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GENETIC DETERMINISM AND THE PROBLEM OF MORAL RESPONSIBILITY OR IS MORALITY POSSIBLE WITHOUT FREEDOM?

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Abstract: The research devoted to freedom and responsibility proceeds only “inside” philosophical knowledge, and therefore there is a certain limitation. Only the synthesis of ideological positions will allow to open the veil of secrets of human actions. The article states that there are two clearly expressed positions regarding the causes of human behavior: the first is based on the theory of the synthetic evolution and emphasizes its biological (genetic) origin; the second rejects the biological conditionality of actions, because deterministic statements make people perceive their genome as an inescapable fate.

To agree with the lack of freedom means to accept the lack of moral responsibility. Without asserting the truth of the predestination of human behavior, the authors believe that such “philosophical perseverance” can not only lead scientists to a dead end, but also slow down the development of those studies that are associated with the introduction of new technologies, including medical ones based on discoveries in the field of genetics. Therefore, in order to “remove” ethical restrictions, the authors attempted to prove the possibility of freedom even within the framework of deterministic behavior by clarifying the essence of “subordination to the principle”, with which moral responsibility is associated.

Keywords: morality, ethics, evolutionary ethics, bioethics, determinism, moral responsibility, genetic reductionism, ethical principle, freedom and subordination.

Introduction

The history of philosophical thinking about

moral responsibility is very long. One of the reasons for this interest is connected with the fact that a human being emphasizes his essential dif-

ference from other classes of living beings. It makes him morally responsible, the quality that is based on a special kind of control that can only be exercised by human beings. Another reason is the fear of losing the unique feature which makes possible to implement morally significant actions that entail the responsibility mentioned. It is the fear to lose freedom. Therefore, there is a burning question: does the loyalty of deterministic statements threaten a person's "special status"? For example, can a person be morally responsible for his behavior if it can only be explained by the physical state of the universe and by the laws which control these changes or only by reference to the existence of the sovereign God who leads the world along a predetermined path?

In our opinion, evolutionary ethics advanced in matters of substantiating determinism. It is trying to build a conceptual bridge between biology and human behavior, exploring the system of cultural and biological connection that inspires the evolution of social rules. A change in one system can cause a change in many others because biological systems are interconnected (see for more details Bromberg, 2016). This biological relationship is also projected to social systems. It imposes restrictions on what people are "allowed" to do: genetic determinism as a biological restriction on the one hand and social prohibitions on the other hand. People cannot do what they want because the actions that can cause the following censure need to be regulated by laws and morals. This situation forces people to choose between doing what they freely want (even getting pain, suffering and death) or setting limits on their behavior. However, can we say that did they make this moral choice at all?

In this regard morality is often viewed in a negative context because it can be caused by selfish motives (political, religious, etc.). It has nothing to do with true morality. Despite this judgment the experience shows that the imposition of rules does not generally reduce the quality of human life. On the contrary, carefully formulated rules have great potential to increase it. The widespread imposition of authoritative moral principles and laws effectively reshapes social priorities. It results in the growth of social organization, which contributes to cultural peace, prosperity and productivity. To some extent, social evolution appears as a continuation of the same biological processes observed in lower or-

ganisms, where, apparently, a rigid hierarchical organization and effective survival strategies contribute to the life of many living beings. Thus, evolutionary ethics believes that social and moral issues are a consequence of the biological, due to which for many years people not only co-existed but also strived together for a worthy life. Nevertheless, the question remains open: is morality biologically determined and to what extent is a person free in his choice? In other terms: where is the frame of his moral responsibility?

Genetics and Human Self

Since the time of Charles Darwin there has been a tendency to interpret the theory of evolution in terms of a ruthless selfish struggle for survival. Therefore, supporters of the determinist approach, which adjusts morality to biological predetermination are doing their best to expose moral altruism because its existence destroys their harmonious theories. This popular or vulgar has a large number of supporters. It projects biological laws to morality. Their ideological encourager was Richard Dawkins. He introduced the concept in his famous book "The Selfish Gene": our genes are "ruthless egoists", therefore the arrangement of a generous and unselfish society working for the common good is a utopia. Therefore, referring to Hume's law of "is / ought problem", Dawkins sees a way out only in trying to cultivate generosity and altruism because we are "born selfish". To fight the moonlight is a useless thing because you cannot defeat the "biological" one. It is like making people change their height or skin color. Therefore, the question arises: how a creature created in accordance with genetic instructions can challenge the "tyranny of selfish replicators" (Lazarus & Lazarus, 1994). Can "moral learning" be opposed to "genetic determinism"? Otherwise, if the genetic is still not enough to determine human behavior, if we are truly unique among animals in this respect then the search for a rule, from which man has become an exception, becomes a new task.

It seems ridiculous to many people that a gene can plan something, evaluate future results and choose what is best for its abundance. All it can do is the reproduction. Some of its copies will survive and some will not. The gene itself cannot make a choice, it cannot prefer one version of the

future to another, it has no cognitive activity at all. Then how is the choice made?

In our opinion, the idea that morality is derived from the fact that genes have proven their ability to bioinfluence over time, which was extrapolated to moral life, is the biological error. Let's assume that biologists are right, and a person is born with different predispositions to behavior: our desires are caused by our biological nature which manifests itself in different physical and social conditions. For example, an animal may be born with an innate predisposition to reacting differently to others. Humans also possess a genetic plastic predisposition for the formation of affective responses in various social environments. If a person is born with a penchant for learning Chinese he will be more successful if he is surrounded by native Chinese speakers in infancy or Arabic if he is surrounded by native Arabic speakers. Having certain predispositions, a person becomes capable of forming a desire to help others, if he finds himself in a favorable environment, and to manifesting aggression, if he finds himself in an aggressive environment. So does our "biological gift" really enable us to adapt?

Following this logic we will demonstrate how this should work. The population has a gene that manifests itself in the characteristic X: it is good in self-reproduction in a certain environment, which explains the successful evolution of this population representatives of which have such a characteristic. At the same time, the human population should be considered as consciously or unconsciously striving for this genetic success (its own survival, its children, relatives) due to the manifestation of the characteristic X.

Let us take into account the idea that we help other people to impress them (directly) and others (indirectly) with our reliability and to maximize the chances of beneficial relationship with them in the future. It means that in a population prone to mutual assistance such behavior provides the environment in which these genes are reproduced. It can explain the evolution of species or individuals within groups that have the X trait. A person acts as a result of an unconscious desire or a motive hidden from consciousness in accordance with the cliché: "as if" he himself wished for this acquiring success for the future life. But in reality we do not find such patterns of behavior: moral actions are altruistic and cannot

be based only on mutually beneficial cooperation for the survival of the population. Moreover, moral actions are often sacrificial, which does not correlate with the evolutionary statement about the priority of one's own selfish interests.

A concern about our genetic future is incredibly weak: few people really think about it. Otherwise, there would be a manifestation of responsibility towards future generations. So far no one has convinced anyone to abandon the release of harmful substances into the atmosphere (hydrocarbons, carbon dioxide, freons, etc.), claiming that it will be more difficult for our grandchildren to exist ecologically if we do not do this. There is a paradox: we want to leave our genes contained in our offspring (if we believe in biological programming) but economic freedom and the desire for a high-quality and dignified life forces us to live here and now without worrying about the future.

Sociobiology tries to find the causes of human moral behavior based on the thesis that as the traits of the human phenotype are determined genetically, it is also an expression of concern, including that associated with the reproduction of our own genetic material. And society somehow "distorts" the fundamental human essence, transforming and masking our true Darwinian goals in accordance with the "necessary" social roles and strategies.

Therefore, the assertion that the "natural" in human nature is a characteristic of lonely individuals who should have an inherent ideology of competitive individualism, seems plausible if people develop in the wild and grow outside of human bonds and parental love. Within these standards our aptitude for the language would be negligible and would qualify as "unnatural" because it should only manifest if we are raised in the linguistic community. We can assume that such an unsocialized infant will grow up to be ruthless, but living moral experience shows that nothing that we observe actually prompts us to think this way. By contrast, toddlers are often friendly, naturally sympathetic to the suffering of others, willing to cooperate, and admirably quick in providing mutual assistance.

If the genetic theory really tries to explain human behavior and its attendant motives and desires it should not start by distorting what should be explained by importing unfounded empirical concepts. Only after we clarify the es-

sence of human nature it will be possible to understand what depends on nature and what depends on upbringing, finding the proper combination of these factors. Both moral and other social encryption messages can be drawn from the synthesis of genetic theory and sociology. To show the inconsistency of this kind of assumptions we first disprove one of the weakest statements on which this theoretical construction rests.

Perhaps this confusion results from Hume's eternal assertion about our inevitable substitution of judgments that "ought" follows from "is". However, in our opinion, this is not entirely true. Facts about human nature are an absolutely necessary part of the contribution to any ethical reasoning, and the biological limitations of human nature are among those that we must notice. For example, keeping prisoners in the cold or dark, depriving them of sleep, or feeding them terribly is contrary to our biological need for warmth, light, sleep and proper nutrition – but this happens – therefore, such a strategy is dictated by others, not biological factors. We do not find anything like this in other representatives of living creatures: neither in polar bears, nor in cockroaches.

There is another example – as sociobiology claims there is a widespread belief, at least among men, that it is "natural" for men to be promiscuous (possibly aggressive) and for women to be loyal (caring and loving), and that this is somehow supported by our biologically asymmetric roles in the production of children.

It is worth mentioning that this story is simplified even from the point of view of evolution. A more realistic model is supposed to take into account both male and female "strategies" to ensure the replication of their individual genes. If everything starts as the traditional history desires, with a population of men with limited educational impulses, but active potential "sperm distributors", and women with less promiscuous tendencies, who are potential "educators". It's easy to see how this might change. Females may be able to find males that are less preoccupied with proliferation and more concerned with parenting, and by choosing them as mates ensure that this becomes a successful trait in males. Males may be more attracted to less caring and more popular females, and this may allow such females to use the energy of males who are most successful in

other dimensions and reproduce their own genes more successfully than their homebody sisters.

It is useless to say that everything used to be as it was at the very beginning: the same unconscious spurred genetically motives were the impetus for functioning. To find out what is actually true about people here and now it is necessary to turn to anthropological evidence. Changes in culturally acceptable practices show that there are certain types of plasticity practiced by different cultural settings.

We must understand which of these plasticities is the most successful. Culture matters: morality is not only a reflection of our genetics and biological nature. Nothing should be interpreted in terms of unjustified optimism about the human being. Self-centered rethinking of behavior can be viable: some rejections result from our pride; apparent altruism may be the result of a sense of self-importance; meekness and humility are caused by resentment, etc. But in order to establish themselves, they must be applied to specific cases and held on a rigid empirical leash. We need to see that with their help the pattern is better explained, or predicted, or makes sense. There will be a huge, endless number of cases, but it does not mean that they will unite into one coherent, all-refuting theory, which reveals the moral motivation of behavior within some frame.

When self-reflection is taken seriously, it does not only change our view of the "bad", but also gives more strength to understand our own moral self-determination in order to begin to live in accordance with it. The belief that all people are mortal does not affect my hope of immortality. But the belief that morality does not exist, that caring for others is just hypocrisy and all actions are selfish makes a person neglect moral perfection due to its uselessness in the fight against the biological. People who care about a narrow circle of beloved ones find it difficult to believe those who are disinterested in caring of strangers: this vulgar belief in the biological generates a primitive understanding of the projection to measure everyone by themselves, and to consider others as hypocrites in this regard.

Genetic Reductionism: Dynamics of Natural Science and Ethical Debate

The belief that genes determine both our pheno-

type and our behavior has been called genetic reductionism which in this sense is associated with biological determinism. This streamline has always had both a large number of supporters and opponents with a number of mutually exclusive arguments. Today, genetic reductionism is more likely to be criticized: the idea that genes influence the formation of our behavior is less supported than it used to be several decades ago.

Genocentrism in biology is a disputable issue. It is refuted by studies of molecular biology and epigenetics. In this regard, the famous phrase of the philosopher and psychologist Susen Oyama (2000) that confronting genetic determinism is like “fighting zombies” (p. 122) has already become classic. It does not lose its relevance since in public discourse you can every day find articles, reports about the discovery of “gene for alcoholism”, “warrior gene”, “conservative gene”, despite the fact that the natural science research environment can be called “purified” from this phenomenon.

Criticism of genetic reductionism developed practically throughout the entire twentieth century: biologists, physiologists, embryologists, sociologists, anthropologists, philosophers from different countries are hostile to this position. However, despite this opposition, genetic reductionism also has a large number of supporters. What is the reason for its “vitality”? The answer to this question requires detailed consideration from different positions: scientific, social and ethical.

Scientific and methodological reductionists believe that the functioning of a biological system can be explained through the behavior of its individual structural elements and the interaction between these elements. They argue that the activity of the whole society can be deduced, calculated, predicted from the properties of the individual parts. In this regard, the ability of genetic reductionism to explanation is limited, because genes are a component of complex pathways and networks, and tracking modifications as a result of changing one of the links in the system is extremely difficult. The rigid structure of “gene-trait” or “genotype-phenotype” is also undermined by the phenomenon of gene redundancy and pleiotropy. Redundancy is understood as the presence in the body of several genes that perform the same function, pleiotropy is the ability of a gene to influence several phenotypic traits. All this refutes the rigid causality of the gene,

especially with such a property of biological systems as emergence - irreducibility to the properties of individual parts or an interaction between structural elements.

The analysis of the connection of human behavior from the point of view of genetic reductionism and, accordingly, genetic determinism is devoid of any plausibility since genes never act in isolation, and any feature is the result of the action of many genes at once (Van Regenmortel, 2004). Epigenetic discourse reinforces this claim through the description of semi-stable (non-deterministic) biological properties that control gene expression without altering the underlying DNA (Jirtle & Skinner, 2007, p. 254). Living beings turn out to be resistant to genetic manipulations because cells and organisms often compensate for the addition or removal of some genetic information by activating alternative pathways for the appearance of the original effect of the modified gene (Keller, 2000). Organisms with identical genomes, regardless of whether it is genetically modified or not, will develop in different conditions in different ways.

Despite some certainty in strict scientific discourse, the situation with representation is much more interesting. During discussions about genetic technologies, especially within the framework of social and humanitarian subjects, predictive ability appears to be greater than it actually is. Bioethical research can often promote genetic reductionism in this way inadvertently, that’s why researchers in this field should be careful, as such research reproduces ideas about the privileged causal status of a gene (de Melo-Martín, 2005).

For example, in the framework of discussions about the admissibility of human improvements through genetic engineering, it is erroneously argued that interference with the human genome is sufficient to change of our cognitive abilities, resistance to disease, beauty, health, etc. This position does not stand up to criticism for several reasons. First of all, there is no empirical evidence for the exclusive influence of genes on human traits and behavioral characteristics. Secondly, genetic determinism can lead to public policy debates prioritizing genetic technology over social reforms. Finally, such statements lead to the perception of our genome as an inevitable fate.

The popularization of reductionism is due to

the specific “rhetoric of the future” that runs through the entire discourse of genetics (Esposito, 2017). It includes expectations, hopes, visions of a technocratic future, in particular the victory over disease, aging and death in general by means of genetic editing. In the history of genetics, this controversy does not disappear and remains stable, despite significant changes in definitions, technologies, politics, scientific traditions, etc. Prediction and control are the main epistemic values in such a discourse. It unites the first geneticists, neo-Darwinists, molecular and biologists, and enthusiasts of the Human Genome project. Despite different positions, the idea that some factors, molecules, mechanisms, information units cause certain traits, underlie the manifestation of phenotypic traits, is the leading one.

Lily E. Kay in “Molecular Vision of Life” (1993) speaks about the seductiveness of a position where the higher levels of an organization can be controlled through the means and study of the lower ones. This reduction is optimal for the technocratic understanding of genetic engineering and the expected future where biotechnological interventions are the norm.

Immersion into the practical contexts of medicine, agriculture, cattle breeding, jurisprudence and biopolitics cause some fetishizing of the gene and support deterministic ideas. Great biotech prophecies cannot exist without simple reductionist models because effective changes are impossible without forms of control.

This instrumental and pragmatic approach views genes as natural components that can be quantified and separated from the contexts of the natural environment and society. The reductional perception conceptually supports the treatment of genetic constructs as trade items, which in a certain sense helps researchers since the status of focusing on the future allows more funding for research, actualizes further developments for the general public (Mcafee, 2003). The rhetoric of the future is addressed to private investors and consumers.

Genetic reductionism even leads to some mystification of its discourse. The sociologists Dorothy Nelkin and Susan Landy in their extensive analysis of articles on DNA in the press came to a very remarkable conclusion. The rhetoric of the deterministic gene is a lot like medieval rhetoric about the soul (Nelkin & Lindee,

2004). Genes and DNA become, in these representations, the essential essences of our being which determine our behavior, while DNA promises us life after death.

It is worth mentioning that in the XX century the reproduction of such views on genetics were the researchers themselves (Haldane, Huxley, McCusick, Watson, Gilbert, Koshland, etc.). At times, magical or religious metaphors were used. The famous quote from James Watson, who discovered the structure of DNA in 1953, director of the Human Genome Project: “We used to think that our future is among the stars. Now we know that it is in our genes”. One can remember the performance of the genomics pioneer Walter Gilbert: introducing the concept of genomic information, he took a disc and said, “It’s you”.

The triad of interrelated concepts: genetic reductionism, essentialism and determinism give rise to a whole galaxy of genetic “-isms” that appear as a result of the significant psychosocial impact of genetic information (Sabatello, 2019). They are all derived from already existing essentialist views on race, gender, ethnicity, etc.

Some of them have something in common with the medical world. The genetic fatalism assumes that health depends on the genetic structure, and the possibilities of reducing risks are very limited. The genetic meliorism claims that the task of genetics is to improve our species through victory over diseases, aging and death. The genetic imperialism is understood as a reductional reorientation of health sciences around genetic information, “all diseases are genetic”.

The existence of such an abundance of phenomena can lead to the idea of an excess of genetic-ethical discourse, excessive attention to ELSI programs, but they are a reminder of the manipulation of reductionist, deterministic, essentialist beliefs about the genome. They can lead to interethnic violence, racial prejudice, inequality in health, which is genetic stigma.

To sum it up, it can be assumed that genetic reductionism in its vast manifestations is partially the result of overly ambitious expectations of bioethics, which envy the success of the natural sciences.

However, the perception of genetic reductionism as an extremely negative phenomenon is fundamentally wrong. Criticism does not negate the importance of genes in human life. Moreover, discussions and intellectual traditions (for

example, sociobiology), generated by the contradictions of this phenomenon, make it possible to conceptualize a gene in a new way outside the framework of biomedical sciences, while protecting it from excessive simplification in the spirit of Dawkins. In addition, rethinking the role of biological, in particular genetic determinism, many existing collisions can be resolved in ethics.

Freedom of Subordination or Responsibility without Freedom...?

It is worth mentioning that the concepts of genetic reductionism do not stand up to criticism and the number of its opponents is growing exponentially. All their arguments are based on the fact that there is no evidence of the dependence of moral behavior on genetics and social conditions. However, according to the principle of the falsification of scientific knowledge there is no refutation of this statement. In addition, criticism is caused by the fear of losing the “human self”, the awareness of “non-freedom”, and, consequently, the impossibility of free choice and explanation of morality in this regard.

In fact, morality is built together with decision-making when we understand that some options are noticeably better than others, when arguing from the point of view the idea of right / wrong, fair / unfair, altruistic / egoistic, etc. This is the manifestation of “moral freedom”, as a result of which a person becomes responsible for his decisions. If we do a projection on physical principles, we observe the Heisenberg principle in physics, which says that there are quantities complementary to each other, the measurement of which is impossible at the same time, for example, velocity and mass. The ethical choice is carried out according to the same scheme: a person cannot choose both, especially when it comes to a conflict of values that are at the same level (justice / mercy, generosity / frugality, duty / conscience, etc.) (Bromberg, 2016). Thus, the principles governing the evolution and survival of organisms seem to be much the same as the forces driving the development of moral systems. The question arises: why should the nature of moral values be different if organic systems are incredibly diverse and complex? It is possible to assume that philosophical riddles about the na-

ture of morality are generated from an underestimation of the complexity of moral science. A different logical approach can be found when explaining the components of the traditional moral / freedom / responsibility triad as interdependent. For this, in our opinion, it is necessary to answer several questions: are we free, obeying the moral principle? Where is the boundary of human responsibility in this regard? and how is moral choice made at all?

So, we found out that the rejection of the concepts of the theory of the biological evolution is connected, first of all, with the fact that a person does not want to think that his behavior is biologically (genetically) determined. If there is the determinism of truths then certain actions of a person are determined by his natural essence, which is a sufficient basis for his moral behavior in general. Can we talk about responsibility in this regard? After all, a morally responsible person is not just a person who is able to do right or wrong actions from the point of view of external assessment, he is also responsible for his morally significant behavior, which causes subsequent encouragement or censure from third parties. So, according to J. P. Sartre (1989), “...a person who decides to do something and realizes that he chooses not only his own being, but that he is also a legislator who chooses all mankind, cannot avoid a feeling of complete and deep responsibility” (p. 93). Sartre relies on the fact that acting in a certain way person asserts the ideal image of a person and thereby “chooses in himself” a person who strives to fulfill his duty to the end. At the same time, arguing that the measure of responsibility is directly proportional to the measure of freedom, the French philosopher believes that a person manifests himself as a completely free person. This position is also dominant in modern philosophical circles. But is it true? There is an opinion that the perfect completeness of human freedom is only an ideal, in the purity of the image of which a person is manifested universally, on the other side of good and evil, in absolute good.

Before answering the main question: is freedom possible within the framework of conditioned (biologically) behavior it is necessary to make clear the meaning of “fulfillment of duty”, obedience to the principle with which moral responsibility is associated, because, at first glance, obedience and freedom are logically incompati-

ble concepts.

So, responsibility is always recognized by a person as an avocation or as a duty. In this regard, there are:

1. responsibility due to (a) the naturally or spontaneously acquired status of the individual as a subject, for example, the responsibility of the parents or (b) the obligations that are accepted by an individual as a result of the agreements; thus, one can distinguish between natural and contractual liability (Jonas, 2004, p. 112);
2. the responsibility independently assumed by an individual as a personal and universalized duty (Apresyan, 2001, p. 342).

In both cases, responsibility is associated with submission, self-limitation, even if it was initially chosen by the person himself. Then, is it fair to think that as a person takes on responsibility the measure of his freedom rises? This self-limitation is practically manifested in self-control: in the submission of inclinations to duty, self-will (arbitrariness) – purposeful freedom, accountability – responsibility. If we take seriously the position stated above that the measure of a person's freedom is certified by the measure of his responsibility.

Thus, free will is understood as a necessary condition for moral responsibility since it would be unreasonable to say about a person that he deserves reproach or punishment for his behavior if he turned out to fail to control it. Thanks to this connection between free will and moral responsibility the problem of freedom seems to be very important.

The substantiation of moral responsibility becomes much more difficult taking into account the understanding of responsibility with such a deterministic view of human activity, the conditionality of behavior, because, at first glance, the moment of freedom disappears...

Our task is to find out whether freedom in submission is possible?

The problem of freedom is one of the most discussed issues in the philosophy of morality. It has factors, sides and dimensions. Famous philosopher V. V. Vasiliev (2016) blames that all the problems have been identified, and they are obvious and understandable, in connection with which researchers are often reproached for “re-inventing a wheel” (p. 64). It looks illogical: “if the issue of free will (in other specific terms) was

discussed in detail by Aristotle, did Locke, Hume, Kant, Moore, Sartre reinvent the wheel?” (Vasiliev, 2016, p. 65). Not at all. Moreover, the problem of freedom is presented in the studies of philosophers, in whose teachings it was not the main issue, and therefore their reasoning often remains on the periphery of ethical and philosophical knowledge, which looks undeserved. One of these philosophers is I. G. Fichte. Without the task to restore justice we will draw our attention to those facets of the problem of freedom and moral responsibility which, in our opinion, seem important for understanding the possibility of freedom and, in this regard, responsibility, in obedience.

On the one hand, if an individual is genetically determined and he is under the power of the natural, biological factors, then he is not free, since he “acts according to the law of nature”; on the other hand, if he decides to “obey” some law, including a moral one, taking on certain obligations, then, as we have already noted, there is also no freedom here, because he refused “the aberration of his will”... So where is the “moment of freedom”?

According to Fichte, freedom is not absolute, it is “the moment of transition”. He believes that freedom lies “in the transition, in the rise from nature to morality” (Fichte, 2000, p. 247). In this sense, I.G. Fichte understands freedom as an opportunity to ascend from the lower end of existence to the higher one. He talks about the five ethical levels of being, and freedom lies in the ability to stay at any of them. The one who overcomes all the steps leading to the “kingdom of morality” must abandon his own aberration to “immerse in the law completely”. The freedom of choice in this case disappears, because the sphere of various kinds of possibilities is eliminated by the “reality of ethical necessity”. Having risen to the highest level of morality a person “completed everything possible, raised and spent the measure of his freedom” (Fichte, 2000, p. 322). Fichte believes that ultimately, a moral person must still sacrifice his freedom and his I.

However, freedom is an integral part of human being and its loss is considered significant. I.G. Fichte came to an unambiguous conclusion that a person, whose will is ethically determined, cannot be fully called free. It evokes a completely justified fear in the person. Moreover, a person does not want to submit to a higher principle,

because he is “afraid of losing his autonomy,” his freedom of self-expression. Discussing the same idea in theological categories, many Russian philosophers emphasize how strange the image of God would be, which initially gives a person freedom only in order to subsequently deprive him of it, making the person an “instrument of Good”. However, the reality illustrates the opposite: the choice is not made in the same way; it is a reflection of the personality’s worldview, its moral experience. Moreover, in similar situations the same personality often acts differently. This means that the initial natural determinism as it acquires moral experience in the process of socialization “acquires” freedom.

This situation forces us formulate the original problem in a new way. At the center of the study is not the question of whether “freedom in subordination is possible, i.e. on the feasibility of the choice between good and evil in favor of good?”, but the one of “how to preserve this freedom?”. Freedom or law: individual autonomy or principle autonomy? To answer these questions it is necessary to solve the antinomial construction completely eliminating one of its members.

So, the choice is made on the basis of certain values in accordance with the target attitudes of the individual, moral principles and beliefs. Values determine the actions of a person who has the ability to comprehend them intuitively but for a person values are ontological, and one cannot interchange the positions of good and evil. However, personality and values need each other. At first glance, they exist independently or the dependence is one-sided. However, the asymmetry of the relationship is imaginary. Without personality, the essence and specific “way of being” of values remains purely ideal. Only through personality they participate in determining reality receiving expression in real life. And a person, as you know, is moral only when he is free.

This reasoning does not fully reveal the mechanisms of preserving freedom. To determine them it is necessary to turn to the teachings of phenomenologists on the hierarchy of values, first of all, to the views of M. Scheler. He believes that “a special order is inherent in the whole kingdom of values ... one value turns out to be higher or lower than the other” (Sheler, 1994, p. 398). The lowest values are in their essence “the most transient”, the highest ones are “eternal”. Thus, Sheler defines sensual enjoy-

ment that depends on receiving pleasure as inferior values. Ethical values such as adherence to certain social norms are put by him well above, because he says that moral judgment for a person is more important than the theoretical judgment of science, since it determines to some extent the entire life and the fate of a person. Hence, the most trivial, primordial moral choice for a person is to prefer a higher value.

The idea of the subordination of values was inherited by N. Hartman. His reasoning will become the theoretical background for solving the issue of freedom for us. N. Hartman believes that the value hierarchy is generated by human consciousness, because ideal values cannot be hierarchized. In this sense, only the division into higher and lower values is unacceptable, since then the highest values would correspond to the personalities of the “higher order”, and “the highest value to the Absolute”, while only the lowest moral values would correspond to a person. Scheler, seeing such a higher value in the “saint”, automatically postulates its superiority over all other values, including ethical ones. Then the search for a way out of the situation is impossible – we confirm determinism, destroy morality and freedom of choice and renouncing ethics talk about life in subjection to nature (biological, genetic), religion, etc.

N. Hartman believes that after making a choice in favor of moral values the hierarchy is also preserved. The system of values is “multi-dimensional”, and only one of its lines of coordinates reflects a noble value, which corresponds to the degree of personal development. But at the same time the scale of the of values coordinates with the relationship of different values that are at the same level: at each level, there are its own “axiological antinomies” (Hartman, 2002, p. 217). Therefore, the freedom of choice remains even in the sphere of “higher values”, after choosing between good and evil in favor of good. For example, this is due to such values as mercy and justice, generosity and thrift, the fight against evil, which are considered to be virtues ... This value conflict cannot be resolved on the basis of a table of values. A person makes a decision freely, non-deterministically. He takes responsibility in preference for one virtue or another, thanks to an independent action. This independence constitutes the “sense of freedom”: the “moment of arbitrariness” is preserved, since

freedom is not completely determined by the principle. At the same time, the adopted “decision” is not considered to be a “resolution” of the moral conflict. If a person could resolve this conflict, it would not be a manifestation of independent freedom of choice: in this case, it would only be necessary to follow the deterministic method of resolution. Consequently, with respect to “conflicting” values, the will of a person as an arbitrariness always remains free, and a person in his real actions is never “rationally determined”. To some extent, he takes risk when making decisions. Thus, in this case, freedom takes the form of real freedom not teleologically determined; because in the process of moral activity there is a free choice of a person, first between immoral and moral, and then between moral and moral, as a result of which certain social goals and objectives are realized.

Conclusion

Summing up, it should be noted that the position of genetic reductionism about the influence of the “biological” on behavior is not that intimidating for a person who is afraid to admit his natural dependence, because it was demonstrated that even in determinism free choice remains at the level of “the highest ethical values”. Therefore, excessive criticism of genetic reductionism is not always justified, because is not based on attempts to find and explain “other” causes of behavior. But on the unwillingness to “come to terms” with the deterministic position in connection with the fear of losing “human self-identity”: the awareness of “lack of freedom”, and, consequently, the impossibility of free choice and recognition of the lack of moral responsibility. Therefore, in order to resolve this problem, we tried to prove the possibility of freedom within the framework of conditioned behavior by clarifying the essence of “obedience to the principle”, which is associated with moral responsibility, since submission and freedom in their absolute meaning are logically incompatible concepts, which was philosophically refuted and shown under what conditions freedom is preserved. It will let us get fresh look at the possibility of expanding genetic research and outline new perspectives in this regard.

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References

- Apresyan, R. G. (2001). *Otvetstvennost'*. In *E'tika. E'nciklopedicheskij slovar'* (Responsibility in Ethics Encyclopedia, in Russian) (R. G. Apresyan, & A. A. Guseynov, Eds.). Moscow: Gardariki.
- Bromberg, E. (2016). *The evolution of ethics: An introduction to cybernetic ethics*. United States: Dianic Publications.
- de Melo-Martín, I (2005). Firing up the nature/nurture controversy: Bioethics and genetic determinism. *Journal of Med Ethics*, 31(9), 526-530. doi: 10.1136/jme.2004.008417
- Esposito, M. (2017, April). Expectation and futurity: The remarkable success of genetic determinism. *Stud Hist Philos Biol Biomed Sci*, 62, 1-9. doi: 10.1016/j.shpsc.2017.01.001
- Fixte, I. G. (2000). *Fakty' soznaniya. Naznachenie cheloveka. Naukouchenie* (Facts of Consciousness. Significance of Man. Scientific Study, in Russian). Minsk: Xarvest, Moscow: ACT.
- Keller, E. F. (2000). *The century of the gene*. Cambridge, MA: Harvard University Press.
- Hartman, N. (2002). *Etika* (Ethics, in Russian). Moscow: Vladimir Dal'.
- Jirtle, R. L., & Skinner, M. K. (2007). Environmental epigenomics and disease susceptibility. *Nat Rev Genet*, 8(4), 253-262.
- Jonas, G. (2004). *Princip otvetstvennosti. Opy't etiki dlya texnologicheskoy civilizacii* (Principle of Responsibility. Ethics Experience for Technological Civilization, in Russian). Moscow: Ajris-press.
- Kay, L. E. (1993). *The molecular vision of life*. Oxford University Press, NY.

- Lazarus, R. S., & Lazarus, B. N. (1994). *Passion and reason making sense of our emotions*. New York, Oxford: Oxford University Press.
- Mcafee, K. (2003). Neoliberalism on the molecular scale. Economic and genetic reductionism in biotechnology battles. *Geoforum*, 34, 203-219.
- Nelkin, D., & Lindee, M. S. (2004). *The DNA mystique: The gene as a cultural icon*. University of Michigan Press.
- Oyama, S. (2000). *The ontogeny of information. Developmental systems and evolution*. Durham, NC: Duke University Press.
- Sabatello, M, & Juengst, E. (2019, May). *Genomic essentialism: Its provenance and trajectory as an anticipatory ethical concern*. In *Hastings Cent Rep.*, 49(Suppl 1), 10-18. doi: 10.1002/hast.-1012
- Sheler, M. (1994). *Ordo amoris*. Moscow: "Gnozis" Publication.
- Sartre, J. P. (1989). *E`kzistencializm – e`to gumanizm* (Existentialism is Humanism, in Russian). Moscow: Politizdat.
- Van Regenmortel, M. H. (2004). Reductionism and complexity in molecular biology. Scientists now have the tools to unravel biological and overcome the limitations of reductionism. *EMBO Rep.*, 5(11), 1016-1020. doi: 10.1038/sj.embor.740-0284
- Vasiliev, V. V. (2016). *V zashhиту klassicheskogo kompatibilizma* (In Defense of Classical Compatibilism, in Russian). *Voprosy filosofii* (Questions of Philosophy, in Russian), 2, 64-76.