

New naturalism and other ethical theories

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I. Introduction

Recently Michael Ruse and Edward O. Wilson point out that the new advance in biology and brain sciences have shown that “Everything human, including the mind and culture has a material base and is originated during the evolution of the human genetic constitution and its interaction with the environment.”¹ They further say that “What Darwinian evolutionary theory shows is that this sense of “right” and the corresponding sense of “wrong” feelings we take to be above individual desire and in some fashion outside biology, are in fact brought about by ultimately biological processes.”²

In this essay I shall first point out that this new naturalism, to the extreme, is close to determinism. Naturalists used to intend to bridge the gap between “is” and “ought”. However, I shall show that even hard determinism is still unable to exempt an agent from the unavoidable job of decision-making. Therefore an agent always feels free and autonomous, and has to have his/her own value judgments and to make his/her own decisions.

Next I shall show that this new naturalism serves well as an important part of the foundation of an ethical theory, but itself is inadequate or incomplete as a comprehensive ethical theory. To be comprehensive, naturalism has to go in conjunction with another theory that is compatible with it.

Then I shall show that this new naturalism is incompatible with

deontology, because deontology is based on *a priori* metaphysical reasoning, which is objective and external with respect to genetic evolution.

Finally I shall show that utilitarianism, because of its teleological nature and its close relation to axiology, seems to be the only main-stream ethical theory that is not only compatible with, but also complementary to, the new naturalism.

2. New naturalism and determinism

According to Ruse and Wilson, the physical basis of mental activity seems to be so specific and definite that this new naturalism is very close, if not identical, to determinism. They write:

This quality can be made explicit by saying that human thinking is under the influence of “epigenetic rules”, genetically based processes of development that predispose the individual to adopt one of a few forms of behaviors as opposed to others.

... We argue that moral reasoning is likewise moulded and constrained by epigenetic rules.

... To summarize, there is a solid factual evidence for the existence of epigenetic rules – constraints rooted in our evolutionary biology that affect the way we think.³

The freedom-determinism debate is a widely-discussed old issue, and the arguments for both sides are well-known, but this issue is still controversial, because no argument is strong enough to be overwhelmingly convincing or is able to serve as a scientific proof. Here I shall not elaborate or strengthen any particular argument for either side, nor shall I add any new argument. In fact, I am neither for nor against determinism, and do not have any particular opinion regarding free will and autonomy. What I shall do here is simply to show, using logical reasoning alone and not based on any particular view regarding determinism, that even if hard determinism holds, one still cannot know in advance exactly one’s own final decision according to determinism and thus rely on determinism to provide decisions for moral actions. That is to say, determinism cannot exempt one from the joy of making decisions.

Let us assume that hard determinism holds. By hard determinism I

mean that the change of everything in the universe is according to a strict law of cause-and-effect relationship so that the universe will develop or progress in a strict deterministic way. Now if (1) hard determinism is true, then (2) the action an agent is going to take is pre-determined. If statement (2) is true, then either (3) the agent knows the prediction of determinism, or (4) the agent does not know the prediction of determinism. If statement (3) is true, then (5) the agent does not need to make a decision, because he can just follow the prediction of determinism. In other words, he is exempt from making a decision. If statement (4) is true, then it appears that (6) the agent may make any decision, because whatever action he takes is pre-determined. Therefore the agent actually has no free choice, no matter what decision he may appear to make. Thus the agent in this case is also exempt from decision-making.

Now I shall first show that statement (3) is not true by considering the knowledge both external to a human mind and the knowledge of the mind itself. First, consider the knowledge about the universe external to a human mind. No human being can have complete knowledge of the present state of the universe, based on which the future states may be predicted. We may assume that there exists a god or external observer of the universe who is omniscient, but no human being can be this omniscient observer. For human beings, the phenomena of the universe are just too numerous and complex to be known completely. There are certain micro-details that can never be expected to be learned by human beings. (This is why probability and statistics come into play.) Consequently, there are at least some human actions for which we have to make decisions based on incomplete knowledge. The decision made for an action based on partial knowledge is either the same as, or different from, that based on complete knowledge. Obviously there are at least some actions which are different from those corresponding actions that would have been taken if complete knowledge were available. Therefore one can never know exactly whether or not a decision made by one for an action will follow the prediction of determinism.

In other words, from a man's point of view, in the decision-making for an action, in the form of a choice of one out of several feasible alternatives, because he has no complete knowledge about the external situation, he has to study the situation and try to make a decision autonomously according to some criterion or criteria other than just to follow the decision of determinism, which should be based on complete knowledge. That is to say, one has to behave as if one has a free will and autonomy even if

determinism determines everything, including the whole of one's mental activity.

Let us consider an example. Suppose that a person P wants to go to a cinema in an evening. There are two movies that P likes, one at a cinema C1 in the east side of the city and a second one at cinema C2 in the west side. By careful comparison P finds that the movie at C1 is more interesting and he makes a decision to go to C1. But before he arrives at some place near C1 he finds that a fire accident has broken out in the neighbourhood of C1 so that the roads to C1 are all blocked. Therefore P has to give up the desire to go to C1 and, instead, he actually goes to C2 for the evening.

According to determinism, P is destined to go to C2. Suppose that an omniscient observer knew it in advance. But, as a human being, how could P know that a fire accident would break out in the neighbourhood of C1 and block all the roads to C1?

Second, consider the knowledge of the mind itself, i.e., the physiological and psychological phenomena of the mind that affect the decision-making for an action. The decision-making for any action is the outcome of a mental process. The external knowledge, or the knowledge of the physical and societal environments, enters the picture of decision-making through its being taken into consideration in the mental process of the decision-making.

This is a delicate and crucial point. Let us consider another illustrative example. Suppose that person P has bought two books B1 and B2, and he is going to read them. P has made a decision of reading B1 first, because B1 is slightly more interesting. This is a very insignificant decision, and P can readily reverse the decision in the event of additional reason(s) arising even after a decision has already been made. So far the mental process of P consists of his thinking up to and including the decision of reading B1 first. Having the complete knowledge of the mental process of P, an omniscient observer O knows that P will read B1 first.

Now suppose that P does not believe in determinism,⁴ and that P learns from some source that according to determinism he will read B1 first. It is quite possible that, in order to disprove determinism, P changes his mind and actually starts to read B2 first instead. There are two interpretations of this phenomenon. One interpretation is that determinism is not true, because what P actually does is different from what determinism predicts, or the actual fact contradicts determinism. A second interpretation, which does not refute determinism, is that, as P learns the prediction of deter-

minism that he will read B1 first and then changes his mind by making a new decision of reading B2 first, the total mental process of P also changes. It now consists of the original mental process plus the incremental part that “P learns the prediction of determinism that he will read B1 first and then P changes his mind by making a new decision of reading B2 first.” Based on this new total mental process, determinism will predict that P will read B2 first. Then the knowledge P had, i.e., the knowledge of P’s mental process up to that P made a decision to read B1 first, was no longer complete knowledge. Then either one, but not both, of the following two statements is true: (1) (according to the first interpretation,) determinism is wrong, or (2) (according to the second interpretation,) determinism is right, but it is impossible for a decision-maker to have complete knowledge of his own mental process of decision-making, because as soon as the decision-maker knows the prediction of determinism, some incremental knowledge is added to the original knowledge, which thus becomes incomplete. This changes the information set of the total mental process and, hence, may result in an outcome different from that originally predicted by determinism.

I shall recapitulate the main line of reasoning as follows. For a small personal action where the decision-making for it does not involve a long and difficult process, where the carrying out of the action is not difficult or complicated, and where the consequences of the action are not large or important, such as the above example of person P reading either book B1 or book B2 first, even if hard determinism holds and the alternative of action to be taken is pre-determined, the agent is in no way able to know the prediction of hard determinism until the action is being taken. This is because, if the agent knew the prediction after he/she has made a decision, he would still have full freedom to re-assess the situation and may reverse the decision, resulting in a new decision different from the alternative predicted by hard determinism. A new decision like this would contradict the prediction of hard determinism and thus refute hard determinism. This situation is, in fact, similar to the situation in which the basic principle of statistical decision theory applies. The knowledge of the prediction of hard determinism would serve as a new piece of information which change the information set of the agent, thus putting the agent in a different situation than that he/she was in before he/she knew the prediction of hard determinism and making him/her able to re-assess the situation. This is similar to the phenomenon that a new piece of information changes the prior probabilities into posterior probabilities in statistical decision theory.

Therefore logically there are only two possible conclusions. Either hard determinism is not true; or hard determinism is true, but the agent is in no way able to know the prediction of hard determinism.

Since I have shown that statement (3) is not true, the only other possible situation is that statement (4) is true, i.e., the agent does not know the prediction of determinism. Now I shall show that statement (6) is not true. Normally an agent is held responsible for his/her decision and action if and only if he/she is autonomous and free, but this does not imply that the agent is absolutely free, in the sense that he/she may make a wild irrational decision without good reasons. An agent is by no means unconstrained in making decisions, because he/she has to (1) make a rational choice, (2) based on his/her own information set, (3) according to his/her own preference and judgment using a certain criterion. In other words, an agent is autonomous and free in the sense that his/her decision and action is not coerced by others or not according to the preference and judgment of others. Others can influence his/her decision and action through supplying additional information to him/her so as to change his/her information set. From this point of view, it may be said that an agent is not exempt from decision-making even if hard determinism is true.

Therefore, even if determinism holds, it is still impossible for one to get rid of the responsibility of decision-making and to rely on determinism completely. Rather, one has to judge, weight, compare and make a decision autonomously and freely, based on some other criteria, as if determinism were not true.

Decision-making is rational behavior based on weighting, comparison and judgment. If an agent P takes an action A instead of an action B, it means that A is better or has a heavier weight than B. So it is rational to choose A and it would be irrational to choose B without any particular reason. P is free in the sense that P has gone through a whole process of decision-making and has arrived at the decision of taking action A free from coercion, but not in the sense that P may irrationally choose B instead of A even after having found that A has a heavier weight than B.

In the above example of person P reading either book B1 first or book B2 first, P does have the freedom of choosing either B1 or B2, but not without any reason. P's choice of B1 is because B1 is slightly more interesting than B2. P's reversal of choice from B1 to B2 is because P does not believe in determinism and wants to disprove it. This desire gives an additional weight to the alternative of choosing B2 and, hence, the reason for the reversal of decision.

That an agent or any other person is unable to know definitely what the action that the agent is going to take will be until the agent has actually begun to take the action also implies that, from the point of view of human beings, an agent is free. That an agent may seem to be not free is only from the point of view of an omniscient observer.

Determinism is close to a kind of absolutely extreme naturalism. Since an agent is free and autonomous even if determinism holds, it follows that an agent is free and autonomous no matter how far naturalism may go or whatever the future developments of naturalism may be.

3. The inadequacy of naturalism as an ethical theory

Ruse and Wilson have shown that naturalism serves well as an important part of the foundation of an ethical theory, namely the biological foundation. For instance, epigenetic rules provide sociobiological reasons why we are predisposed to preserve our kind, why we believe in a stronger obligation to help members of our family over others and why we have rules against killing people but not rules against killing chickens.

However, it was shown in the previous section that even hard determinism is true, one still feels free and autonomous and is not exempt from the responsibility of making decisions for moral actions. Therefore, although the recent developments in biology and brain sciences are positive sciences and have to be accepted by everyone who believes in science, the gap between “is” and “ought” still remains, because man cannot obtain moral principles, virtues and moral rules or a moral code by simply following naturalism directly and blindly without doing something culturally by using man’s free will and autonomy. Even if naturalism goes in the direction of Darwinian evolution and human objective and effort are in the same direction, there is still no way in which man can follow naturalism completely. Man has to study a decision problem intensively by obtaining relevant information, setting objectives, formulating feasible alternatives and choosing the optimum or most advantageous alternative. This is exactly the complete process of a decision or optimization problem. To achieve this, man has to make value judgments too and, to be able to make value judgments, man has to develop out a theory of value, not only for material values, but also for spiritual values including epistemic value, aesthetic value, moral value, historical value, sentimental value, etc. In other words, moral value is but a subset of spiritual values

and, to serve as a guide to human conduct, a moral code or normative ethics is required as a cultural product.

Therefore, although naturalism, as a biological foundation of an ethical theory, has been shown to be a positive science, as an ethical theory in itself, it is still inadequate or incomplete and has to go in conjunction with another ethical theory that is compatible with it.

In addition to this main argument, there are a few other reasons why the material base alone is incomplete. First, the coverage of epigenetic rules cannot be expected to be comprehensive. Normative ethics includes a moral code, which should be comprehensive enough to serve as a guide to human conduct for the decision-making for all kinds of moral action. Second, epigenetic rules are usually hidden and have to be discovered by life scientists gradually. However, evolution is rather slow and the discovery of the epigenetic rules also takes some time. Therefore it is not expected that we can discover a comprehensive set of epigenetic rules. Third, epigenetic rules may be technically too involved to be grasped by an average man. Therefore, even if a comprehensive set of epigenetic rules are obtained, it is still desirable to have a cultural moral code in parallel.

Finally, human morality (as distinguished from what Ruse and Wilson call moral systems of other species) seems to be a transcendence from epigenetic rules. It is adaptive and dynamic in nature. As the material standard of human living increases to a certain high level, human beings, not satisfied with material values alone, will naturally emphasize more and more spiritual values. As pointed out above, although it might be possible to find, for every spiritual value, an ultimate source in biology and genetics, to develop spiritual values practically still has to be from the cultural point of view using human intelligence as well as free will and autonomy.

4. New naturalism and deontologism

Based on biological and genetic findings, Ruse and Wilson strongly refute the view that morality is objective and external with respect to genetic origin. They write:

It renders increasingly less tenable the hypothesis that ethical truths are extrasomatic, in other words divinely placed within the brain or else outside the brain waiting revelation.⁵

We believe that implicit in the scientific interpretation of moral behavior is a conclusion of central importance to philosophy, namely

that there can be no genuinely objective external ethical premises. Everything that we know about the evolutionary process indicates that no such extrasomatic guides exist.⁶

It is thus entirely correct to say that ethical laws can be changed, at the deepest level, by genetic evolution. This is obviously quite inconsistent with the notion of morality as a set of objective eternal verities. Morality is rooted in contingent human nature, through and through.⁷

Thus this new naturalism obviously rules out absolutism and moral objectivity of certain kinds. Moreover, it is also incompatible with deontologism because, first, the principle of justice in deontologism is derived from (or proved based on) *a priori* metaphysical reasoning, which is external to the biological basis and, second, the concept of justice is regarded as almost absolute and as having an infinite weight, which entails the concept of objectivity. Therefore it seems that this new naturalism is incompatible with deontologism too.

As pointed out by Ruse and Wilson, epigenetic rules not necessarily parallel external premises. In other words, any moral premise, if it is objectively and externally derived or justified, is not guaranteed to be in the direction of Darwinian survival and flourishing, in which epigenetic rules are. This is certainly not in the best interest of human beings.

An ethical theory not precisely in the direction of genetic evolution not necessarily causes immediate harms because, first, the deontological principle of justice is generally accepted by intuition and common sense and second, mankind is in such a dominating position among all species of animal and has such a tremendous intellectual power to understand, use and control natural resources that there is no immediate danger of non-survival or non-flourishing due to an inappropriate ethical theory. However, in the long run, such an ethical theory has a potential danger of harm or even disaster to human beings. (This point is beyond the scope of this essay and will not be discussed.)

I have a side argument in support of the view that deontologism is incompatible with naturalism. Note that *a priori* metaphysical justification for morality is a kind of transcendence, but not an ultimate justification. It is intuitively true that the ultimate end of human beings is to survive, progress and flourish, and this end conforms to the direction of genetic evolution. The value and significance of an ethical theory mainly lies in the ultimateness of its justification. Since the justification of deontologism is not really ultimate, its plausibility as an ethical theory is questionable.

Since biological discoveries are positive science, we cannot but accept

them unconditionally and whole-heartedly. I believe that this is the most important and significant impact of the new naturalism on the future development of ethical theories. In future, no doubt deontology will gradually give way to some other ethical theory that is more scientific and compatible with naturalism.

5. New naturalism and utilitarianism

Deontology being excluded, the only other main-stream ethical theory left is utilitarianism, in spite of its decline in recent years. Ruse and Wilson say nothing about utilitarianism. It seems to be that there is no conflict between utilitarianism and this new naturalism. Furthermore, according to my own interpretation, this new naturalism is not only compatible, but also mutually complementary, with utilitarianism.

To confirm my above statement, let us consider the question: What kind of normative ethics, or cultural development, is required to go along with the material basis of moral philosophy? I find that normative ethics should be teleological in nature, because the ultimate end affects the choice of an ethical theory. For the sake of simplicity and convenience, assume that human conduct can have only three different patterns: Pattern 1 (P1) is according to moral code A, and the natural selection will make mankind survive, progress and flourish; pattern 2 (P2) is according to a moral code (or rather immoral) code B, and natural selection will make mankind decline and perish; pattern 3 (P3) is according to no moral code, i.e., people take moral actions randomly and natural selection will make mankind either survive or perish in the probabilistic sense. Then is the moral code A or P1 the right code to be conformed to by human beings? It all depends – it depends upon the ends of human beings. If human beings want to survive and flourish, then certainly P1 will be the right pattern and moral code A will be the right code to be conformed to. If human beings, on the contrary, want to decline and perish, then P2 will be the right pattern and moral code B will be the right code to be conformed to. Furthermore, if human beings do not care, or are indifferent to whether mankind will survive or perish, then maybe P3 will be the right pattern and no moral code will be required. Thus the ultimate end of mankind plays a crucial role in the choice of moral code.

I believe in and advocate a utilitarian theory because it is teleological in nature and sets up general human objectives, the ideal of life and, hence,

that of society. With a view to the ideals of life and society, human beings can formulate criteria for moral judgments and a moral code as a guide to human conduct. Since the ideals of life and society are value judgments, they are normative in nature. Thus moral philosophy is still essentially a normative science, although it has a strong material basis in such positive sciences as biology, genetics and psychology.

Then what should be the ultimate end of human beings? It seems intuitively true that man, as an individual, wants to live happily and mankind, as a society, wants to survive, progress and flourish. Therefore, from the moral point of view, one should take the survival, progress and flourishing of the human species as the ultimate objective. In fact, this ultimate end conforms to the direction of genetic evolution. Therefore, utilitarianism seems to be not only compatible with naturalism, but has justification that is really ultimate.

There is a last, but by no means least, argument for utilitarianism, from the point of view of scientific and systems approach to the study of moral philosophy. Although I do not agree that moral philosophy reduces to a mere applied science of biology and genetics, I still strongly believe in using a scientific approach to moral philosophy. I consider moral philosophy closely related to axiology. From my utilitarian point of view,⁸ to pursue an ideal life is nothing but to maximize one's own utility, and to pursue an ideal society is nothing but to maximize the aggregate utility. According to my definition of value in terms of personal preference, value is subjective and statistical in nature.⁹ From the statistical distribution or the probability density of values norms can be obtained. But these norms are only psychological, sociological or anthropological ones. For moral philosophy, the norms should be tied up with the ultimate end, or the ideals of life and society. My scientific approach to moral philosophy is a quantitative and statistical treatment of values and a study of the decision-making and moral judgment for moral actions according to the principle of utility. Since moral philosophy always involves value, it is always teleological, no matter to what degree it is materially based on biology and genetics.

In conclusion, it may be said that utilitarianism, or at least a certain modified form of classical utilitarianism, is a qualified main-stream ethical theory that is compatible with the new naturalistic view of moral philosophy, as reported and advocated by Michael Ruse and Edward O. Wilson.

Notes

1. Michael Ruse and Edward O. Wilson, "Moral Philosophy As Applied Science," *Philosophy* 61.236 (April 1986): 173–192.
2. *Ibid.*, p. 179.
3. *Ibid.*, pp. 180, 183, 185.
4. That P does not believe in determinism is not contradictory to the assumption that determinism holds, which I made above. In actual fact, there are many people who do not believe in determinism.
5. See Note 1, p. 174.
6. *Ibid.*, p. 186.
7. *Ibid.*
8. C. L. Sheng, *A Approach to Utilitarianism* (unpublished book-length manuscript).
 I have proposed a new utilitarian theory, which I call unified utilitarian theory, in that manuscript, which is still not available yet. However, my interpretation of the principle of utility is presented in the following essay.
 C. L. Sheng, "On the Flexible Nature of Morality," *Philosophy Research Archives* 12 (1986–87): 125–142.
9. Value is defined and its general properties are discussed in detail in Chapter 4 of my manuscript *A New Approach to Utilitarianism*.