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## UDC 17.0:57

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# **BIOETHICS. A PHILOSOPHICAL FOUNDATION**

Trento, Italy

#### УДК 17.0:57 Джуліано Ді Бернардо БІОЕТИКА. ФІЛОСОФСЬКЕ ОБГРУНТУВАННЯ Тренто, Італія

Автор розвиває вчення про біоетику з точки зору її використання в біомедичних науках, торкається питань етичності клонування, використання біотехнологій, обговорює особливості етики Сократа, внесок Ніцше, Маркса, Гегеля у формування етичних концепцій. Пропонує організувати Комітети з етики, що складаються (і представлені) з біологів, лікарів, філософів, юристів і вчених-соціологів.

Ключові слова: біоетика, біотехнології, концепція.

#### УДК 17.0:57 Джулиано Ди Бернардо БИОЭТИКА. ФИЛОСОФСКОЕ ОБОСНОВАНИЕ Тренто, Италия

Автор развивает учение о биоэтике с точки зрения ее использования в биомедицинских науках, касается вопросов этичности клонирования, использования биотехнологий, обсуждает особенности этики Сократа, вклад Ницше, Маркса, Гегеля в формирование этических концепций. Предлагает организовать Комитеты по этике, составленные (и представленные) биологами, врачами, философами, юристами и учеными-социологами.

Ключевые слова: биоэтика, биотехнологии, концепция.

The term "bioethics" was used, perhaps for the first time, in 1971, in the title of a book by the oncologist V. R. Potter: Bioethics: Bridge for the *Future*, to indicate a plan for using biological science in order to improve the quality of life.

This term has been ambiguous right from the beginning, both semantically and philosophically. On the one hand it indicates some form of reflection on the values subordinate to life (bios), while on the other it denotes a meta-moral (ethos) that evaluates the findings of biology and medicine. This dual significance derives from the joint use of the two terms that make it up: "bios" and "ethos", which, while sometimes expressing a happy synthesis, at others signify a profound contradiction. Irrefutable proof of this comes from the whole set of definitions that have been given to the word "bioethics", which show that when specifying the field it covers, emphasis is placed either on the scientific viewpoint (based on "bios") or on the ethical viewpoint (based on ethos). In subsequent developments of bioethics, this ambiguity has tended to worsen, making its meaning more and more confused. Hence the need to find a philosophical basis for it.

Although the meanings that may be given to the term "bioethics" can differ, the object it refers to is perfectly clear and distinct: the *human body*. examined from a point of view that is new and, in some respects, different from all the preceding historical points of view. The human body, in fact, is no longer considered as an organism whole and indivisible into its constituent parts, but rather as a set of biological functions whose organs may be subjected to transformations and adaptations. Hence both the single organs and the body as a

whole may undergo changes that will alter its nature. The result of this is that the study of the human body, from natural as it always was in the past, has become artificial: artificially, it is possible to modify human nature. From this new situation arise the problems concerning the interventions that man the scientist can make on the human body, problems that are very important from the ethical, social, legal, religious and economic viewpoints.

After Potter's book was published in 1971, bioethics presented itself as a borderline study between different disciplines. This characteristic was further confirmed in the *Encyclopaedia of Bioethics*, begun in 1972 with the contribution of the Kennedy Institute of Ethics and published in 1978. In more recent times, bioethics claims to be a wide-ranging and independent research project that brings together biology and medicine on the one hand and the human sciences such as sociology, law, theology and moral philosophy on the other. Epistemological interest in bioethics is more and more lively, tending to define the ethical responsibility of this science.

Disparate fields coexist in the research project that goes under the name of bioethics. These include birth control, heredity and genetics, the development of neuroscience, pharmacological experiments on man, the voluntary interruption of pregnancy, artificial insemination, organ transplants, the treatment of patients with terminal illnesses, and cloning.

Ethical, social, legal and religious problems arise in each of these fields. Any solution put forward is usually confused and contradictory. One case is emblematic of the situation. At Stanford, California, in 1971, techniques were prepared for transferring genetic material into a receptor cell. When the news became public, the reactions were negative and very disturbed, because of the fear that a person's hereditary make-up could be modified in this way. These criticisms forced the researchers to organise a convention that was held in 1974 in Asilomar, in the United States, where it was decided to suspend research into biotechnologies. However, the following year, again at Asilomar, the suspension was suspended and biotechnologies were subjected to rigorous control. This did not calm the waters, though, and two parties were born: those in favour of and those against biotechnologies. To complicate matters still further, bans were imposed by the various religions. Bioethics thus became the battleground on which different conceptions of the world, of life and of humankind clashed.

To shed some light on the situation, two fundamental questions must be faced:

a) what are the relations between ethics and biomedical science?

b) what does ethics mean for biomedical science?

We have already seen that the term "bioethics" takes on a dual meaning, depending on whether one stresses "ethos" or "bios". In the first case, science (biology and medicine) is subordinate to ethics, while in the second, ethics is subordinate to science. Consequently there can be two different ways of viewing bioethics, one based on "ethos", in which ethics is independent of science, and one based on "bios", in which ethics is not independent but is a derivative of science. This second viewpoint is an expression of *scientism*, i.e. a conception that claims to be able to solve all human and ethical problems through science. Scientism is closely linked with positivism, from which it derives. Positivism is a philosophical concept that was born in France in the first half of the 19th century and then spread throughout the whole of Europe. It is characterized by the rejection of metaphysical speculation, attributing the role of producing scientific knowledge to the empirical sciences alone. The task of philosophy is simply to organize the findings made within the individual sciences. Ethics is understood as a set of propositions, devoid of meaning, that merely express irrational emotions. The result is an optimistic view of human history, which, thanks to the exclusive merits of science, is the artifice of continuous and constant civil and social progress.

There are well-founded motives for thinking that the meaning given by Potter to the term "bioethics" is precisely this scientistic one, thus revealing an attitude of blind and absolute faith in biomedical science. If this is the interpretation given to Potter's "bioethics", then the meaning he wanted to give to the term immediately becomes perfectly clear. His "ethos" refers to ethics born from science and completely at the service of science.

Is this interpretation of bioethics valid and, therefore, acceptable? In fact, there are many reasons for rejecting it, all finding justification in the alternative view based on "ethos".

To clarify this viewpoint, it is first of all necessary to define the concepts of "morals" and "ethics", which generally tend to be regarded as synonyms. Although there is a common basis of meaning in both of them, it is possible and advisable to make a distinction between them.

By "morals", one generally understands a set of customs and rules belonging to a given culture and that are recognized as rules of conduct by a person or by a group.

"Ethics", on the other hand, is understood as a meta-moral, i.e. a doctrine that is placed beyond morals, which reflects on moral values and judgements, to which it claims to give a foundation, leading them to a set of ultimate principles. In the rest of this paper, when we speak of "ethics" we shall be referring solely to a theory that provides a basis and justification for morals. It is a commonly held opinion that, in the contemporary world, ethical thought is in crisis. Understanding this crisis is essential if we are to clarify the relationship between "ethos" and "bios" within bioethics.

In the world in which we live, all reference to traditional values has disappeared, and we no longer know what the possible bases of a theory of ethics might be. Contemporary ethics navigates in a sea in which the foundations of metaphysics, ontology and religion have been repudiated. The old certainties on which an ethical theory could be based no longer exist.

We live immersed in a nihilism of which Nietzsche, in the nineteenth century, was the unheeded prophet. It is from nihilism, understood generally as a spiritual phenomenon linked with the death of God and its suprasensible ideals that the current crisis of ethics began.

Nihilism is also characterized by the death of the totalitarian ideologies and grand conceptions: the thought of the Enlightenment philosophers, who saw a rational teleology in history; Hegel's theory, regarding the formation of the Spirit of the world; Marxism and its kingdom of ends, in the sense of a classless society.

Nihilism died in the ideologies that led to the delegitimisation of ethics, which now finds itself devoid of those traditional certainties on which is justification was based.

Is it possible to escape from nihilism? This question can be given a positive answer. Nietzsche himself, prophet and theorist of nihilism, glimpsed a possible solution in the "will to power". With regard to ethics, a new foundation is needed. But what are these new principles needed for, as each foundation requires a basis without which the building will not stand. What principles, then, can the new ethic be based on?

It must be pointed out, to begin with, that the new ethics are not born from nothing — they explore new paths drawing on well-defined currents of thought, without which they could not be put into effect. The new, therefore, consists in adapting the old to changed historical conditions. The problem is, then, to decide which of the existing currents of ethics should go to make up the foundation of the new ethic.

Our argument is not, however, interested in founding a general ethic but, rather, an ethic capable of giving direction in particular to biomedical science. One might also wonder if the ethics of science may be valid for these specific sciences. I am convinced that a general ethic of science (like that, for example, proposed by Karl Otto Apel) can grasp only some but not all the aspects of biomedical science. Consequently, an ethic for science in general, valid both for logic and for the natural and social sciences, would be too weak for biomedical science. Hence this science requires an ethical basis capable of

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grasping its specific nature. In delineating this specific nature, we shall also find a reply to the second question posed above: what is ethics for biomedical science?

The foundation of any ethic cannot disregard the ideas of Socrates, who identifies the essence of man with his *soul*, defining this as *intelligence*, or the capacity to intend and desire good and, therefore, as the intellectual and moral personality of man. This new concept of "soul" and therefore of "man" were to become a reference point for western culture.

Socratic ethics are centred on three fundamental concepts:

a) *autarchy*, or the self-sufficiency of reason;

b) *self-control*, or the control of reason over sensible impulses;

c) liberty, or the capacity of reason to impose itself over man's animal instincts.

These three concepts show an unlimited faith in reason and intelligence that qualifies Socratic ethics as rational. And it is to reason that Socrates reduces everything, even the gods, making them moral and thus subjecting them, like men, to respect for rules and moral values. Morality, therefore, is at the apex of man's conduct.

Western culture is still characterized by Socratic ethics, which have found further investigations and developments in the thought of philosophers who, from antiquity up to present times, have proposed ethical theories that have usually expressed particular cultural and social needs. In delineating ethics for biomedical science, I shall refer to the essential contribution of Socrates, in confirmation of the continuity between the old and the new in ethical thought.

What is "the new" on which an ethic for biomedical science can be based? To find an answer to this question, it is sensible to start from the widespread fear that derives from its technological applications. These, in fact, increase man's powers enormously, giving him the power to produce on himself changes that are so radical that they can compromise his very nature. His experiments and innovations are no longer in a field extraneous to him, like the universe or the physical world, but his very self. When man feels threatened by science and believes that it can cause him irreparable damage, then a new ethic is needed, practical and enlightening, capable not only of guiding the results of technological applications but also of tranquillising man about his fate. How, then, can one conceive the new ethic?

A new ethical theory must be based on the following concepts:

- a) *autonomy*,
- b) *rationality*,
- c) responsibility,
- d) realism.

a) Socrates had already declared that ethics, founded on reason, must be autonomous (autarchic). This means that reason is self-sufficient and, therefore, capable of regulating itself, without the intervention of external factors. What, though, are these external factors? Above all, religion. To avoid this form of interference, Socrates had already made the gods themselves subject to morals. In the course of the centuries, many people have repeated that ethics, by its very nature, is not religious, because it follows pure reason alone. This ethical rationalism was taken to its extreme consequences by Kant, who proposed that "practical reason", in the sense of the basis of ethics, is independent of all knowing, religious or speculative though this may be.

Ethics must be independent not only of religion but also of politics, law and *science*. If ethics depended on science, it would be scientism and positivism and, in the framework of the term "bioethics", the meaning to be given to "ethos" would be that of ethics not autonomous but dependent on biology and medicine. Why should ethics be autonomous? The answer will be given below.

b) The foundation of Socratic ethics is rational. Reason, by its nature and in order to be itself, is self-sufficient. The development of ethical thought, however, has also been characterized by non-rational ethical theories, based on will, on passions, on sentiments. Thus there exists the possibility of founding a new form of ethics not on reason but on will. Which to choose? I believe the choice must be in favour of reason, for at least one important motive: through reason one can reach the *universal*. A universal ethic, capable of involving the whole of human society, is the only one capable of giving a sense of direction to the problems that are created by the technological applications of biomedical science, of giving humanity, disorientated and anguished, the necessary tranquillity to look to its future with trust.

c) Responsibility descends from autonomy and rationality. Implicit in Socrates but well defined from Plato onwards, responsibility means being completely accountable for one's actions. Plato writes in the tenth book of *The Republic*: "Everyone is responsible for his own choices! God is innocent and we are the sole artifices of our destiny, through the choice we make of how to live our lives".

The concept of "responsibility" that governs classical ethics is found again in contemporary ethical thought, though profoundly transformed. Whereas previously responsibility was based on eternity and transcendence, now it hangs on time — time that is not only present or immediate future, but also, and above all, distant future. Our responsibility must push out towards a distant future, in order to preserve the existence of humankind from the perils of the sciences that study the body of man: the survival of humankind in the future is the result of this responsibility — a new interpretation of responsibility that is the merit of H. Jonas.

A responsibility that, to be valid for all, now and forever, must be founded on reason and uni-

versality and, as we shall see in section d) below, must also start from a realistic view of matters.

d) Realism means the capacity to accept what can actually exist, to observe the very conditions of life and existence as they are, in their painful and tragic essence. Reality may express itself through joy, but that is nothing other than the obverse of pain.

In the history of ethical thought, realism is a theory that has been shared by few philosophers. It was fostered, in particular, by Schopenhauer and by Nietzsche. It has been reintroduced with some determination today precisely to define the anguish that is born out of the technological applications of biomedical science.

Let us now recapitulate the four concepts on which to base a new ethic.

Autonomy defends ethics from external interference, such as that of religion, politics, law and science.

Rationality allows it to reach the universal, a necessary condition for regulating the problems posed by biomedical science.

Responsibility makes man the arbiter of his choices and obliges him to preserve future humankind.

Realism opens his eyes to the reality of things as they are, including pain and tragedy.

Returning to the question we have posed a number of times already: why must ethics be autonomous? The reflections already made have partially answered this question, but it still needs looking further into.

As I am convinced that Kant's ethical rationalism is a necessary condition for the foundation of any ethic in the age of science, I shall clarify one of the cornerstones of his ethical theory. Kant believed that practical philosophy is not based on what "is" but on what "ought to be". This means that ethics, based on practical philosophy, is formed of a set of rules that are not deduced from historical, social or scientific data. To use a technical expression, we shall say that the "ought to be" (ethics) is not deduced from the "being" (reality). Vice versa, any attempt to deduce the "ought to be" from the "being" is an error of logic that leads to scientism and positivism.

The greatest danger for bioethics comes, therefore, from scientism, which creates the illusion that science can solve every kind of human and ethical problem. Science can certainly solve scientific problems, but it cannot solve ethical ones, which belong, as Kant has shown, to another order: that of what ought to be.

Scientism, the offspring of positivism, came into a crisis with its progenitor in the second half of the last century. In the last few years, however, thanks precisely to the outstanding discoveries made by biology and medicine in manipulating the human body, scientism has come back into fashion more strongly than ever before. Scientists, authorities in their fields yet with little knowledge of ethics and philosophy, cannot resist the temptation to appear wise and as master of virtue and to assume the mantle of prerogatives which belong to God.

Bioethics, at this early stage of development, must avoid two opposing radical threats: scientism and *theologism*. Of scientism we have already spoken. With reference to theologism, we specify that this is a conception which attributes to God rather than to man the capacity to judge and decide on the results of biomedical science. The reason therefore lies in the fact that human nature, being created by God, may not be artificially modified by man, not even in the name of scientific progress. The duty of scientists, vice versa, is to care fore, protect and improve the human body. Thus, while in scientism it is man who decides, in theologism it is God. Kant would say, in this matter, that, in the presence of God, man has no more to add: if there is a dispute between man and God, then God, definitively, will always prevail.

Scientism and theologism are the principal causes determining the ambiguity and contradictions in bioethics. Each claims to represent the truth and considers the other to be wrong. These two interpretations cannot, unfortunately, be reconciled: either one or the other applies.

Correct development of bioethics would require overcoming both scientism and theologism. But how? It would be over simple and banal to thinking of excluding their representatives from bioethics. Even were this desirable, one would have to establish which authority would hold the power of exclusion and which authority that of attribution. It is evident that the problems arising are of such complexity that they would render the situation even more obscure and incomprehensible.

Then how to we deal with this difficult situation? The sole route I see available is to take note of the existing situation. It is a fact that certain researchers in biomedical science have a scientistic and positivist view, which is proper to their subjectivity and to their culture. As it is difficult to change their view, what can and must be done is to separate their scientific activities from their manner of understanding theses activities. While the results obtained with their scientific research into the human body are universally valid, their assessments of those results remain debatable. To some they are acceptable and to others no. Thus, if one considers that their scientist attitude is a obstacle to the development of bioethics, it is necessary to move so that they cannot apply it to influence decisions regarding the use of scientific discoveries. As the privileged forum for the expression of scientism is that of ethics committees, it is necessary to move to exclude these scientists therefrom.

The same argument applies to theologism. We cannot stop theologians and the representatives of religion from seeing the human body as the result of divine creation and, thus, from expressing opposition to the manipulation of human nature. What we can, on the other hand, and, indeed, must do is exclude them from the Ethical Committees.

If, within these Committees, there is coexistence of "scientistic" researchers and theologians, then conflict and misunderstanding is inevitable with deleterious effect on bioethics.

The development of bioethics was accompanied by the formation of Ethical Committees.

These Committees are inspired principally by the Nuremberg Code of 1947, the Helsinki Declaration of 1964 and the Manila Declaration of 1981. These were born, initially, as spontaneous manifestations inside hospitals and universities. Subsequently, in the main western countries, National Committees were formed. At the same time, attempts were made to safeguard the rights of the person from the legal viewpoint too: it was, in fact, declared that the human body could not be disposed of (i.e. my body may not be touched without my consent), it could not be the object of commerce (there can be no trafficking with regard to the human body) and it could not be considered as property.

Everyone agrees on the need to set up these Ethical Committees. The differences and arguments, however, arise when people begin to talk about their composition. Who has the right to be a member? Scientists, philosophers, jurists, theologians? These arguments are the proof of the ambiguity that exists in regard to how bioethics should be understood, as I pointed out in the previous pages.

Some people maintain that scientists should be members of the Ethical Committees, because they alone know the best way to apply their discoveries and resolve the problems that arise from these applications. The scientistic attitude is evident in this.

Paradoxically, this attitude is the exact opposite of what happened with positivism. In positivism, in fact, scientists had the right to carry out research freely, but were not responsible for the use that others made of their research. Now, there is the wish to make the scientist responsible for this too, giving him the monopoly not only of scientific research but also of the ethics that should regulate it. This scientistic attitude would be a serious peril for understanding and developing bioethics.

This does not mean that scientists must not become members of the Ethical Committees, but that they must remain within their fields of competence. They have undoubted authority in science, but not in ethics. Ethics is the province of philosophers.

The Ethical Committees, in conclusion, must be made up of non "scientist" researchers (biologists and doctors), philosophers (of morals and of science), jurists and social scientists. Each of these, however, must exercise his authority solely within the field in which he is an expert, without intruding into the fields of the others, and must respect the others' opinions even if he does not agree with them. Only in this way will the Ethical Committee be able to unravel the tangled web that derives from experiments on the human body. And give man tranquillity about his destiny.

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### UDC 17.0:57:008

Marcelo Palacios, M. D.

# A BIOETHICS CULTURE

International Society of Bioethics (SIBI), Gijyn, Spain

### УДК 17.0:57:008 Марчело Палаціос БІОЕТИЧНА КУЛЬТУРА

Міжнародне товариство біоетики (МТБ), Іспанія

Багато зроблено в сфері генетики: стало можливим розглядати ген людини, копіювати його, комбінувати тощо, але мине час, і він стане більш «домашнім», тобто людина зможе сама керувати ним і здобувати від нього користь.

Мета і завдання біоетики — зробити можливим співіснування наукового і технічного прогресу з життям, розв'язати проблеми, які виникають між суспільством та індивідуумом, природою і технічним обладнанням. Біоетика є сполучною ланкою між цими двома світами і, що найважливіше, допомагає запобігти насильству над природою і людиною. Згідно з її постулатами, необхідно враховувати інтереси обох сторін, як з точки зору економіки, науки і техніки, так і з боку навколишнього світу, природи; необхідно прийти до такого стану, коли вони почнуть діяти гармонічно. Сюди ж включаються й інтереси людини, яка нерозривно пов'язана з усіма сферами життя. Ключові слова: біоетика, навколишнє середовище, технічний прогрес.

#### УДК 17.0:57:008 Марчело Палациос БИОЭТИЧЕСКАЯ КУЛЬТУРА

Международное общество биоэтики (МОБ), Испания

Многое сделано в области генетики: стало возможным рассматривать ген человека, копировать его, комбинировать и многое другое, но пройдет время, и он станет более «домашним», т. е. человек сможет сам управлять им и извлекать из него пользу.

Цель и задача биоэтики — сделать возможным сосуществование научного и технического прогресса с жизнью, разрешить проблемы, возникающие между обществом и индивидуумом, природой и техническим оборудованием. Биоэтика является связующим звеном между этими двумя мирами и, что самое важное, помогает предотвратить насилие над природой и человеком. Согласно ее постулатам, необходимо учитывать интересы обеих сторон, как с точки зрения экономики, науки и техники, так и со стороны окружающего мира, природы; необходимо прийти к такому состоянию, когда они начнут действовать гармонично. Сюда же включаются и интересы человека, который неразрывно связан со всеми сферами жизни.

Ключевые слова: биоэтика, окружающая среда, технический прогресс.

## **Biotechnologies**

We are entering the XXI century with an exceptional baggage of knowledge, techniques, products, applications and research lines related to biotechnology.

"Modern biotechnology" is gradually taking shape at a very fast pace ever since Watson and Crick first described the double helix structure od DNA in 1953 and the genetic dogma "one gene equals one protein" (now reviewed) was formulated. Twenty five years ago advances in molecular biology gave way to the "New Genetics" (Nathans) and set the scenario in a more significant context, in particular advances in genetic or molecu-