

Biotechnology and the human future
A dialogue between science and philosophy

البيوتيقا ومستقبل الإنسان

حواريين العلم والفلسفة

Lakli Hanane,

Zian Ashour University in Djelfa, (Algeria), h.lakli@univ-djelfa.dz

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Abstract:

Thinking about technology in general in the contemporary period is considered problematic thinking that places a person's life in a corner of judgments that may overthrow his being and threaten his survival and existence by creating different types of modern technologies that limit human freedom and allow the freedom to participate in the preoccupation of his soul, body, and future with an act of domination over the self, which requires the intervention of philosophy. In many cases, by activating its conscious contemplations based on rationality, logic, and ethics, and this is the origin of biotechnology, which should give consideration to that intimate relationship between philosophy and science.

Keywords: Biotica, Philosophy, Science, man, keywords.

ملخص:

يعد التفكير بالتقنية عامة في الفترة المعاصرة تفكير إشكالي يضع حياة الإنسان في زاوية من الأحكام التي قد تسقط كيانه وتهدد بقاءه ووجوده بإيجاد أنماط مختلفة من التكنولوجيات الحديثة التي تحد من حرية الإنسان وتسمح بحرية المشاركة في انشغال روحه وجسده ومستقبله بفعل تسلطي على الذات مما يستوجب تدخل الفلسفة في أحيان كثيرة بتفعيل تأملاتها الواعية القائمة على العقلانية والمنطق والأخلاق وهذا هو أصل البيوتيقا التي ينبغي أن ترد الاعتبار لتلك العلاقة الحميمة ما بين الفلسفة والعلم، على اعتبار أن العلاقة بينهما هي علاقة تكاملية بالرغم من اختلاف طبيعة كل منهما عن الآخر، وقد سمحت البيوتيقا بإتاحة فرصة اندماجهما واعتبارهما أساسا للبناء الأخلاقي والجمالي معا. وهو ما تم تدوينه منذ زمن بدء البحث في

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جدلية هذه العلاقة، من هنا ظهر ما يعرف بالفكر الاخلاقي الجديد الذي امتدت مباحثه لتسائل معظم النشاط الإنساني ومختلف ميادين الحياة،
كلمات مفتاحية: كلمة مفتاحية، كلمة مفتاحية، كلمة مفتاحية، كلمة مفتاحية.

Corresponding author: Lakli Hanane

1. Introduction

Throughout the past centuries, philosophical thought has been questioning its place in its affiliation to abstract theoretical statements that seem to have no relation to reality, and with the development of humanity and the opening of the world to modern technologies, it was necessary to decline some of the philosophical currents that dominated the intellectual and cultural arena for decades ago, such as rationalism, abstraction, descriptiveness, Marxism, and others. It left a philosophical legacy with its starting points and the philosophical features that embraced it as a principle to continue its path in a new intellectual style that is not devoid of current issues that reflect the preoccupations of contemporary man in the various fields of thought, science and civilization to catch up with the ride of development. From here, what is known as moral thought in its practical aspect, and more accurately called applied philosophy. Which falls under many topics that touch reality, especially in developed countries, and the call has appeared for introducing ethics into the fields of medicine, environment, education, and other aspects of contemporary life. What is the relationship of ethical research to biotics? What is its meaning and reasons? What is the relationship of the human future to it within the framework of the so-called epistemic dimensions of the concept?

It seems to say that: «Applied ethics began recently in terms of terminology, language, and cultural friction. This is a sound saying, except that the approach to ideas in the past and present is based on the idea more than the terminology. If the previous ones dealt with ideas that are in themselves or are close to them in the contemporary time, this calls for describing the analysis of that approach for two reasons. The first is an approach to ideas and knowing their weakness or strength, and the second is moving contemporary ideas to stimulate other different ideas. Therefore, we

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cannot say that applied ethics in the field of medicine, for example, arose out of thin air, just as we cannot ignore some of its forms in our ancient heritage.» (Mohieddin Ahmed,2017,p8-9) What is the nature of the concept? What are the circumstances of its emergence in the history of philosophical thought?

1.The concept of biotech:

Biotics has several definitions, the most prominent of which is that it is the study of problems resulting from scientific and technological progress in various economic, professional, environmental and medical fields. Is it a new science that belongs to the study of values (lexology). The term biotics was first coined by the American scientist Van Potter in 1970, and it is a normative science. It relates to the study of human behavior and determines what behavior should be in the problems resulting from progress in medicine and biology, in addition to being a philosophical study of the issues resulting from progress in the field of medicine and biology.

The biological revolution and the resulting new ethical problems and the accompanying boom in modern technologies, especially those related to biotechnology, were accompanied by a clear decline and decline in philosophical thinking, especially moral ones, but this decline did not last long, as philosophy soon regained its position in an attempt to break into the scientific field. In the context of gaining a cognitive balance between science, philosophy, and other knowledge, what is meant by biotics? What is its relationship to philosophy and ethics?:«Biotics is one of the most important basic topics in contemporary educational fields. The dangerous transgressions that have characterized the field of medicine and biology have made it imperative for thinkers, philosophers, and researchers to try to challenge them and stand on the lookout for them. This can only be achieved through ethical principles that delve into medicine and biology. Through biotics, this has emerged. The term, as it was previously referred to in the United States of America by the American biologist Van Potter Ranis Laer, and perhaps among the motives that made him coin this term was the tremendous progress in the medical and biological fields, and the delay in the ethical field within this sector, so he wanted to establish A solid

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relationship between biology and human values for the sake of humanity's continued survival under the guise of human dignity. The term biotechnology is considered like other terms in that it is difficult to determine a precise definition for it, due to the multiplicity of definitions, each according to its view and specialization. From this we can say that biotechnology is a compound of two parts. Bio: meaning life and ethics: meaning ethics. It is therefore an intellectual field characterized by the use of modern biomedical techniques that aim to reconcile scientific research with respect for human dignity. Therefore, it is an ethical philosophy applied to the sciences of medicine and biology.»(Ibrahim, Abd al-Razzaq,2015,p120-121) In the midst of this broad importance in the quest to find the relationship between science and philosophy, there is a correspondence in a certain sense and within known limits to both the search for truth and the dialogue between philosophy and science, and even between philosophy and science, religion and ethics, given that truth is generated from dialogue and is confirmed through it and scientific dialogue. It seems to be a permanent and natural state of knowledge that has a tendency toward truth. Therefore, if we want to understand and evaluate the mutual relationship between philosophy and science as represented in biology, we must eliminate some of the hypotheses in order to emphasize the type of relationship and its intellectual and cognitive principles, starting from:«The descriptionists' assertions on the liberation of the science of life from philosophy and natural philosophical claims and the reform of biology and its dragging to the veranda of pure thought structures. It is not necessary to diagnose in detail these false streams of thought because they are known to a great extent in their classical and contemporary forms, but we stop at their foundation, which is common to all of them. So what is the content of this foundation? ?

It is a tendency to start from the following premises:

Firstly:All philosophizing means its departure from the framework of positive science.

secondly:The claim that natural scientific knowledge of the essence of life and its laws is impossible, and thus we find ourselves face to face with

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stimulating the cognitive potential of life science. By the way, if natural philosophy does this theoretically, presenting itself in the form of undermining, then the hypothesis leads to the same result in practice by rejecting the importance of any philosophy in biological knowledge.»(Ibrahim, Abd al-Razzaq,1982,p13-14) This appears to be, as the author points out, a contradiction with correct thought and contemporary scientific experience. It also contradicts the history of biological science, and may even contradict the principles and principles of philosophy upon which modern Western philosophy in particular was based, especially with Bacon, Spinoza, Leyens, and others.

2.The roots of biological thought and its origins:

Medical and biological ethics raises multiple ethical, legal, legal and philosophical issues:«Philosophers are at the forefront of those interested in bioethical thought, because bioethical thought is also philosophical thinking about the ethical problems resulting from contemporary research and studies in the fields of life sciences, and because the opinions of philosophers, their ways of thinking, and their concepts were among the tools that the new ethical thought took care of to analyze and address those problems, as well as The practices of doctors and researchers often call for philosophical contemplation on the topics of human death, life, existence, nature, etc»(Mohieddin Ahmed,2017,p30).

3.Why does biotics need philosophy? What is the relationship between them?

It is known that if the nineteenth century was the century of determinism, then it can be said that the twentieth century is the century of indeterminism, as science was liberated from every concept related to Newton's universe and the progress of Pierre Simon. Laplace says that all we need is the ability to know all the circumstances surrounding philosophy and science.

In view of the nature of the relationship between philosophy and biotics, it must be made clear that there is a great connection between them, the features of which become clear in the fact that biotics is a new ethical thought despite its age, and even if its rules have not been established

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before, it is new as it is a basic branch of contemporary philosophy according to the classical division of philosophy into Three basic topics are ontology, or the study of existence, epistemology, i.e. knowledge of knowledge, and axiology, i.e. the study of values:«We do not deny that philosophers have a major role in the emergence and development of biotechnology, and this is embodied by the efforts of many philosophers, such as:

3.1. Daniel Callahan: This philosopher was interested in spreading and introducing biotechnical thought. One of his most important achievements was founding the magazine “Biotechia” and participating in writing the first biotechnique encyclopedia.

3.2.Hans Jonas: The German philosopher who is credited with developing one of the basic concepts on which biological thought is based, which is the concept of responsibility.

... The strong presence of philosophy in biotechnical thought is evident in the formation of the ethical committees that accompanied its emergence and development. Philosophers were among the most prominent members of these committees, and the leaders of biotechnical thought also try to emphasize the scientific, practical, and realistic character of biotechnical thought, which is the characteristic of pragmatic philosophy that was and still is. The most prominent American philosophical currents»(Mohieddin Ahmed,2017,p31)

Biotic thought has contributed to renewing and enriching the contents of some ancient concepts and terminology, according to the author and thinker Muhammad Mohieddin Ahmed. At the top of these concepts we find basic ethical concepts such as: the concept of right, duty, and goodness. This is from the core of philosophy and its values and is what formed the concept of the philosophy of biology, which combines... As two large and important terms, what is the basis of this agreement?

4.Perceptions about the philosophy of biology:

Darwin's theory occupies an important position within the philosophy of biology. One reason for this is its strong connection to questions related to man and existence. There is another reason:«The existence of a large

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amount of evidence for the validity of the theory, which fulfills what can be claimed regarding other theories initially proposed by the social sciences and behavioral sciences, relates to the same issues. In the physical sciences, there are theories that have been supported more strongly by scientific experiments. The theory of quantum electrodynamics, for example, has made predictions. It was confirmed with 12 decimal places, and the accuracy of this measurement is approximately equivalent to measuring the distance from the top of the Empire State Tower built in New York City to the highest point in the Sears Tower built in the city of Chicago, and measuring two distances within the diameter of one hair, but despite all this accuracy, the relevance of this theory is The variability of human life is very weak... On the other hand, theories have been developed in the social sciences and behavioral sciences different from Darwin's theory to explain the prediction in a very contemporary way of human behavior and actions. Oh Large-scale social processes such as culture and history» (Rosenberg and others, 2018, p22-23).

As stated above, some theories arrive, and despite this, given a certain amount of data, biology does not actually exist-Or so some philosophers of the philosophy of science expressed it - describing it as a science at all. Until Darwin's discovery of the mechanism of natural selection, it was at the beginning a subject of controversy. After that, some philosophers began to solve some issues also related to biology, such as that the principle of selective validity is the heart of the theory of evolution, but its description It has always been a problem, and what can be confirmed in this field, despite the many and varied readings scientifically and philosophically, is that philosophy was never separate from the natural sciences. It is linked to the life sciences in two basic areas. The first is what is known as the philosophy of biology or biology, and the second is the ethics of bioscience. Recently, biology has witnessed great interest from philosophy, which reflects the importance of the biological sciences themselves. The philosophy of biology considers the importance of the life sciences to philosophy, and vice versa, as: «Philosophy is also concerned with conceptual problems within the science of biology, subjecting them to philosophical analysis. For

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example, philosophers have been preoccupied with the issue of defining the concept or perception of suitability or correctness, in our saying, survival of the fittest, which is one of the important concepts in the branch of evolutionary biology. In what sense is an organism the fittest to survive?

This concept has always been a source of disagreement among philosophers of biology. The issue among them can be summarized in that they saw that defining the fittest is useless because the fittest cannot be defined except by defining the concept of survival, and vice versa. The fittest is that which survives and it survives because it is the fittest. This problem has been named in the literature. Philosophy of biology is the problem of achieving the result. One of the solutions to this problem came in counting the fittest, a concept that cannot be reduced to another term, but it takes its meaning in the context of a theory to explain evolution in which it represents one of the axioms that does not need to be explained by another concept.»(<https://www.omandaily,2023>).

Biotechnology between biology and philosophy of life:

Philosophically, Paul Ricoeur was interested in the topic of biotics during its appearance in the history of thought, in addition to readings by Hans Jonas, which clarify the relationship between the philosophy of biology and ethics, but he devoted an entire dialogue to it with Jean Perchango, which was later printed in a book after it was modified under the title (What Makes Us Think: Nature and the Rule), and he:«There was talk at that time about the possibility of overcoming the conflict between scientific discourse and moral discourse, and a search was made for a consistent discourse that stems from the existence of commonalities and the exchange of services and deals with the concept of representation as the true bond between the subjective and the objective. It was agreed that ethics remains valid to protect society from the negative dangers of science. And technical applications. In this context, the problems resulting from the dominance of the media and the hesitation of the wisdom of contemporaries in the face of the embarrassments of the biological revolution were also addressed in this context. The dialogue moved towards forming national committees for medical, professional and environmental ethics whose

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mission would be to look into intractable cases and rely on the collaboration of multiple methodologies. Among the problems that arose was Philosophy's ability to get rid of the dogmatism of biology, its reliable view of positive knowledge, its blind application of scientific results, and its critical orientation towards confronting the challenges posed by the cognitive sciences and neurosciences.»(Khuweldi,2023).

5.Man and bioethics:

Biological and medical ethics are known today as bioethics or medical ethics, and it is one of the branches of applied ethics known by contemporary philosophy. In its relationship to philosophy, we find that the strong presence of philosophy in biotechnical thought was evident in the formation of ethical committees that accompanied its emergence and development. Biotechnical thought went through three basic stages and a preparatory stage. Biotics, and what concerns us in the issue is the impact of this science on contemporary man, although there are those who trace this thought back to the Greek period and subsequent historical periods, as it is known that:«The science of medicine and life share the subject of life, and the first principle through this subject is respect for the body, that is, the person as a body and a soul. Here the importance of the principle of responsibility emerges, which is a key word in life and natural ethics. Researchers distinguish between three areas of biomedical ethics, which are:

- Modern medical ethics.
- Clinic ethics.
- Scientific research ethics.

As for modern medical ethics standards, some specialists, including doctors, are responsible for setting ethical standards, which can be clarified through the following:

5.1. Ethics related to the rights of doctors.

5.2. Ethics related to patients' rights».» (Mohieddin Ahmed,2017,p36-37)

Within the framework of the field's interest in human beings within the framework of the principles that must guide practice in the fields of

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medicine and biology, it is also concerned with the ethical problems posed by this practice and the solutions that must be sought to overcome these problems in order to preserve the principle of the right to life and the duty to preserve the human being in spirit and body, especially with regard to problems. related to medical and pharmaceutical experiments, which revolve around the principle of awareness and respect for people in the field of human experiences occurring today in the contemporary world. So, at this level of concept and clarification, the initial level becomes clear to us, where the relationship of the human mind to the experimental world is consistent within the framework of the relationship of philosophy with science, as it was consistent at the highest level of The level of scientific research and it seems that there are no unjustified irrational paragraphs. Patterns of moral behavior, wherever they may be, must carry behind them values and rational logic that do not deviate from the framework of practical philosophy in its moral framework, which is what is required and what most philosophers were working on, especially in modern philosophy with Kant in His critical thinking.

Biotics and the future of man:

There is no doubt that the transition of the philosophy of science in the twentieth century from the logic of justification to the logic of progress had many results and outcomes that were not limited to contributing to the solution of a specific problem, but it seemed possible to anticipate the future prospects of that dialogue between philosophy and science that began a long time ago, even if that relationship It seems tense at the beginning, but it nevertheless gave great impetus to change many intellectual, philosophical, and even scientific stations as they were, even if they encountered many obstacles and challenges:«We generally agree on the importance and value of controlling diseases, for example, and epidemics, and getting rid of them, but progress in this field depends mainly on research and experiments that must be conducted, whether on animals or humans. As for animals, their use is still continuing despite the objection of animal welfare societies, but the real problem is It involves conducting experiments on humans»(Al-Yaksi,1993) Which indicates the lack of

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comfortable practice of technical tools and vital experiments. The psychological, physical, and mental aspects of the human being must be taken into account, and these experiments must be ethical, social, and behavioral in the first place. No one has the right to infringe upon a human being's psychological, spiritual, or physical value except within the framework of his personal benefit. Ethics undoubtedly represents a fundamental center in philosophy. Especially when it comes to the human being, his entity, his sanctity, and the change in his nature, because what we see today is that genetic engineering research, for example, has allowed scientists to change the genetic makeup of the human being and transform him into a being with special characteristics that he entered into the world of experiments, just as he did with animals and plants before, and that is a clear threat to his existence and survival, inevitably.

6.conclusion:

The contemporary world today is experiencing tremendous development in the field of medicine and biology, and this has led to the emergence of serious crises with successive effects on the level of the human entity and the future of humanity. This has called for the intervention of philosophy as the mother of the sciences. It was and will remain so through a new, ancient study, which is the study of ethics, which accompanies the various sciences in an attempt to control The individual's behavior in making existential and life decisions combines moral values and the requirements for adopting them to preserve human dignity and the scientific field with its various intellectual and cognitive data, including medicine, the environment, and others. The intervention of biotechnology is nothing more than a moral and sensitive turn only, but rather it is a philosophical contemplation on the nature of existence through practice. A contemporary process whose activation becomes clear in the context of the reality of life that man lives, first and foremost, in a world dominated by matter, and it is an incentive from it (philosophy) to reconsider the reasonableness of things and take awareness as a weapon against everything that could threaten the human being and his living nature in this universe. Science should He bridles awareness, logic, and ethics, and uses the

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philosophical approach as a means of serious and realistic contemplation of the problems that befall biotechnical practices, so there is no harm or harm.

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