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PIOTR ŚWIERCZ

<https://orcid.org/0000-0002-6290-879X>
Ignatianum University in Cracow
piotr.swiercz@gnatianum.edu.pl
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The search for a definition of human nature and its consequences for political philosophy

Abstract

RESEARCH OBJECTIVE: The aim of this article is to analyze the notion of *human nature* and its consequences for political philosophy.

THE RESEARCH PROBLEM AND METHODS: My goal is to present a synthetic outline of the most important aspects of the issue of human nature and its politicalphilosophical implications, as space constraints do not allow for an exhaustive analysis.

THE PROCESS OF ARGUMENTATION: The analysis is divided into four main parts: 1. The essentialist perspective vs. the nomological perspective; 2. The significance of the problem of human nature; 3. nature vs. nurture; 4. human nature and political philosophy. My conclusions, which constitute the culmination of the reflections presented in the previous sections, are contained in part 5.

RESEARCH RESULTS: The research demonstrates the insufficiency of purely philosophical analyses. An interdisciplinary approach – drawing, among other fields, on biology – is necessary.

CONCLUSIONS, INNOVATIONS, AND RECOMMENDATIONS: In discussing human nature, the author proposes rejecting *hard essentialism* (associated with classical philosophy), which leads to arbitrary solutions. Instead, the author suggests adopting a nomological approach, characteristic of biological methodology.

KEYWORDS:

human nature, political philosophy, nature vs nurture,
definitions of nature, essentialism

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INTRODUCTION: TWO PERSPECTIVES ON HUMAN NATURE

In recent decades there has been a rise among philosophers and philosophers of politics in what may be called human nature scepticism – the idea that human nature does not exist. Usually, the argument for the non-existence of human nature stems from the difficulty, if not outright impossibility, of defining human nature. It is within this context that we may speak of essentialist and nomological views of human nature. I will begin by presenting both of these perspectives, as defined by Edouard Machery in his polemic with human nature sceptic David Hull, within the context of the discussion on human nature.

Machery (2008, p. 322) describes the essentialist perspective as follows:

According to the essentialist notion of human nature, human nature is the set of properties that are separately necessary and jointly sufficient for being a human. Furthermore, the properties that are part of human nature are typically thought to be distinctive of humans.

The nomological perspective on human nature, in turn,

stands in sharp contrast to the essentialist notion. According to this second notion, human nature is the set of properties that humans tend to possess as a result of the evolution of their species” (Machery, 2008, p. 323).

Despite Machery’s claims to the contrary, I view both of these attitudes as *de facto* essentialist, though each accepts a different meaning of “essence.” Consequently, I am going to use the term “hard version of essentialism” (HVE) to signify the essentialist perspective, and the term “soft version of essentialism” (SVE) to signify the nomological perspective.

Essentialism

Essentialism is generally viewed as having its source in Platonic reflection. It is here in regards to this source where, in my opinion, a misunderstanding occurs that leads to far-reaching consequences.

First of all, understanding Plato's "essentialism" requires an understanding of the intellectual context in which Plato lived and wrote. Much of this context is constituted by the philosophy of Parmenides of Elea. Parmenides understands the reality accessible to human cognition in terms of Being and Non-Being. Being is non-born and indestructible; eternal; immutable; indivisible and complete; full and non-gradational; absolute and identical; necessary and connected to justice and righteousness; authoritative; and unified. In contrast, non-being is born and perishable, temporal, mutable, divisible and incomplete, gradational, relative and non-identical, unnecessary and unconnected with justice and righteousness, unauthoritative and plural. Since non-being is incomplete and ever-changing, only Being can be truly grasped by the mind. The part of reality that can be grasped by the senses is a mixture of Being and non-being—this mixture cannot be grasped by true cognition, only by what may be deemed "probable" cognition. In consequence, the HVE can only be used in relation to Being. When discussing the admixture of Being and non-being, one can only use the SVE.

From the perspective of both Parmenides' and Plato's philosophy, physical reality (thus, from the point-of-view of modern science, all objects that fall under the biological sciences as well) is classified not as Being, but rather as a combination of Being and non-being. Its opposite is mathematics—a noetic reality that corresponds to Being. Thus, while the HVE *can* correctly be applied to mathematical entities (e.g. "A triangle is a flat figure with three sides and three angles, the sum of which equals 180°"), it cannot be applied to biological species.

Distinguishing vs descriptive definitions of species

Another problem I wish to indicate is the difference between distinguishing one species from another (I will call it a *distinguishing definition*) and describing the nature of a given species (I will call it a *descriptive definition*). From the perspective of taxonomy and the theory of evolution, distinguishing one species from another is associated with distinguishing one taxon from another taxon, e.g. on a cladogram or another type of genealogical tree. Thus, for example, one can define the species *Homo sapiens* as a "living member of the

subfamily *Homininae* with 23 pairs of chromosomes" (or similarly as a "living member of the tribe *Hominini*," or, if you include the genus *Pan* within the tribe *Hominini* instead of the separate tribe *Panini*, as a "living member of the tribe *Hominini* with 23 pairs of chromosomes"). In short: the definition distinguishing *Homo sapiens* is simply an indication of its place on the cladogram with an added justification. Is the cladogram creation process arbitrary? Of course, it is likely impossible to completely avoid arbitrariness, but looking at the development of taxonomy in a historical context, we see a continuous (and largely fruitful) effort to limit this arbitrariness.

The descriptive definition is undoubtedly a much more complicated matter. First, unlike the distinguishing definition, the full description of a species should include the definitions of all its taxons; for *Homo sapiens*, this includes the genus *Homo*, tribe *Hominini*, subfamily *Homininae*, family *Hominidae*, and so on. Ultimately, a full descriptive definition should contain all branches of the complete phylogenetic tree, including all characteristics—cladistic, evolutionary, morphological, and so on. Second, it is very difficult to choose the features of the species representatives that will be included in the description. Is it possible to avoid arbitrariness? Probably not completely, but, as in the case of the distinguishing definition, it is possible to minimize this arbitrariness. One way to do so would be to include more traits in the definition (therefore, it would seem that the more features are included, the better). A definition of human nature formulated this way should contain not only typical features common to all individuals, but also those that are unusual. Third, there is the problem of feature modality. The example given by Machery, 2008, p. 324) concerns possible differences in mating psychology. It is unacceptable for me to leave these features out of descriptions of human nature. When we discuss human nature, we must necessarily include both the qualities that all representatives of the species enjoy and those shared only by some subset of humankind. I am unconvinced by Machery's argument that discussions on human nature should only emphasize similarities. A description of human nature must encompass all characteristics. Moreover, the human genome is effectively reduced to 22 pairs of chromosomes if we leave sexual differences outside of the description.

Therefore, I consider a modified nomological perspective as the proper basis for any discussion on human nature. This precludes brief, synthetically-formulated descriptions or definitions of human nature. All constructions such as the (alleged) Platonic definition of man as a “featherless biped” are doomed to fail. The nature of each species, including humans, is a collection of all its known traits and their variants. Moreover, this set of traits is constantly evolving, as nature is changeable. This means that we can expect new traits to appear periodically and existing traits to disappear.

THE SIGNIFICANCE OF THE HUMAN NATURE PROBLEM

The difficulties associated with defining human nature aside, some philosophers point to another problem: recourse to human nature as the basis for formulating moral, ethical or political ideas can have dangerous socio-political consequences. One of the most dangerous consequences involves norm establishment—determining what constitutes the norm and what constitutes a deviation, which in turn may lead to discrimination. As David Hull writes in his classic publication (1986, p. 12–13):

Although I feel uneasy about founding something as important as ethics and morality on evolutionary contingencies, I must admit that none of the other foundations suggested for morality provides much in the way of a legitimate sense of security either. But my main problem is that I do not see the close connection which everyone else sees between character distributions, admission to the human species, and such things as human rights. [...] All the ingenuity which has been exercised trying to show that all human beings are essentially the same might be better used trying to explain why we must all be essentially the same in order to have such things as human rights. Why must we all be essentially the same in order to have rights? Why cannot people who are essentially different nevertheless have the same rights? Until this question is answered, I remain suspicious of continued claims about the existence and importance of human nature.

I view human nature as a scientific and philosophical problem. Practical consequences—moral, ethical, political—however important, should not obscure the fundamental problem, which is

theoretical. Despite the frequent difficulties with clearly distinguishing between species (In some cases, these difficulties with distinguishing between species are due to a lack of sufficient data (this applies especially to extinct species), in other cases they are a consequence of the nature of related species or other taxons), it is certain that in the process of evolution organisms form units of biodiversity (Although the problem of clearly distinguishing between species does not apply to modern *Homo sapiens*, tens of thousands of years ago we would have had to face a considerable difficulty related to *Homo neanderthalensis* and the Denisovans). Regardless of internal differentiation, varying durability and permanent variability, these units are fundamental for reproduction and are especially important for sexual reproduction. Each of these units has a set of characteristics—genetic, physiological, morphological, ethological—constituting an accumulation of the characteristics of all individuals comprising that unit. From a nomological perspective, these accumulations “build up” the species-nature. This is sufficient justification for discussing the problem of any species-nature, including human nature. Nevertheless, I recognize the questions formulated by Hull as important. I will therefore try to address them here as best I can.

First, the view that human rights are for human beings is tautological. Human rights are special rights for only one form of living organisms—those belonging to the genus *Homo* with its one extant species—*Homo sapiens*. The “human” in human rights stands for a general “human being.” This human being may be obtained conceptually either by way of hard essentialism or by way of the nomological perspective.

Second, it is worth considering what the terms “we,” “people,” and “human beings” mean in the questions posed by Hull. I take all these terms as referring to *Homo sapiens*, which is fundamentally a species of primate. As such, biology is the science that should be looked to for answers concerning who “we,” “people,” or “human beings” are. What alternative is there? Hull repeatedly invokes “common sense” or “deeply held intuitions” and accurately criticizes them (Hull, 1986, p. 7–8). Simultaneously, however, he seems to treat “common sense” as capable of weakening arguments formulated from a biological perspective. I consider this a fundamental misunderstanding. There is no such thing as “common-sense biology,” “common-sense physics,”

or “common-sense math.” Even if we agreed that a “common-sense version” of each science existed among the completely ignorant in these fields, what would that mean? For instance, when biology informs us that from its perspective something is “normal,” it is “normal,” —any objections made by “common-sense biology” would be meaningless. All “common-sense versions” of science can be grouped into two basic categories; they are either 1) oversimplified and often misinterpreted scientific theories (like the rather absurd idea that humans originated from modern apes), or 2) pre-philosophical and pre-scientific interpretations of the world made from the perspective of our Pleistocene brains, which evolved to help Pleistocene hunter-gatherers survive on the Pleistocene African savanna. The problem with “common sense” also lies in the fact that it relies so heavily on its most important instrument—the common language, good for gossip, but completely inadequate for scientific purposes: it is on the grounds of colloquial language and its unavoidable ambiguity that such fatal common-sense misidentifications as “natural” = “normal” = “typical” are formulated.

The biological and philosophical discussion on human nature is also necessary and significant from a more practical perspective: only such a discussion can break stereotypes born out of “common sense” and fuelled by various ideologies and superstitions. Giving up on this discussion due to the enormity and complexity of the problem will not prevent “common sense” from (ab-)using the concept of what is “natural” in a way that supports its non-scientific goals. Only by undertaking this problem head-on and emphasizing the diversity and complexity of material, do we have any chance (however slim) of minimizing the social scope of the dangerously erroneous identification of “natural” with “normal” and “typical.”

In terms of human rights, I consider them as belonging only to those organisms whose individual natures contribute to the general nature of *Homo sapiens*. However, I would like to draw attention to the wider context of the rights of others. What are we to base our attitude towards other living entities on? I think that only a biological and philosophical study of nature can indicate such a foundation to us. I agree with those scientists (e.g. Frans de Waal or Jelle de Boer; see De Boer, 2011) who point to the possibility of basing morality and ethics on a biological foundation. For instance, the ability of other

animals to feel empathy and sympathy could be the basis for building special models indicating how to treat these species. However, this requires research into the species-natures of these animals that would address both theoretical and practical aspects.

“NATURE VS NURTURE” AND OTHER FALSE ANTITHESSES

An issue directly related to the problem of human nature that has been generating lively debate for years is the alleged antithesis of nature and nurture. This antithesis seems to be a generalization based on various similar antitheses that have been put forth, such as nature vs convention, nature vs culture or the natural vs the artificial. The beginnings of these debates go back to ancient reflection; we can find them in the philosophy of Protagoras of Abdera or that of Diogenes of Sinope.

The essence of the dispute seems to lie in the antithesis of what is necessary and determined by “nature” (understood as a set of all-encompassing necessary rights, not subject to modification by subjects subordinate to them) and what is unnecessary and undetermined, mouldable by factors other than nature. Understanding the concept of nature is therefore fundamental in regards to this matter.

In the modern nature vs nurture debate, both concepts are used in a peculiar way. “Nature” seems to have been reduced to solely genetic factors. In turn, “nurture” is taken to mean all non-genetic factors. In essence, therefore, “nature vs nurture” should be properly formulated as “genetics vs environmental interactions.” After all, the concept of nature suggests the influence of factors such as hormones or neurotransmitters, or more generally—of all physical, chemical and biological factors. In turn, the concept of “nurture” suggests the sole influence of intentional factors. Were we to treat the “nature vs nurture” dispute literally, it should be interpreted as the antithesis of biology and culture. I would like to briefly discuss this antithesis, but will first remark on “genetics vs environmental interactions.”

While in past decades it could reasonably be thought that genes were a factor whose influence could be perceived as the basis for “hard determinism,” current genetic knowledge has nuanced what

we know about the influence of genes (see, e.g. Moore, 2013). This is brilliantly described by Robert Sapolsky, who indicates that the interaction of genes is best characterized as “a genetic influence on how one interacts with the environment” (Sapolsky, 2005, p. 10). What is meant by “environment” here is all factors affecting the way genes operate, from the cellular environment through ecology, to social influence and impact. Epigenetic discoveries further narrow down the idea of “genetic hard determinism.” In short, the “genetics vs environmental interactions” dispute is a pseudo-dispute in which attempts are made to separate and contrast non-separable and cooperative factors (Moore, 2001; Ridley, 2003; Stotz, 2012). As Matt Ridley aptly states, “no longer is it nature vs nurture but nature via nurture” (Ridley, 2003, p. 3–4).

But what about the “biology vs culture” antithesis? Of course, defining culture is problematic. Due to space constraints there is no room for a detailed analysis of the matter here, so I will only signal a few issues. In my view, the most significant problem with the antithesis of “nature” (biology) and “culture” is that the culture a given species has developed must necessarily be compatible with the “nature” of that species. If we find manifestations of “culture” as part of a species’ behaviour, I see no alternative than to consider that “culture” as an element of the “nature” of this species. So, while it is possible to contrast “culture” (understood as a biological characteristic) with other biological characteristics, it is senseless to contrast one specific biological characteristic with biology as a whole. For example, while “genetics vs morphology” could make sense (at least from a logical standpoint), “genetics vs biology” makes no sense at all. One could only purport to understand the “biology vs culture” antithesis on the grounds of common sense, because on that level people use the term “biology” not “in the sense that biologists use this term but in some other, more basic sense” (Hull, 1986, p. 10). Of course, this “more basic sense” does not exist. It is no more than an ignorant sense. An excellent illustration of this state of affairs is the problem of “nature” and homosexuality from both the biological perspective and the commonsense view. In the commonsense view, the situation is simple: homosexuality is clearly against nature because the natural function of sexual behavior is reproduction, and homosexuals as homosexuals cannot reproduce. From the biological

perspective, the situation is not so clear-cut: homosexuality is quite common in the Animal Kingdom, so it cannot be against nature. But where does reproduction come into play? It seems to be a paradox. However, there are a few hypotheses about how homosexuality evolved (as described by e.g. Sommer, 2006). Finally, as evidenced by bonobos' and humans' sexual behavior, sex plays many more roles than merely that of a reproductive method which increases genetic heterogeneity.

Finally, all institutions of cultural life—art, science, philosophy, religion, ideologies, worldviews, socio-political systems, as well as products of material culture—are nothing but products of human brains. Understanding how human brains function, in turn, is nothing more than understanding the biology of that organ. In this context, it is difficult to find any justification at all for the “biology vs culture” antithesis.

This does not mean that only biological methodology should be used in all research on *Homo sapiens*. To put the matter synthetically: physics is the most general science, and the other natural sciences are merely particular applications of physics. In turn, psychology and philosophical anthropology are sciences that examine specific aspects of biological phenomena. Just as the findings of physics must be considered in biology due to the more general nature of the former, so too must the findings of biology be considered in the more specific areas of psychology and philosophical anthropology.

HUMAN NATURE AND THE PHILOSOPHY OF POLITICS

The last problem I want to signal in this article concerns the notion of human nature within the context of political philosophy.

One of the fundamental problems the human mind has wrestled with since the dawn of writing is that of the relationship between humans' species-nature and the phenomenon of political power. One example can be found in the Sumero-Akkadian *Epic of Gilgamesh*. The problem of the relationship between human nature and politics or political power is first fully recognized in the works of Aristotle, with his key thesis that a human being is *zoon politikon*, human beings

are political animals by nature, and people, even without benefit to themselves, seek to live in communities. The most famous antithesis to this was formulated by Thomas Hobbes, who considered human nature incompatible with life in large organized communities. Hobbes held that human nature is realized through egotistical, rather than community-based activities. Consequently, the permanence of human communities necessarily requires coercion through which political power, *against human nature*, maintains the unity of the “artificial community” that is the state. It should come as no surprise that these two conceptions lead to different models of the rights of political rulers, citizenship, the political system, and the legal system and its justification. As a result, many different very nuanced models have been created. I believe that any discussion regarding political issues, whether practical or purely theoretical, must be based (or as some may argue, is always based, however implicitly) on some notion of the nature of *Homo sapiens*. The problem lies in determining *which* particular notion we choose. How do we make that choice?

The classical philosophical discussion on human nature was conducted using two basic instruments: logical coherence and examples taken from observation. However, observing human behaviour enables the formulation of various mutually-exclusive conceptions; without recourse to other instruments, the choice between these conceptions becomes arbitrary. On the basis of classical philosophy, it is impossible to establish whether Aristotle’s or Hobbes’ view of humanity is more correct.

The second problem associated with classic reflection on human nature ties in to the HVE. Considering the fact that *Homo sapiens* has essentially inhabited all ecological niches in nearly every climate zone, it is to be expected that a wide array of behaviour patterns has emerged. In such circumstances, the nomological perspective is the most appropriate. Its use requires the collection of rich and comprehensive data from various research disciplines (history, sociology, psychology, the history of ideas); however, it is my view that biological data should play a key role in discussions on the social aspects of human nature. Biology gives us incredible amounts of data. More importantly, such branches of biology as palaeoanthropology, genetics, ecology, primatology, endocrinology, and neurology give us a consistent and coherent theoretical basis for all possible justifications.

Let me give one example of the attitude I recommend taking in regards to the discussion on human nature, especially its social dimension, and of what biology can contribute to this discussion.

Returning to the problem of humans' political nature, we can say without a doubt that human beings are social animals. There is much primatological and paleoanthropological data to back up this statement. However, does this alone allow us to conclude that a human being is a *zoon politikon*? The matter is quite complex. Robin Dunbar has demonstrated that there is a relationship between brain size (especially the size of the prefrontal cortex) and herd or group size. Based on an analysis of empirical data, Dunbar formulated a hypothesis in which he determined the maximum number of acquaintances with whom each of us can maintain real and consistent contact. "Dunbar's number," as it is called, comes out to 150 individuals—this number corresponds to the average size of basic groups of hunter-gatherers in both ancient and modern times (Dunbar, 2004; Dunbar, 2014). If this is the case, how can cohesion be built in larger groups? Endocrinology provides us with a clue. Oxytocin is a hormone that is largely responsible for creating interpersonal bonds, such as those between a mother and her offspring. For a time, oxytocin was considered a "hormone of love," which, at least potentially, would be capable of generating positive emotions in people towards even complete strangers. However, research into the effects of hormone demonstrated that oxytocin's influence is complex: while it does generate strong friendly bonds with loved ones, it generates the opposite feelings towards strangers and anyone who may be seen as a possible threat to one's loved ones. It seems as though human social nature requires both friendship and hostility—it is jointly defined by both of these aspects. One more fascinating aspect is worthy of mention here. Research on the social nature of human reason has revealed an interesting feature of this reason: it is focused not on truth-seeking, but on defending one's own (or own group's) point-of-view (Sloman, 2017; Mercier, 2017; Gorman, 2017). This is likely the heritage of our Pleistocene ancestors – practical concerns were more pressing within their historical context than was cognitive nuance. The problem is that today, being equipped with such Pleistocene minds, it is difficult to imagine honest socio-political discourse, upon which, after all, our communities should be based.

Examples of ideas that the biological sciences contribute to the discussion on human nature and human social nature can be multiplied. They concern key issues such as family, the sense of justice, free will, and others. Can a philosopher afford to skip over this wealth of data and ideas?

CONCLUSION

Discussing human nature and its social aspects is a necessary condition for any rational reflection on humankind and socio-political life. Rejecting the category of human nature is both incompatible with reality and has the potential to create a cognitive vacuum that would soon be filled up with various ideological or common-sense notions of no cognitive value. Reflection on human nature requires both great methodological caution and an interdisciplinary approach; however, for me there is no doubt that primacy in the discussion on human nature belongs to biology.

Above all, it seems that approaching the problem from the perspective of “hard essentialism” (classical philosophy) is unjustified. A hard essentialist approach leads to arbitrary solutions, which in consequence may lend support to various oversimplifications and stereotypes. Consequently, the most reasonable seems to be the nomological approach, which is typical of biology. This approach attempts to grasp the broadest possible range of traits, rejecting the notion of “normalcy” in favour of the notion of typicalness, which is not identified with “nature.”

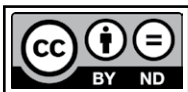
Fruitful discussions of human nature also require giving up pseudo-antitheses, such as “nature vs nurture” or “nature vs culture.” Their arbitrary, stereotypical and shallow character contributes nothing of value to the discussion, instead focusing attention on pseudo-problems.

Finally, the necessary condition for the fruitfulness of this discussion is openness and a readiness to revise even the most “deeply held intuitions” — nature, which we are constantly discovering, has surprised us more than once with its decidedly non-intuitive character.

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