SOCIOBIOLOGY AND THE ORIGINS OF ETHICS

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ABSTRACT. According to sociobiology, ethics is an offspring of natural selection and totally explicable through biology. According to this discipline, any individual has reproduction as its supreme life objective, and thus ethical principles are directly originated from such objective. This criterion subordinates choice to "natural" duties and eradicates the power of human free will to generate values. Sociobiology falls into the *natural fallacy* as it assumes that a moral "duty" derived from a particular behavior is justified by the same existence of such behavior. This paper sustains that humans are qualitative different from the rest of animals since they exist in spheres afar from strict biological ones; sociobiology subjugates human freedom to the necessity realm and build up an ideological discourse.

KEY WORDS. Ethics, evolutionary theory, ideology, naturalist fallacy, sociobiology, survival, liberty, necessity, dearth, free will.

INTRODUCTION

Sociobiological theory deals with animal species that are "social", that is, they form groups, develop a certain division of labor, and cooperate in order to survive in the struggle for existence. For this reason, these species appear from the start as if they were endowed with moral attributes. "Social" animals possess qualities comparable to human beings not only insofar they are born and die, develop, reproduce, become ill, nor since they relate to other beings of the same and even of other species, but because, as they perform all these various functions in their peculiar ways, they exhibit emotional and behavioral patterns curiously akin to those of human beings.

One of the main sources of sociobiology is Darwinist theory which, upon refuting creationism and affirming the principle of continuity in the evolution of species, denies the existence of overall qualitative differences between human beings and higher animals (Darwin 1981, Part I, p. 105).

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Thus, Darwinism is logically bound to the admission that morality originates in the evolutionary mechanisms common to all living beings.

The contribution of this theory to the problem of the origins of ethics lies, firstly, in the search for an explanation by means of a scientific method of analysis, a method which naturalizes the moral status of species. According to Darwinism, species must earn their right to survival in every-day struggle. No species is intrinsically more appreciable than any other; natural selection will prove the value of each species and, in case of success, it will be expressed by their perpetuation throughout time. Darwinist theory implicitly affirms that the only criteria by which values can arise is the reproductive one, by which each species defines its "tactics" of struggle in order to guarantee perpetuation. In this manner, an eventual moral valuation would take these criteria into account. Sociobiology, being an extension of orthodox Darwinism (Ruse 1987), reinforces this contribution. In 1975, E. O. Wilson wrote:

Scientists and humanists should consider the possibility that the time has come for ethics to be removed temporarily from the hands of philosophers and biologized (Wilson 1975, p. 562).

Several years later, he reaffirmed this point of view as he made his empiricist faith manifest:

Above all, for our own physical well-being, if nothing else, ethical philosophy must not be left in the hands of the merely wise. Although human progress can be achieved by intuition and force of will, only hard-won empirical knowledge of our biological nature will allow us to make optimum choices among the competing criteria of progress (Wilson 1978, p. 7).

More recently, he asserted:

The empiricist argument, then, is that by exploring the biological roots of moral behavior, and explaining their material origins and biases, we should be able to fashion a wiser and more enduring ethical consensus than has gone before (Wilson 1998, p. 262).

Again, this interpretation of the origin of morality is a consequence of the thesis that the human moral practices are the result of universal evolutionary processes:

Human emotional responses and the more general ethical practices based on them have been programmed to a substantial degree by natural selection over thousands of generations (Wilson 1978, op. cit., p. 6).

According to this point of view, natural selection is the only mechanism of biological evolution, which shows a clearly defined continuity and only the empirical method leads us to know the truth of evolutionary processes.

Wilson's claim is that only those who understand these premises reach correct conclusions regarding the issues of ethics and morals.

In this article an attempt at an analysis and a refutation of these theses will be made, based on the point of view that there is a qualitative difference between animals and humans, and that the principles of human behavior cannot be totally explained only by virtue of their biological properties.

1. GRADUALISM AND THE PRINCIPLE OF CONTINUITY AS A FOUNDATION OF EVOLUTIONARY ETHICS

A. DARWIN AND KROPOTKIN AS HISTORICAL BACKGROUNDS

One of the conceptual foundations of sociobiology is found in the postulates of Charles Darwin's theory of evolution. His main opinions regarding moral and ethical sense in the process of evolution are found in *The Descent of Man*. There, Darwin established:

If no organic being excepting man had possessed any mental power, or if his powers had been of a wholly different nature from those of the lower animals, then we should never have been able to convince ourselves that our high faculties had been gradually developed. But it can be clearly shown that there is no fundamental difference of this kind. We must also admit that there is a much wider interval in mental power between one of the lowest fishes, as a lamprey or lancelet and one of the higher apes, than between an ape and man; yet this immense interval is filled up by numberless gradations (Darwin 1981 [1871], Part I, pp. 34-35).

This is a clear statement in which Darwin expresses his conviction that evolution is a universal process that is gradually carried out with almost imperceptible variations, and since the human being is its result, human faculties governing their functioning must be attributed to this process.

Consequent of and coherent with that thesis is Darwin's claim that "...any animal whatever endowed with well-marked social instincts, would inevitably acquire a moral sense or conscience... 1" (Darwin *op. cit.*, Part I, p. 71).

Darwin correctly points out the existence of sentiments like love, desperation or worry in animals (*Ibid.*, p. 74) and their capacity to feel compassion for individuals that are not members of their family (*Ibid.*, p. 82).

Anyhow, the animal possess but a constrained vision, limited to its interactions with the habitat; it only expresses its sentiments to what is relevant for it insofar as its existence is strictly biological. A moral sense, and the moral action that derives from it, come about when the human being, holder of a cognitive structure capable of attaining conceptions of universal extent, acquires the capacity of global appropriation of nature and society and simultaneously transforms them in practice, thus trans-

forming himself. In an animal, its sentiments are never separated from certain stereotypes nor are they translated into a radical transformation of habits, as occurs in humans.

A moral being, says Darwin, "...is one who is able of comparing his past and future actions or motives, and of approving or disapproving of them" (*Ibid.*, p. 88). This characteristic is only found in humans. Even if an animal possesses a memory and, to a certain extent, the capacity to plan immediate actions, even if it possesses a rudimentary language and behavioral norms, it is not capable of judging, comparing and balancing the whole or part of its past actions, nor its projections toward the present nor its consequences, both in terms of its present relation to the environment or in terms of the immediate future. Thus, the animal cannot be considered a "moral" being.

The acquisition of a moral sense and a moral conscience is, for Darwin, a consequence of a continuous process that has its origin in the social instincts and continues to develop itself through reason, self-interest and, later on, religious sentiment combined with instruction and habit (*Ibid.*, pp. 165-166). In this sense he expressed that:

There can be no doubt that a tribe including many members who, from possessing in a high degree the spirit of patriotism, fidelity, obedience, courage and sympathy, were always ready to give aid to each other and to sacrifice themselves for the common good, would be victorious over most of tribes, and this would be natural selection (*Ibid.*, p. 166).

From here, then, can be deduced: firstly, the idea of morality as a sacrifice for the good of the community; secondly, the concept that altruism and cooperation only exist as a way of preparing the individual for competing more efficiently, not as an end in itself; and thirdly, a concept of moral-natural progress measured by the increase in the number of humans who possess the capacities of sacrifice, cooperation and altruism.

The third point seems to contradict the second, but this is not so. A tribe that emerges victorious after waging war against another tribe, will increase the possibility of extending its altruistic capacities on account of the augmentation of members who possess the altruistic capacity within that tribe. This, in turn, increases the possibility of victory in future struggles so that the increase in intragroupal altruism is complemented with the increase in intergroupal selfishness. A moral sense is developed in the tension generated by these two poles.

Darwin had previously pointed out this limitation. The services that an individual provides for another as a consequence of his moral sense or conscience do not extend to all individuals of the same species, but to those of the same exclusive association (*Ibid.*, p. 72). Some years later, P. K. Kropotkin (1983 [1902]), for whom what primary reigns is a cooperative

attitude among individuals in order to move forward, would express himself in similar terms. Kropotkin's work has been put forward as an example of an alternative to the Darwinist view of nature, though I do not see a clear contrast. Kropotkin declares that cooperation is carried out among animals of the same species or at least of the same society (*Ibid.*, pp. 51, 65-66). He explicitly accepts the coexistence of competition and cooperation at different levels of analysis (*Ibid.*, p. 66), without denying that struggle is a necessity of survival even for the most adapted (*Ibid.*, pp. 111-112).

Recently, Alexander (1993, p. 179) has emphasized that intraspecific competition is dominated by intergroupal competition, facilitated by cooperation. Sober (1993, p. 206) has mentioned that altruism first requires a group selection which indicates competition among groups. Thus, it can be affirmed that for Darwinist moral theory, the introduction of altruism and cooperation is necessary, but this does not mean that it goes beyond the world-vision governed by individual interests and rewards. This idea is clear in Wilson who gives examples of what he considers reciprocal attitudes of altruism with the following phrases:

'Give me some now; I'll repay you later.'

'Come to my aid this time and I'll be your friend when you need me.'

'I really didn't think of the rescue as heroism, it was only what I would expect others to do for me or my family in the same situation' (Wilson 1975, op. cit., pp. 552-553).

Wilson cannot detach himself from a mercantilist concept of human conduct and values. Altruism is placed in a frame of reference of cost/benefit relationships. The connection to the egotistical "invisible hand," to which Adam Smith alluded in order to explain the ultimate and mysterious cause of economic activity, must not be forgotten. In the same fashion that men cannot be separated from that concept in their economic activity, the sociobiologists concept cannot be separated either from its economist metaphor nor from the idea that, ultimately, we are all entities controlled by mercantilist forces that shape human character and its interests.

B. CONTINUITY AND ETHICS IN CONTEMPORARY SOCIOBIOLOGY Sociobiologists tacitly or explicitly accept the existence of a continuum in evolution as a universal process, one of whose consequences is the emergence of ethics and moral action. As a part of such line of thought Wilson writes:

...culture, aside from its involvement with language, which is truly unique, differs from animal tradition only in degree (Wilson 1975, op. cit., p. 168).

Nothing fundamental separates the course of human history from the course of physical history, whether in the stars or in organic diversity. Astronomy,

geology and evolutionary biology are examples of primarily historical disciplines linked by consilience to the rest of the natural sciences (Wilson 1998, op. cit. p. 11).

M. Ruse also remains consistent with this approach when he states: "The standards of right action are set by the causal laws of evolution" (Ruse 1986, p. 72) and when he expresses that the evolutionary process provides a moral guideline given that there is an inherent value in the present state of the organic world (*Ibid.*, p. 86).

Since these characteristics are a product of social relations and also a product of human evolution, and since it is not considered that there is a qualitative difference between human evolution and the rest of biological evolution, social progress winds up being equated with moral progress, and both with biological progress.

It has also been defended that the Darwinist idea of continuity among animals and humans is antiessentialist since it does not consider humans to be something so special as to possess an essence greatly different from the rest of living beings (Bradie, M. 1994, p.158). There is a certain amount of confusion here. A qualitative difference between two entities does not imply that everything is vastly different. Entity B comes about as a product of the evolution of A after having presented a qualitative change, and can maintain and develop many of A's properties. What makes B qualitatively different from A is the predominance in B of characteristics never found before in A, which force the observation of B's behavior to be made according to rules and methods different from A's. This is what constitutes a qualitative difference.

Connecting this with the evolutionary origins of morality, in many animals the property of suffering and having emotions does not imply that in all of them there is a moral sense, not even in a rudimentary form. Moral sense will appear as a consequence of sentiments, emotions and group activity in humans, but it cannot be understood *only* as a function of these characteristics in their animal expression. Human moral sense acquires an independence and a unique development.

For sociobiology, however, there is not a difference in nature between the origin of hands, eyes and altruism; all of these characteristics are a consequence of the adaptationist imperative and are useful for the perpetuation of genes. M. Ruse declares:

We think that we ought to help, that we have obligations to others, because it is in our biological interests to have these thoughts. But, from an evolutionary perspective they exist because and simply because those of our would-be ancestors who had such thoughts survived and reproduced better than those that did not. In other words, altruism is a human adaptation, just as our hands and eyes and teeth and arms and feet (Ruse 1993, pp. 147-148).

According to this schema, moral sense and moral action do not differentiate themselves from physical functions such as sight or hearing, other than by their exterior expressions. Adapationism judges that the emergence and practice of morality are just another adaptation on the same plane as all human capacities and physiological functions (*Ibid.*, p. 151), therefore, all categories are treated as fixed and abstract entities without being considered in the concrete situations in which they express themselves.

It is evident that the human being is the product of biological evolution, but this does not mean that everything in it is derived *directly from* biological evolution. Evolution implies change. If this is admitted, there is no reason, then, for not accepting the existence of changes whose resultants cannot be judged in relation to what existed previously, but according to rules of a different system, regardless of the process by which it arose. Put differently, biological evolution, evident since it appears before our senses in easily measured and quantifiable modalities when morphological and physiological characteristics are observed, entails other characteristics not as easily measured, such as psychological and emotional ones. From these, social and cultural characteristics are developed, but the change has been so profound that it is not possible to squeeze them all into a continuous dynamic, one that crosses all levels of expression of the matter without any kind of mediation.

The consequence of this pidgeon-holing all changes into just one type of explanation is the inability to distinguish qualitative changes, and the need to convoke a series of rather obscure elements in order to account for the constancy in the nature of changes. If all evolutionary transformations are going to be explained by only one mechanism, natural selection, then there must be something that never changes in nature, that gives meaning to such a mechanism and whose expression in human beings is, at the core, the same as in other species. This something, which according to sociobiology is a fixed constant, is the need to survive and leave offspring; therefore, morality and ethics, as biological adaptations, are geared toward those ends.

We should ask why survival is unchangeable and constitutes itself as an end for all living beings alike. Can't a new level of living matter appear in which survival is no longer the end, and so change the very character of evolution? Does this contradict the evolutionist concept or does it make it more consistent? This has not been dealt with by sociobiological evolutionism, which has always limited itself to a biologicist explanation. Ruse and Wilson (1986), under the influence of this point of view, claim that morality must be explained solely in reference to the events of biological evolution and natural selection.

This point of view has generated some alternative perceptions. P. Tort, for example, adheres to Darwin's principle of continuity and concedes that ethics and morality arise from this principle, but he also believes that they generate and contain a dynamic opposite to natural selection. Instead of eliminating the least fit, they protect and take care of it, thus provoking an anti-selectionist dynamic (Tort 1995). If this is so, morality and ethics constitute the opposite of natural selection, that requires a qualitatively different level of analysis from the biological one, thus nullifying the universality of the principle of continuity.

Ayala argues that ethical behavior, despite the fact that it can be the result of biological evolution, does not necessarily has to be explained in adaptationist terms. He admits that the development of human intellectual capacities is the final stage of continuous and gradual evolutionary development (Ayala 1987, reprinted in Thompson 1995), yet he also points out that the necessary conditions for ethical behavior are reached after crossing an evolutionary threshold. Despite the gradual process that leads to this state, once it has been reached, a process of ethical behavior is set off. Analogous phenomena have occurred several times in the history of living beings (*Ibid.*, p. 301-302).

However, strong support to the idea of graduality based on the necessity of adaptation to the environment has continued to be hegemonic, thus the origins of ethics and morality acquire a determinist character. Regarding this point, it is necessary to place special emphasis on a problem for the sociobiologist: the fact that the human being judges and acts according to choosed purposes, be them of an ethical, aesthetic, functional or other nature. Human behavior is definitely teleological. If biological evolution as such does not have any ends, then sociobiology should admit it problematic that human social and individual evolution does have ends. This implies a fundamental qualitative difference whose character cannot be understood using biological laws. The ethical sense is one of the clearest expressions of this new undoubtedly teleological quality.

Ruse (1986, op. cit., p.96) recalls Wilson's teleological concepts, pointing out that they belong to a conception that approaches Spencerism (as the same Ruse [1999, p. 208] has pointed out, even though Wilson is not a strict Spencerian, he deeply admires Spencer). Furthermore, Ruse adopts a teleological language when he denies, for example, that the human bucal tract—which encompasses the development of speech and language—is the consequence of an accident (*Ibid.*, p.130). Later, he declares that things that cause us pleasure and pain, that make us happy or unhappy "...did not just happen by evolutionary change to be as they are." (*Ibid.*, p. 235-236). He also declares that sexual pleasure, the fear of snakes, the sweetness of sugar are not accidental either (*Ibid.*). There is a contradiction between these statements and Ruse's own declaration that Darwinism

turned its back on biological progressiveness (*Ibid.*, pp. 93, 149, 175). Finally, Ruse himself solved at last this contradiction when he rectified and recognized the progressionist character of Darwin's theory (Ruse 1988).

The conclusion will be that natural selection *has made us*, that we are beings *for* a purpose: our own reproduction is a way of perpetuating the existence of the species. And, of course, the relation of survival to ethics clearly appears since it will come about that everything that favors reproduction and survival will be considered good, and everything that is an impediment will be deemed bad. Ruse is also clear on this matter: "Consequently, natural selection has made us in such a way that we enjoy things which are biologically good for us and dislike things which are biologically bad for us" (*Ibid.*, p. 236). Within this conception, randomness appears annulled by natural selection and consequently, ethics cannot be product of that randomness.

The error of the adaptationist method, when referring to the evolutionary origins of ethics, resides in supposing that the forms of usual behavior are ideal, and in looking for an explanation for previous adaptations (Collier and Sting 1993). The adaptationist method assumes that observed behaviors are the ideal ones, thus attributing values to those behaviors, since a schema is constructed in which reproductive success and the level of adaptation are directly proportional. Good is successful as far as it represents adaptation and, as a result, survival and reproduction.

Upon automatically assigning the origins of morality to evolution without taking into account the autonomy and independence of the sociocultural realm, the role of morality as an important human feature is diminished and trivialized, and a basic unanimity of the moral perspective is suggested (Trigg 1986).

2. SOCIOBIOLOGICAL ETHICS AND THE NATURALIST FALLACY In 1903, the philosopher G. E. Moore stated that it is fallacious to consider that something is good because it is natural or bad because it is antinatural. He also stated that evolutionist doctrines that concur in this fallacy—the naturalist fallacy—pretend that the course of evolution, while showing the direction in which we are moving, show at the same time the direction in which we *must* go. This fallacy arises as soon as that which is considered normal is considered good as well, when one supposes that a law of nature is morally respectable because it is a law (Moore 1971[1903]).

Moore emphatically declares:

To argue that a thing is good because it is 'natural' or bad because it is 'unnatural', in these common senses of the term, is therefore fallacious; and yet such arguments are very frequently used (*Ibid.*, p. 45).

And he adds:

These [evolutionist] doctrines are those which maintain that the course of 'evolution', while it shews us the direction in which we are developing, thereby and for that reason shews the direction in which we ought to develop (*Ibid.*, p. 46).

Sociobiology concurs in this fallacy when the property of generating good processes for the species, and particularly for humans, is attributed to genes on account of their existence and function. Natural selection and the struggle for existence are processes that are considered to be real and, as in statistical observation, common to the species' group. It is inferred, then, that values must arise from genes as entities that inherently have them. Yet it is never questioned why the struggle for existence and the guarantee of leaving behind better offspring are good.

Thus, good refers to only one property of the gene, that of replicating itself. The search for the perpetuation of this behavior and nothing else is what explains ethics.

It could be discussed whether or not what is healthy for an organism is "good" for it (*Ibid.*, p. 42). This verification in sociobiology is found only to be intraspecific or within a population, so it seems, since when an organism is in the prime of its health, it can be harmful to other organisms given that it can survive at the cost of others. As Moore has pointed out in his critique of naturalism in ethics, what is normal is automatically considered to be good (*Ibid.*, p. 43). Why? According to sociobiology, because, when the degree of adaptation is increased, it allows for survival and reproduction, but again, an explanation why this is good is never given.

While unveiling the naturalist fallacy, Moore situates himself against the empiricist concept that Wilson develops. According to such concept, survival of the fittest appears as a good property, and the struggle for existence as an adequate "tactic" as well. Certainly, Moore's critique is aimed directly at Spencer; but it is also certain that sociobiology, with a more veiled idea of the direction of evolution than Spencerism, defends nevertheless a teleological conception with regard to ethical questions (see the language employed by Ruse, above). It considers altruism and social behavior, with all their ethical consequences, to be the result of a trend in evolution; proof of this is that both have presented in two phylogenetically very different groups such as insects and vertebrates. Wilson notes:

We should first note that social systems have originated repeatedly in one major group of organisms after another, achieving widely different degrees of specialization complexity (Wilson 1975, op. cit., p. 379).

According to this schema, altruistic and cooperative strategies, characteristics of social interactions, are the embryo of an ethical system which

finds its highest expression in the human being. This behavior is considered correct because it allows the preservation of species and particular groups within the species. The problem is that, from this point on, each deviation from the norm will be considered incorrect, antinatural or abnormal. This will also be the case for each conduct that does not have as its direct or indirect objective the perpetuation of species.

Such is the implication of this naturalized code of behavior. In particular, it is a reasoning that leads to the naturalist fallacy, to the confusion between "beings" and "duties" under the veil of scientific objectivity. It is a discipline that cannot distinguish cause from reason (Bradie, *op. cit.*, p. 105). Under these precepts, human beings must abide by the rules dictated by evolution and must not break them. Behavior to be good must guarantee the survival of the fittest.

That sociobiology has committed the naturalist fallacy has been recognized (Ayala 1987, op. cit.; Thompson 1995; Singer 1981, p. 74), and this has been a subject of debate. In defense of sociobiological ethics, it has been affirmed that any ethical system derives its norms from facts and, consequently, either the naturalist fallacy is not a fallacy or the whole ethical system commits it (Richards 1986). This is neither the case of sociobiology nor is it Moore's critique of naturalism. The naturalist fallacy is committed when, between the existing fact and the ethical value that is derived from it, no explanation is offer as to why the fact in question or the behavior derived from it should be considered good or bad. The naturalist fallacy consists of deductively going from facts to duties, from being to what ought to be without any kind of mediation. There is only the statistical accumulation of observations of what is most frequent. It is obvious that each ethical system must base itself on and arise from facts; it is obvious as well that, for there to be a valuation, there must be a certain generalization of a determined behavior (Heller 1973). In any case, it is necessary to elaborate a consideration, a mediation which specifies why certain things that are can be considered moral or ethical. Within the construction of these considerations, this is how we come to elaborate moral judgments and, from these, to derive actions. Valuation from the sole generalization is a fallacious criterion.

For sociobiologists, insofar as the bases of moral behavior are inalterable by reason of their biological essence, one has to accept them just as they are. Their method leads them to point out that behavior, more than being observed as "good" or "bad", as "correct" or "incorrect", should be judged as "natural" or "antinatural" and, once this has been determined, on a second level one should proceed to qualify and make moral valuations. In other words, moral behavior is already a given since it is one of the products of evolution. The task is to reinforce scientific evidence of its evolutionary origin and accept it just as it presents itself. In this sense,

Wilson confronts the naturalist fallacy when he declares that if Moore (alongside Kant and Rawls) had known modern biology and experimental psychology, he would not have reasoned the way he did (Wilson 1998, op. cit, p. 272).

Nevertheless, moral behavior is not determined at the expense of subjects. We cannot conceive of a good moral behavior and a bad one in absolute terms or in reference to a sole activity or criteria. They all depend on, and are a result of, changing social relationships and assembleges of factors which are expressed in them. Thus, it is correct to say that evolutionary ethics can only sustain a wide range of interests of moral behavior through narrowing what is considered biological causality and by confusing necessary conditions with sufficient ones (Gewirth 1993, p. 254), all of which reaffirm its foray into the naturalist fallacy.

One of the most transcendent consequences of this problem is the one dealing with the public good. Darwin mentioned that moral sense and the action derived from it make for the good of the community, the "public good." He defined it in this manner:

The term *general good* may be defined as the means by which the greatest possible number of individuals can be reared in full vigour and health, with all their faculties perfect, under the conditions to which they are exposed (Darwin 1981 [1871] *op. cit*, p. 98).

Sociobiology makes this formulation its own. For Richards, evolution gives us a structured context for moral action because it propels and involves others to follow its example, since constructive forces of evolution impose a practical necessity on each person in order to promote the good of the community (Richards 1993, p. 128). This is based on the Darwinian concept that natural selection acts for the good of a determined species, but can harm others (Darwin ² 1968 [1859], pp. 132, 228, 229). In the beginning of the twentieth century these thesis was defended by Davenport; for him, ethic codes should be integrated by particular rules that would be selected according to the benefit they reported to a specific group of animals and from which the criteria of "good" and "evil" would come from (Vicedo, 1999, p. 235). This position implies that the criteria of what is good is limited to necessities of one particular species and does not have to look for the good of other species. This would follow since diverse species are rivals in the struggle for existence.

But as Williams (1990) points out, this leaves the door open for ethical relativism: anything that "is" can be turned into an "ought to be" as far as the principle is carried out. And if that "is" is shared by many people or by all that integrate a community, "under the conditions to which they are exposed," even more so will it be validated as a moral norm, especially if it is considered that it leads to reinforcing the community's well-being and

the species' survival. Let us take into account that the conflict of interests that generates moral values is expressed not only intersubjectively but also intercommunitarily. The prevalence of a community's moral criteria regarding other communities, or the dominant or hegemonic moral criteria of a certain community towards the rest of its members often result in confrontations. To whom must moral authority be conceded in order to exercise its rights, if all parts affirm to act on behalf of the general good? An adecuate answer should take into account the composition of the community and the circumstances and direction in which values arise and develop. It is from such standpoints that mediations within the issue of moral valuations should be considered, not from a statistical recount of what an abstract majority does. An example illustrates the point: in the majority of African and Muslim societies, there is the general custom of extirpating women's clitoris so as to desensitize them for sexual pleasure and to limit their sexuality to reproduction. The intention is to "optimize" their reproductive capacities, thus avoiding their "deviation" towards other manifestations of their sexuality that have nothing to do with the preservation of the species. If this practice increases the guarantees of sexual reproduction, then sociobiology would accept it given its generalization in space and time, and it would consider such practice to be a particular expression of a genetically determined behavior that has different expressions in different cultures. Thus, sociobiology would endorse the governments and cult ministries that demand respect for those customs, based on the argument that they are thousand-year-old traditions.

3. SOCIOBIOLOGICAL ETHICS AND SURVIVAL

As I have analyzed, committing the naturalist fallacy in sociobiology and its translation into ethical relativism are managed from the start by the principle of survival, which gives origin to morality based on the principle of "the ends justify the means."

One of the main sociobiological theses, in which a particular concept about the functioning of human society is projected on the whole of the living world, is the one which affirms that organisms find themselves in the need to always struggle against a hostile environment in order to survive and leave offspring, thus generating individuals' interests and its conflicts.

Throughout history, nature has appeared as a hostile entity and without the control of human beings. When humans try to overcome this situation they adapt to what nature demand from them; even so, while they do this, they also adapt nature to their needs, dominate it, and are able to generate new situations of conflict that are no longer the consequence of the permanent state of nature but of human action on it. Humans are capable of modifying their environments; they are not just limited to being subjugated by nature.

Thus, I believe it is more precise to define the situation of living beings as a constant and complex process of interaction in which more or less wide oscillations of hostility/benefit and adaptation/inadaptation can be produced. These fluctuations lead to oscillatory behaviors which Darwinist language has qualified as selfishness, altruism, competition and cooperation. These oscillations take place on various levels, from the individual to the interpopulational one. A strict vision of living beings as extreme selfish or extreme altruists contributes to a poor and reductionist concept of the human world and thus should be dismissed (Sober, *op. cit.*, p. 216). According to circumstances, an individual can on occasion behave selfishly and on another altruistically, covering over time all intermediate points between the two extremes. The responses to all these situations are very complex; to analyze each one of them the integration of all the elements and variables that intervene is needed.

Sociobiological analyses on the origins of ethical behavior have ignored the profound dynamic of human relationships and its constant transformations, as far as it starts from an *a priori* conviction of a constant in the human being which, in consequence, remains unaltered in his relationships with nature, and because it treats the human being abstractly, without drawing society or discriminating its components in space and time.

A. THE PROBLEM OF FREEDOM

Since ethics has an objective and universal base rooted in the principle of survival, we can analyze the aspect of human behavior that refers to human freedom.

Again, it is Ruse who gives a clear indication. Evolutionary, that is reproductive, interests are the foundation of human nature and values. Human beings do not freely choose what is right and wrong. "We may not be rigidly predetermined, but the genes don't allow us absolute freedom" (Ruse 1984, p. 178). This judgment, after putting a limit on freedom, is in itself a moral point of view.

The question is whether the criteria of good and bad and the actions derived from them are ultimately human decisions or entities that control human beings, like genes do.

Wilson is eloquent on this topic:

The genes hold culture on a leash. The leash is very long, but inevitably values will be constrained in accordance with their effects on the human gene pool. The brain is a product of evolution. Human behavior ...is the circuitous technique by which human genetic material has been and will be kept intact. Morality has no other demonstrable function (Wilson 1978, *op. cit*, p. 167).

For Alexander, also, the highest interests are reproductive, in which the valuation of individual acts come into play; acts that acquire coherence insofar as they adjust themselves to this supreme biological interest:

Leaving aside the question of conscious belief of personal opinion about one's goals or intentions, there is every reason to accept that humans like other organisms are so evolved that their 'interests' are reproductive (Alexander 1985, p. 182)

Sociobiology, then, reiterates that happiness, pleasure and the common good are not ends in themselves, but are subordinated to a higher end: reproduction. Ultimately, an abandoning of the will and conscious motivation is put forward in order to generate and multiply offspring. Making genes responsible for our conduct implies an incapability of controlling one's own actions (Singer, *op. cit*, p. 153).

Singer questions whether the central interest of the individual human is the perpetuation of his genetic heritage, and admits the predominant role of reason in ethical choices (*Ibid.*, p. 86). Only if a rational component exists in ethics is possible to use biological explanations in order to differentiate existing rational items in moral principles from biological components (*Ibid.*, p. 150).

Furthermore, humans can be enterily indifferent regarding the reproduction of their genes. The reasons for having children are many. They range from the search for company and security, the need to transmit affection, a mechanically repeated habit, the result of an accident or even ignorance of the relation between sexual contact and procreation. The survivalist and reproductivist thesis is influenced by the habits and needs of aristocratic and bourgeois families to inherit their possessions to descendants, or by the customs of peasants and artisans to find in their descendants a new workforce. In both cases, it is about insuring a distance from shortage or the consolidation of an economic position. In these cases, sexuality can limit itself to reproduction since there is a conscious interest in perpetuating not the abstract species, but concrete phyletic lines. Success is reached when inheritors, the new owners, are materialized. But this usage is nothing but one way among many of tackling the complex and vast problem of human sexuality.

Sociobiology's concept of ethics appears as the cumulus of numerical and statistical connections that lead us to passively understand what is given in the universe of morality, but without the possibility of intervening in it and taking an active role in its construction. The very premises of ethics appear as realities unalterable by human practice. Given the inevitability of individual death, who can doubt the transcendence of the survival of the species? Who can deny that the individual's highest mission is leaving behind numerous offspring and guaranteeing the conditions for it?

The connection to the character of human activity is clear. In order to survive, the human being must develop activities involving the production of means of subsistence. This is called labor, and there are numerous possibilities for developing it. Political economics start with the essential fact of private property to explain it, so that a particular concept of work is imposed as the only one possible and all relationships are derived from it. Since this appears as something unalterable, labor itself will appear as independent of the human being, like something that dominates him on account of laws beyond his grasp (Lukács 1975 [1923], p. 127).

A moral and ethical system that accepts these premises has to accept that its own principles mark an independence regarding the human being, who irremediably subyugates when applying them. In sociobiological ethics, the individual's survival and the good of the community are understood as the adaptation to the inevitable principle of resource shortage and the competitive, warrior-like and egotistical characteristic of the human being. The survivalist and utilitarian principles of this morality appear as rules of adaptation for the individual's perpetuation under the community's interest, understood as the sum of individual interests. Shortly, it is the mere fulfillment of behavior in conditions of eternal dearth.

With all this baggage, human freedom is under continuous serfdom to necessity. The laws of the external world maintain their necessity, and are eternal and external to humans. After all, sociobiology is talking about abstract individuals whose freedom comes from the exercise of reason precisely as individuals, yet whose necessity comes from the laws of the universe that are independent of him and all humans. In its ethical dimension, sociobiology represents human beings subjugated to unexplained abstract principles, survival and struggle, and to hidden entities that use those principles, genes. When in this context vital human activity is thought as a means to an end, one cannot talk of freedom given that human powers made manifest during that vital activity remain dominated by exigencies external to them (Meszaros 1978, p. 174).

This is the model in which sociobiological ethics is immersed. Since sociobiology conceives survival as the end for the human being, his vital activity is the means to realize it. These are the consequences of applying the principle of continuity to the evolutionary scale, for it does not differentiate another end in the human other than what is proper to all species.

If we ask ourselves what survival is for, the discussion takes on a different twist because survival, far from being an end, becomes a means. In humans, survival results in the production and the development of multiple manifestations of existence that go beyond sole perpetuation. I am not referring only to human material production, already of vast richness, but also to spiritual and sentimental production. In a word,

production in differing planes qualitatively different from the vital activity of the animal.

This way, one can affirm that human survival is not an end in itself, but the means to overcome biological existence (survival) in order to arrive at a dimension of human existence (culture). In its full realization, this human existence is identified with freedom, and the ethical code that it involves is, or should be, qualitatively different from the one elaborated for the realm of necessity, that is, the realm where means substitute ends and thus produce alienation.

For Heller, there are two kinds of necessity: the alienated kind, of a quantitative nature, and the non-alienated human kind, of a qualitative nature (Heller 1978, p. 172). The predominance of quantitative necessities brings about an eagerness and an obsession to increase the quantity of what is needed, not of what is characterized by quality; thus, the eagerness to collect, accumulate and possess. This is one of the most pronounced characteristics of the realm of necessity: the dominance of survival over multidimensional human development.

Political economics start from the perspective that human nature is selfish and inclined toward trade as a form of satisfying its needs, which are always quantitative. Sociobiology takes this thesis as its own, examines it scientifically while trying to reinforce its validity, and upon doing so, validates the recognition of quantitative needs and its increase as primary criteria. Human experience remains a prisoner to such needs and to the alienation they produce. Sociobiological ethics will collaborate in organizing the regulating principles of these kinds of necessities, seen as freedom, and in organizing the means, thought of as an end. The instinct of survival, the root of these regulations, is transformed into the heart of culture and values. However, altruism in human beings (which for sociobiologists is supposed to be originated by a survival instinct) is neither an inevitable nor an irresistible attitude, since it can be avoided. That is, is not a compulsion. From there the failure of the assertion that it is a genetically determined behavior (Woolock 1999, p. 288).

Axiological growth should take into account the increase in range of moral values, the reference to generic elements and the enrichment of personality (Heller 1973, op. cit, p. 120). According to this approach, anything that simply allows or facilitates survival cannot be conceived as a value. Conversely, values should come from everything that enables humankind and individuals to enrich themselves and their experience as humans, to reinforce all human potentialities (*Ibid.*, p. 78). This humanist approach is ignored and despised by sociobiology. Against the "survivalist" perspective, I affirm that nothing in ethics and morality has meaning if does not lead to the enrichment of human capacities, and that each value that tends to restrict them should be considered immoral and be rejected.

Society like the modern one in which we all currently live, in which what dominates is the exchange value and private property, has to reflect this domination in its moral values. The sense of possession dominates human relationships, limits its display and enrichment, treats relationships and values that are derived from them as objects and impoverishes both. In a word, it makes disvalues grow (*Ibid.*, p.123).

The only human beings that sociobiology conceive are the ones who exist in the historical moment of the postulation of the theory: alienated beings submitted to the realm of necessity. That is why they do not understand that this realm can be surpassed by the realm of freedom. Thus, their ethical model must always have at its core the element of the permanent shortage of resources that propels the never-ending struggle for survival, an end in itself. Such a model never expresses a movement that tends toward the increase of interior wealth. Its concept revolves permanently around a vulgar materialism based on the laws of supply and demand, and on a subjugation to a perennial hostile environment that only knows changes in form.

It is logical that freedom does not appear in the sociobiological scheme. In any ethical approach in which human nature is determined by external factors, freedom will be limited to what predetermination allows, and the ethical code will reproduce that limitation. If, however, the human being is considered as a multiplicity of necessities modifiable by its own action, his realization as a human can only come about when he satisfies his needs, qualitatively different among them and qualitatively different from the needs of the other animal species. The ethical code that corresponds here will not restrict beforehand this realization of what is human, since what is most important will be the expansion of freedom in order to carry out the satisfaction of necessities.

4. SOCIOBIOLOGICAL ETHICS AS AN IDEOLOGY

Sociobiology does not tackle the problem of freedom, let alone defend it. It never proposes analyzing the extent of free human action, but only its limitations. In this theory, the selfish and competitive individual in a given situation is identified with humanity in general and, thus, the basis of a very concrete moral code are identified with the bases of all moral codes. This constitutes the "ideological fallacy" that is a result of equating the part with the whole and stripping it of its historical nature (Lukács, *op. cit.*, pp. 152-153).

The problem with sociobiological ethics is that it does not highlight the material sources of morality and ethics; it simply transfers to animals certain human values proper to a historical period and then proceeds to naturalize them both in animals and humans. That is, it takes on a particu-

lar approach of the world and considers it as the only existing one. In spite of dealing with an evolutionist theory, it does not incorporate history into its scheme, then it cannot explain the question of continuity and discontinuity of values as a dynamical phenomenon. This creates a false consciousness of the world, that is, an ideology, and its integrating intentions alter into a partial, fragmentary and decontextualized perspective of the world.

This ideological representation does not stop here. Sociobiology identifies as good the reproductive success of an individual, considered as the capacity to transmit genes. But it conceives the gene as an entity whose existence has meaning in itself, without integrating it in a more complex system of interactions. Thus, that ideology not only presents certain human behaviors particular of a historical stage as general and inherent to an ahistorical human being, but biologically it also presents such "essential" entity's behavior as if it were valid, regardless of the existence of other organismic, cellular or molecular entities that intervene in the complex phenomenon of life. It confers genes their own "moral" nature without realizing that the gene and its functions must also be considered in the particular context in which they are found.

For sociobiology, what is good for the gene is good for the person. But the human being's biological condition does not coincide with his cultural performance and, therefore, biological necessities do not have to be equal to cultural interests. Sociobiology equates them both when it inverts the situation and conceives that the functioning as a person and the interests that arise are subordinated to, and are the direct consequence of, the biological, not the cultural being.

The ethical relativism to which sociobiological abstract altruism leads as well as the principles of good and evil for the whole of the community and the social species are not clearly characterized. One thing is that a moral subject *believes* that a determined action pursues the common good, another very different is that that good *really* is pursued through that action (Williams, *op. cit.*)

Here we have the problem of false consciousness, of ideology. False consciousness is the product of the contradiction between a partial world-vision and the pursuit of private interests with the moral justification molded in accordance to public interest and universal values. It has been said that false consciousness is produced when desires are based on interests and not the other way around (Meyerson 1991, p. 80). Here, desires and interests are separated. To say otherwise, both are mutually produced and condition by each other, but if interest comes about from a partial world-vision, it will produce a false desire and a false interest, in other words, a false consciousness.

In the same sense, a desire is identified on account of the satisfaction that produces its compliance (*Ibid.*, p. 92), but if the interest pursued or the

desire produced starts from an illusory and partial representation of the world, pawned off as universal, it leads to a false satisfaction.

Thus, false consciousness and false satisfactions provoke altruistic or egotistical attitudes that not only produce what is good, but also deepen alienation and what is bad. History is full of these examples. Hitler, Stalin and the Catholic Monarchs possibly were convinced that the extermination of Jews, of "counterrevolutionaries", or American Indians would achieve a good for their communities, but what was important for them was to give the impression that that sentiment existed only in order to gain a social consensus. The good of the communities in which these personalities derived support was the excuse to satisfy (among other things) their lust for power and control through the extermination of a social sector. But the actions of personalities such as these were based on deformed moral values and were the products of historical conditions that molded alienated minds and developed a false consciousness.

From this, it can be deduced that it is not possible to present, in the way that sociobiology does, the abstract search for the good of the community as the reason for moral sense and action, even less when what at bottom supposedly prevails is the strict individual interest to survive and reproduce. Sociobiological theory leads to the postulate of a morality in which the common good arises from the individual interest to survive and leave offspring. Thus, the belief in the common good is, within this scheme, incompatible with strictly private, individual success.

The utilitarian concept of sociobiology lacks the historical context that is able to avoid relativism. In order to achieve this, it is completely necessary to specify and to set the concept of the common good in the historical moment in which it is judged. It is necessary to use criteria of mediation regarding the fixed composition of communities, of conflicts that arise within them, of the nature of opposing values in which these conflicts arise, of the historical nature of the relationships of one community with other communities, of the universality of certain values, the peculiarity of others, the relationships and dynamics between one and the other, and their meaning and concrete expression in determined periods. In a word, it is necessary to consider the nature of social relationships in their complex dynamics and in their totality.

CONCLUSION

The application of Darwinist principles of evolution to explain the moral ideas of human beings leads to serious problems. The reason for this lies in the prevalence of the principle of continuity as one of the foundations of this theory. Upon conceiving that everything that is found in animals is also found in human beings in merely a more developed way, and conceiving that in his development there have not been abrupt changes

in quality, but only gradual ones at the same level of analysis, Darwinist evolutionism, sooner or later, has to make a foray into the field of what has traditionally been conceived as been proper to humans. Morality and ethics constitute one of those fields.

Sociobiology has manifested a faithful adherence to the principle of continuity. This fidelity goes so far that sociobiology has been imprisoned by it and, consequently, unable to understand the phenomena that annul or do not respect it. Thus, its concept of ethics and moral sense turn out to be too limited to understand the complexity and richness of the relationships in which what is biological has been exceeded. A concept of human behavior in which the only thing that counts is reproduction and the transmission of genes results in a theory that, in spite of its efforts to find experimental evidence or to adapt any observation to the precepts of the theory, leads to a backward state and a poor discourse regarding other moral theories in which the human being is judged as something qualitatively different and not as just another product of biological evolution.

As a consequence of its analysis of morality, sociobiology cannot propose anything to explain conscious, deliberate human actions such as freedom, the broadening of sensual capabilities or the multiplication and increasement of the human potentiality, rational or sentimental. Sociobiology limits human moral action to the compliance of subordinate behaviors to a repeated biological cycle of birth-growth-reproduction-death. Human existence does not have, within its scheme, a purpose independent of genetics.

This is one of the aspects of sociobiological theory in which ideology plays a more important role, fused to the theory itself, turning theory into an ideology. Morality based on necessity, not on freedom, and the idea that the human being can only attain within necessity are theses that historically have been held by those who have imagined attaining freedom while denying it to others. These are ideas of freedom and morality based on conditions of life and particular periods of history that appear to be general according to certain constants—like shortage—that are not insurmountable, but only historical peculiarities. Sociobiology contributes with so-called experimental proof, with evidence of empirical contrasts that reinforce these concepts and are pawned off as the expression of general life conditions insurmountable for human and living beings. With this, contemporary science contributes by imposing on the human individual the conviction of his own insignificance compared to the unalterable reality of society as reflection of the physical and biological world. And it confirms the uselessness of his moral actions, that are but directed toward transmitting blindly what is pretended to, ultimately, direct those actions and that morality: information encode in the genes.

A last remark: One function of science is the control and the imposition of a particular conception of order. This is how the great quantity of resources invested in scientific research is explained (Dupre 1993, p. 259). As a peculiar image of natural order is imposed, a social, ethical and moral order also is dictated. Sociobiology, as a representative of the hegemonic empirist approach of science, fulfills this task. Its approach tends to uniformize scientific and general knowledge, including, of course, that of ethics by means of an imposition based in the assumption of scientific knowledge as objective and neutral.

Nevertheless, the conception of science as something that deals with a method that inherently leads to objective knowledge and to transcendent truths, without relation to social or ideological issues, is seriously questioned as soon as the hidden motives behind the sociobiological debate are analyzed. It is shown, then, that these motives include the research agenda of the contenders, their social and academic status, the defense of their respective research projects and institutional supports, their *curricula vitae*, and so forth (Segestrale 1986, 2000), all of which will be expressed in their particular points of view.

It is precisely on account of those motives that the defense of all those elements is not just a one of strictly personal motives but also the defense of different conceptions of the world. It is a dispute for hegemony. Extense social groups support Wilson's and his partisan's sociobiological ethical approaches, whose tasks as scientists, as well as their personal interests, are an expression of wider interests that collide against those of their opponents, because they are responding to a different social project.

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NOTES

1 Darwin immediately adds: "...as soon as its intellectual powers had become as well developed, or nearly as well developed as in man." *Ibid.*, part I, pp. 71-72. It is interesting to note that in one of the footnotes regarding this point, Darwin debated against J. S. Mill on the instinctive character of social sentiments: "It is with hesitation that I venture to differ from so profound a thinker, but it can hardly be disputed that the social feelings are instinctive or innate in the lower animals; and why should they not be so in man?" In the same note, debating with Bain he points out: "Mr. Bain and others believe that the moral sense is acquired by each individual during his lifetime. On the general theory of evolution this is at least extremely improbable." *Ibid.*

2 Man selects only for his own good; Nature only of that of the being which she tends. p. 132.

Natural selection cannot possibly produce any modification in any one species exclusively for the good of another species; though throughout Nature one species incessantly takes advantage of, and profits by, the structure of another. But natural selection can and does often produce structures for the direct injury of other species... If it could be proved that any part of the structure of any one species had been formed for the exclusive good of another species. It would annihilate my theory, for such could not have been produced through natural selection. *Ibid.*, p. 228.

Natural selection will never produce in a being anything injurious to itself, for natural selection acts solely by and for the good of each. *Ibid.*, p. 229.

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