The impact of the new biology on ethics

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Abstract
The classical ways to make philosophy are used to discuss ethical problems applied according to some fundamental ethical principles whose paradigm still remains the kantian categorical imperative. Nowadays, such approach is contested because the problem of "conditio humana" have to take into account scientifically and technical changes. The consequence is that ethics cannot be separated from the actual scientific context, especially from the modern biology developments.

The present article discusses the concept of nature. If according to Antique acceptation nature means "what man hasn't done", nowadays, conception is that human being creates nature by his own work, he interferes the life structure, even his very life. By this interference man determines his own essence and always tries to redefine himself. That's why, ethics couldn't exist without anthropology, i.e. without basic assumptions about human nature and couldn't exist without the knowledge of the circumstances in which man lives. But nowadays, these circumstances are mainly determined by science. The modern biology generates discussions on the concept of human nature, that's why the necessity of bioethics as applied ethics and, especially, in its determination as ethics of the responsibility. On the other hand, the debate on ethical problems of the biology is today extended beyond bioethics, in the direction of an "ecological ethics".

Keywords: philosophy, ethics, human genetics, genetic engineering, cloning.

Preliminary Remarks

Philosophy has the tendency - and due to its nature also the peculiarity - to move in the realm of principles, that is, to view things from a principled perspective. Accordingly its answers or solutions tend to be categorical. The sciences try their luck again and again in the infinite ramifications of what can be studied and often find it even in the purportedly marginal. But in philosophy such a deviation from the principled line is considered a diversion (with regard to philosophy?ś real task) or as something for weaker spirits, who dig up a philosophical author or a (perhaps merely purported) philosophical problem that is of no interest and seek their fortune as specialists for the insignificant (which of course they themselves consider significant).

In fact, the matter of principle is a vital question of philosophy itself. Wherever it loses sight of this, that is, wherever it no longer sees its task as the pursuit of questions and problems in a more fundamental, in a more rigorous, and thus in a more principled manner than others, it dissolves itself in intellectual, usually historically oriented marginal notes and loses it legitimacy as a discipline. No wonder that in matters of ethics philosophy also follows the path of principle and discusses problems of applied ethics in the light of ethical basic principles, the paradigm of which is still Kant's categorical imperative.

In his attempt at an "ethics for technological civilization", Hans Jonas noted that according to classical ethical views the conditio humana, given by the nature of man and the nature of things,
was always the same, that on this basis the good (for man) was easy to determine, and that if consequences of action were, in principle, manageable, then responsibilities could be clearly delimited [1].

According to Jonas, this view can no longer be upheld - for philosophical reasons (which he attempted to present in a new concept of responsibility) and for empirical reasons, which have something to do, among other things, with changes (discernible in social science) in the conditio humana, with the transition from basically natural relations to technical relations. However problematic in some respects this result may be, it is right to point out that ethics is not simply a theory that can be isolated from developments, including scientific developments. This in turn applies especially to the development of modern biology.

Nature as our Work

According to an ancient definition, nature is what was not made by man. Today, this definition is crumbling. Man does not stand still with his own works before nature, but rather he is, to a certain extent, making nature itself into his work. The key to this development is presented by the natural sciences. And it is especially modern biology that opens up new, never before expected perspectives. Man is intervening in the structure of life, even in that of his own life. Just as the external world (external nature) has for some time been becoming more and more a work of man, so too the inner world, his own inner (biological) nature, is now becoming his work.

Modern biology - keywords are human genetics and genetic engineering - makes it clear that our scientific knowledge puts us increasingly in a position not only to know our (biological) nature, but also to change it. The old Renaissance notion that man, unlike any other being, must determine his essence himself [2] - what was meant was his cultural essence - no longer stops at his biological essence. It is true that the conditio humana is changing in the sense that now even its biological foundations are at our disposal. This creates a completely new and consequential situation for ethics.

As for the consequences for the inter-relations of ethics and science, there are two aspects that must be distinguished: (1) consequences of research that demand an ethical evaluation and possibly an ethical regulation, and (2) consequences for ethics itself. In the first case, ethical points of view have consequences for the further pursuit of research; in the second case research has consequences for ethics itself, perhaps in the form of forcing modifications in those empirical assumptions about the nature of man that enter into a normatively structured ethics. Just as no ethics can get by without anthropology, that is, without fundamental basic assumptions about the nature of man [3], so too, no ethics can get by without knowledge of the circumstances under which man lives. Among these circumstances are those ascertained by science and those brought about by science in the first place. And in the case of biology, these are both prerequisites, such as those that lie in the biological nature of man and those developments in which the biological nature of man is involved.

Cloning
An example of the difficult relations between science and ethics and the consequences for both science and ethics that might arise from our increasing scientific knowledge is the debate about cloning, in particular about the possible production of human clones. This debate began with such a shock and has been pursued so hectically because the new potential of genetic technology has all of a sudden made possible something that once seemed to be forever beyond the horizons of human intervention, namely, the fabrication of a human being. It seems that boundaries drawn by nature itself are disappearing.

Producing clones means producing living creatures with the same genetic information, either by exchanging cell nuclei or by dividing embryos at very early stages of development. Cloning thus means that the genotype - that is, the primary hereditary material of two (or more) individuals - is the same - which does not mean that their phenotypes (the aggregate of external traits resulting from the genotype) are identical. Not all traits of an organism are determined only by the effects of the genes.

The developmental conditions of an organism, including in the case of humans social and cultural conditions, also play an important role. In the case of identical (monozygous) twins, this has long been known. This makes it clear, by the way, that the production of clones is a thoroughly natural process; it is a replication mechanism that is quite common in nature, for instance, in bacteria and other microorganisms. What is new is only that this method can now be "artificially" applied to higher vertebrates. And what is of ethical significance is whether this kind of procedure may permissibly be applied to humans.

As a rule, especially in the arguments of theologians and philosophers - cloning humans is taken to be a severe infringement of human dignity, inasmuch as the natural individuality of humans is abrogated. Here, particularly claims are being made about the character of humans as ends in themselves, who are to be protected from any kind of instrumentalization - such as the cloning of humans is taken to be. These are strong words that seem to be able to overturn any counterargument.

Nonetheless, it should first of all be recognized that there is an infringement of human dignity neither in the identity of the genomes of two people - identical twins, too, are individual persons and bearers of human dignity - nor in the procedure of cloning itself. In this procedure no person yet exists whose dignity could be attacked. On the contrary, as was made clear by a recent intervention: an infringement of human dignity occurs only through "the fact that a human being is produced as a means to an end that is not he himself, and that to this purpose genetic identity with another human being is imposed on him."[4] This would be the case, for instance, in cloning for the purpose of producing donor organs or tissue - that is, establishing an individual organ bank.

But this notion - the clone as a storehouse for spare parts - is absurd since the clone just as a natural twin is of course an individual with all the rights that we associate with individuals. The fact that one (the clone) is just like the other (the cloned) is a circumstance that we have long been accustomed to in identical twins, whereby no one imagines that the one is (only) there for the other. Twins, too, are persons just like nontwins and thus enjoy all the protections of the laws
that enlightened societies afford to individualities.

There are, furthermore, a number of arguments that speak in favor of cloning or the affordance of such reproduction possibilities. What if the cloning procedure is used as a method of treating infertility or is applied to avoid serious hereditary illnesses? Even a widow's wish for a child very much like the one she has just lost [5] might be a permissible reason for applying the cloning procedure. In such cases, there is an infringement neither of the principle of the inviolability of human dignity nor of the closely connected determination of man as an end in himself, as formulated for instance in Kant's second form of the Categorical Imperative.

Remember that even this formulation of ends in themselves is both realistic and humane: "So act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means."[6] If we use Kant in our arguments we should read Kant closely. He argues here that we must not treat a person merely as a means but always also as an end. Kant intends no complete exclusion of the means perspective here. Had he said: never under any circumstances as a means, then every instance of human reproduction would be morally reprehensible, because it is always, as is the act that leads to it, not only determined by the person as a purpose. The progenitors of a child think not only of the happiness of the child but also of their own. In another formulation: It would be completely unrealistic to assert that up to now the only thought at the conception of children has been the happiness of the future child, and not for instance the happiness of the parents or compensation for the loss of an earlier child.[7]

Thus it is clear that "cloning itself is not in any sense "in itself" reprehensible, but only in connection to human intentions. Intentions however are variable, so that the question of what is morally reprehensible must be posed one case at a time," even though "the cloning of humans represents a deep and qualitative change in human self-understanding. The accidental genetic constellation that occurs through natural propagation is something like a natural protection against instrumentalization (at least extensive instrumentalization)."[8] This means that the question of principle remains: how much technology we want to place in the stead of traditional modes of behavior that are considered natural.

After all, with the technology of cloning we change not only future generations, we also change ourselves, at least in our self-understanding. In other words: Wherever boundaries are crossed, which, as in the case of human reproduction, seem to be set by nature, we must analyze very precisely and without recourse to individual intuitions or to ideological prejudices just where such boundaries ought to lie in the future. For man is a being without measure that can only live under measures. This is made clear both by nature and by science.

**Biological Ethics**

There are various consequences that have been drawn for ethics from the results of the new biology. One consequence is the call for a bioethics in the sense of an applied ethics, which deals specifically with biological states of affairs. Such a code would prescribe particular watchfulness and particular measures in certain fields, as well as certain applications that could be formulated
as rules of an ethics of responsibility. Such rules might include - for instance as applied to
developments in genetic technology - both the rule of considering the consequences by carefully
checking for possible undesirable results and a rule of caution, which favours the choice of the
option that offers the greatest security of prognosis and the least expected harm.[9] However, the
debate on the ethical problems of biology extends far beyond such bioethics in the direction of
environmental ethics, which attempts to change the foundations of ethics itself.

The point of departure of such a conception of ethics is often an argument about going against
nature. According to this, genetic engineering and interventions into human reproductive
processes do something that is the business of nature alone; they intervene in a regulatory
manner in a self-regulating nature; by gene transfer they cross species boundaries, thus infringing
on the "identity of species" (G. Altner [10]) and disturb the (relative) stability of ecological
balances. [11] In arguments of this kind we find biological unclarities - what is then the "identity
of species?" - coupled with ethical unclarities - what does ethics have to do with the order of
species, that is, with biological classifications or even with nature as a whole, however that is to
be imagined? Those who think (and write) this way are confusing the empirical (bio-logical
states of affairs) with the normative and commit the naturalistic fallacy, that is, they infer what
ought to be from what is, they derive norms from facts.

Precisely this is also the case in the arguments of Jonas, who declares the natural to be the
highest norm and views any intervention into natural processes as an offence against "naturally"
given norms. For Jonas the technology of cloning is in "contradiction to the dominant strategy of
nature"[12] and is thus not to be justified. The natural - here in the form of a natural reproduction
- consequently appears not only as something not to be interfered with (for whatever reasons, for
instance, religious reasons) but also as something that pursues its own goals with strategic means
and by these means makes itself the highest normative authority. It is no wonder that this kind of
argumentation is often connected with religious notions such as myths of creation. If everything
that is natural is creation, the work of a divine creator, then an offence against the natural - in the
form of suspending its effects or of making a copy - is an offence against the divine will, which
in turn is conceived as norm-giving in a principled sense.

As a matter of fact, the attempt is made again and again to construct an ecological ethics on the
basis of an inference from facts to norms, which usually reveals a secret naturalism, and to
oppose this in the form of physiocentrism to the anthropocentrism that has long dominated ethics
and which is now declared to have been a basic error. A central role in such arguments is played
by differing concepts of nature, and thus a bioethics that has been expanded into an ecological
ethics is also called an ethics of nature. For the anthropocentric position - both in questions of
ethics and of nature - man is the point of departure of all arguments and nature has no intrinsic
moral value. For the physiocentric position, nature is characterized by its own (absolute) intrinsic
value, which at the same time implies duties of man toward nature. To be more precise, we can
distinguish between pathocentrism (all sensible creatures have a moral value), biocentrism (all
living creatures have a moral value) and radical physiocentrism which, as just explained, makes
all of nature the bearer of moral value. Quite often all these aspects, as parts of a physiocentric
position, are mixed up in a mode of argument that is difficult to understand, for example in the
following conviction: "(a) The belief that humans are members of the Earth's Community of Life
in the same sense and on the same terms in which other living things are members of that
Community. (b) The belief that the human species, along with all other species, are integral elements in a system of interdependence such that the survival of each living thing, as well as its chances of faring well or poorly, is determined not only by the physical conditions of its environment but also by its relations to other living things. (c) The belief that all organisms are teleological centers of life in the sense that each is a unique individual pursuing its own good in its own way. (d) The belief that humans are not inherently superior to other living things.”[13] Common to all these variants is that values, which in fact are always the result of valuations, are declared to be a part of nature itself.

The expansion of a bioethics, a subarea of applied ethics, to biological ethics in the form or against the background of physiocentrism is thus based on a misunderstanding. This expansion not only makes ethics dependent on a particular view of the world but also leads by its naturalistic premises to a new (ethical) biologism. Biology is expected to be not only an advisor but also a legislator in ethical affairs. And this in turn involves both a philosophical and a biological misunderstanding, since the new biology teaches us how permeable the boundaries are between the natural and the artificial; that is, those processes determined by man. The appeal to nature in ethical questions, which made sense in archaic cultures, no longer makes sense here. And one more thing: the notion that moral conduct as a particular form of social behavior is itself the product of evolution or could be given an evolutionary explanation leads one astray if it is understood in an absolute sense as a foundation of ethics.

Whereas in the first case of a biologistic ethics, natural relations are to be taken as the standard of ethics, in the second case ethics would be a product of these relations, and thus our ethical deficits would not be due to the failings of reason but to an evolution that was unfinished and unable to cope adequately with man.[14] An evolutionary ethics in this sense would be a convenient excuse for tasks unaccomplished in man's dealing with himself and with nature.

But these tasks are what have to be addressed - which is why only a rational ethics, that is, a rightly understood anthropocentrism in ethics, is able to solve them. Nature gives no ethical lessons, neither in the form of physiocentrism nor in the form of evolutionary ethics. Nature only reminds us, when harm is caused - keyword: environmental problems - of the unfinished tasks of rational ethics.

References


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