal Investigations, p. 4.
7. Riyadh Ahmad, Audeh Allah (2003), Elstenshah Fayyat al-Islam, Oman, Darasamah.
8. Saed, Mohammad Jafar (2007), Criminal Law and Human Simulation, Tehran: Sina Cultural Law Institute, First Edition.
9. Sa'di, Davood Solomon, (1423 AD), Elstensah Bet-al-Alam and Al-Fiqah, Beirut, Dar al-Farwal al-Arabi.
10. Sohrabi, Marjan and Khoeini, Ghafour, (2007), Shi'a Analytical Analysis of Simulation, Medical Journal Quarterly Journal, No. 3.
11. Sarimi, Abotaleb (2003), simulation, purity, Tehran, second edition.
12. Tabatabaee Lotfi, Issamat Al-Sadat (2006), Human Recognition: Jurisprudence and Legal Consequences, Quarterly Journal of Legal Thoughts, Fourth Edition, No. 15.
13. Al-Tariyah, Fakhr al-Din; 1412 AH, Assembly of the Al-Bahrain, C 2, Najaf, Maktab al-Martazouyah.
14. Alian Nejad, Abolghasem (2007), The jurisprudential view of Grand Ayatullah Makarem Shirazi on two issues of simulation and ways to escape from riba, Journal of Research and Technology, issue six.
15. Farid Wassal, Nasr, (1999), Al-Bashir Al-Shakhtar, Al-Shaitan, Dar al-Fakr.
16. Fawzi, Mohammad Hamid, (1999), Eldershan Al-Bashari, Inter-Agency and Tahrim, Damascus: Dar al-Nafdi.
17. Fukuyama, Francis (2005), Our Future, Iran: Iran Publishing House.
18. Qarzawi, Yousef (2003), Simulation: Translation by Nouraldin Saediani, Journal of Religious Research, No. 3.
19. Gunther, Kahn (2005), A Comprehensive Dictionary of Genetic Terms and Biotechnology, The Translation of Imam Salamat and others, Tehran, First Edition.

20. Mohammadi, Ali, (2008), Problem of Psychological Identity in Simulation, Journal of Medical History and Medicine, Vol. 1, No. 3, Summer.
21. Musavi Bojnourdi, Seyyed Mohammad (2007), Family Law, Legal Thoughts, Majd Scientific and Cultural Association, Tehran, Q First.
22. Mousavi Sabzevari, Seyyed Ali (1423 AH), Elstensah Inter-Al-Tekhnayah and Al-Tashiry, Bijya, Kosar.
23. Momen, Mohammad (2006), Simulation of its types and its provisions, New exploration in Islamic jurisprudence, No. 46.
24. Nazemi, Ali and others, (2006), Human simulation, Tehran, Aij.
25. Nikouinejad, Layla (2011), Authorization in the process of human harmonization technology, Journal of Medical History and Medicine, Vol. 4, No. 5.

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