# **Essentialism and Human Nature**

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Current scientific attempts to characterize human nature have roots in a philosophic view of kinds that is inapplicable to any species in the wake of Darwin's work on evolution by natural selection.

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**Human Nature - Modern Accounts** 

## Introduction

The idea that humans are special has been around for a long time. Attempts to identify just what it is that makes us special have been around just as long. One major source of this project is philosophy and philosophy's attempt to provide definitions for the things it takes to be of major importance in the universe. In what follows we first set out a major philosophical approach to definitions, essentialism, and then discuss how this approach plays out in discussions of human nature.

#### **Essentialism**

According to philosophy, the essential properties of a thing, collectively called its essence, are those of its properties that it must have so long as it exists at all. For instance, the number two has the essential property of being even.

It is crucial to note that the notion of essence is fixed and unchanging. Either an object has its essential properties, or it is not that object at all; there can be no change in essential properties. If the object were to acquire different essential properties, it would be a different kind of object. If the number two ceased to be even it would no longer be two – the fact that this is unimaginable simply emphasizes how necessary essential properties are to the nature of a thing. Note that evenness is not the essence of two because the numbers four, eight, etc., are even as well. The essence of two is the collection of essential properties that pick out two uniquely, e.g. the lowest even number. In addition, essential properties are not accidental universals – all goldfish live on Earth but one could go into space without ceasing to be a goldfish. Finally, what exactly constitutes an essence and whether there are any has been a subject of debate within philosophy since Socrates' questioning first identified the notion of a real definition (or essence).

# **Human Nature – Classic Accounts**

One feature of the world that is immediately striking to any human thinker is the existence and uniqueness of humans.

Once this feature has been noticed the next obvious step is to attempt to characterize what it is that makes us unique. Thus the connection to human nature; classically, to describe the nature of a thing is to give its essence.

Over the centuries, repeated attempts have been made to describe the essence or nature of being human. The search focused on properties that were believed to be uniquely human, and it included an interesting list of features.

Pre-evolutionary thought—especially Aristotelian thought—assigned a variety of essential traits to human beings, most predominantly, rationality. In other words, what distinguished human beings from all other animals was the fact that human beings are rational. On the other hand, many other accounts were also suggested: Thomas Willis claimed that the unique trait was laughter; Martin Luther proclaimed that human beings were the only animals with private property. Others have suggested that it is the protuberant nose, the ability to smile, the possession of a hippocampus minor in the brain, the ability to make tools, the belief in God, or the capacity to stand comfortably on our hind legs.

As this brief list should make clear, it has proved an extremely difficult task, despite a long list of candidates, to identify the true essence of humanity. This has been due to the difficulty of finding properties that seem at once necessary to humanity and which all and only humans possess. The research project of Plato's Academy – which took humans to be, in essence, featherless bipeds – was famously derailed when Diogenes the Cynic tossed a plucked chicken into the Academy's grounds. However, if the task was complex before Darwin, it became infinitely more so afterwards.

# The Darwinian Challenge

In the wake of Darwin, essentialism about human nature must be radically rethought. Fundamentally, Darwinism seems to require that species (or kinds, such as humanity on the old picture) do not have essences in the traditional philosophical sense. This is because species are defined as ever-changing lineages, with no essential properties shared by each and every member. The only exception to this rule is that each member of a species must be a descendant of one or more members of that species, unless it is the first member of a species. Thus, what binds human beings together as a species is not the possession of a special set of traits or properties that make up the essence of being human, but rather, their sharing in the common human gene pool.

There is also an historical difficulty. Our nearest ancestors, archaic *Homo sapiens*, gradually changed into our current species, *Homo sapiens sapiens*, but we are unsure exactly when or how this occurred. In short we do not know much about who the first humans were and what they did – clearly this makes identifying properties possessed by all humans a pretty serious challenge.

This problem is a version of a general concern. To be able to identify an essential characteristic of a group you must first identify all the members of the group. This first step turns out to be difficult when the 'group' under consideration turns out to be a species. First, there are many distinct definitions of 'species' used by practising biologists. Although all share the notion that descent is crucial, they identify the 'edges' of the group in different ways, which leads to debate about whether certain borderline cases are or are not members of a given species. To make matters worse biologists sometimes change their species notion depending on the problem they are working on. Moreover, because there are numerous definitions of 'species' being used by biologists, it makes it difficult to decide exactly which notion of species we should use in identifying the human species.

Another reason that it is hard to identify just which things are members of the human species is that which member of a lineage counts as the first member of a species is arbitrarily decided by biologists, as was noted by Darwin himself. One of the problems facing biologists attempting to delineate species is determining when, exactly, species branch off from their ancestral species. While there are a number of methods used to accomplish this task, none of them are precise enough to narrow the speciation event down to, say, placing a grandmother in one species and her granddaughter in a new species.

#### **Human Nature – Modern Accounts**

Although it may appear that Darwinian insights have ruled out the possibility of a human essence (other than the minimal 'descendant of' type account), it is still the case that there are intriguing differences between human beings and other living species, such as our upright posture and our extensive use of language. Even though these are not considered by (many) biologists to be 'essential' traits in the philosophical sense, there are nonetheless several

research programmes in evolutionary biology that attempt to account for these differences and to characterize human nature itself (or at least to identify some essential properties of humanity), beyond the common-gene-pool approach.

An early attempt along these lines was the work of Herbert Spencer and other Victorian social scientists who identified evolution as a directed process, that is, a process that leads from simpler to more perfect organisms. The ideal or goal of these evolutionary accounts was suspiciously like the European male – human nature then became something that human beings approximated more or less closely (although all imperfectly). This view was based on an interpretation of evolution that has since been rejected (it was in fact rejected by Darwin himself). Evolution does no more than 'fit' one to the current environment – there is no larger goal toward which evolution is aimed.

The second major strand in modern scientific accounts of human nature began with the work of Konrad Lorenz, the animal behaviourist. In On Aggression Lorenz claimed that all species possess 'fixed action patterns', that is, behaviours that can be triggered in a species member regardless of environmental stimuli. These fixed action patterns in turn are theorized to be controlled by four major drives (feeding, aggression, reproduction and flight (as in running away)). This would make these drives necessary for humans but not characteristic (i.e. other species have them). Lorenz identifies the essential feature of humans with the particular way that these drives – in particular aggression - play out in the context of humanity's other abilities. Because our technological ability to commit violence has outstripped our 'natural' ability, we are the only species that kills large numbers of its own species. Lorenz's view is not currently widely accepted. This is because his evidence for fixed action patterns comes largely from birds and fish (and not primates), so it is weak evidence for human behaviour. Further, there is little or no direct evidence for the big four drives - indeed it has been suggested that this part of Lorenz's view is untestable. Lorenz's general approach, however, has been very influential and there are a number of current research projects that derive from his thought.

Since Lorenz's work, sociobiologists have attempted to explore human nature by searching for commonalities in behaviour among all human beings. They have assembled a list of traits that they believe to be universal among human beings, including religiosity, the desire to follow, hierarchical social structures, and sex differences of various kinds, including male dominance. Their claims have been met with resistance by anthropologists, who state that the traits are not actually universal. More recently, behavioural ecologists have been looking for universal traits by exploring human ways of adapting to their environments. Finally, the recent programme of evolutionary psychology seeks out universal mental propensities.

Despite the problems discussed above, the major challenge to the projects just mentioned and to any other attempt to discover the essence of humanity, is the wide diversity of human ways of living. Technically, to be universal, a trait must appear in every human being. Moreover, in their attempts to delineate what is uniquely human, these scientists need to find traits that are not shared with our closest living relatives. These requirements are quite stiff. In considering human traits, everything that any human being has ever been or done is, technically, an aspect of human nature. But no scientist attempting to characterize human nature has taken the approach of including all of these outcomes. Rather, certain behaviours and certain outcomes are plucked out of the full spectrum of human beings and placed in a special category, which is then described as human nature. These attempts must be considered inadequate on logical grounds alone.

We can see this by returning to the philosophical definition of essential properties. Specifically, an object has a property essentially if it has it in such a way that it is not even possible that it could exist but fail to have it. In contrast to the philosophical focus on existence, biologists are more interested in whether the object is alive, able to reproduce, actually reproductive, or a member of a breeding population. Not all members of a species reproduce, but they are nevertheless still members of the species by virtue of their sharing of the gene pool of that species. An example may help to make things clearer. Human sexuality is enormously various. There are intersex and transgender individuals. There are same-sex preferring individuals and others who have little or no sexual interests (and those whose interests clearly will not lead to reproduction). For a biologist the humanity of all these individuals is secured by their heritage – they have human parents hence they are human and the whys and wherefores of their practice become things to be explained. On the philosophical or essentialist account each of these variations rules out that behaviour as a candidate for the human essence. A little thought should make clear that the 'problem' (for an essentialist) of variety exists in every area of human life and therefore for humanity in general.

These difficulties do not imply that these projects – evolutionary psychology, sociobiology or behavioural ecology – are not good science or that they will not lead to important discoveries about human capacities, limitations and tendencies; what it does mean is that they will not yield an account of the essence of humanity.

In summary, then, if there is an essential trait of being human, it is exactly (and no more than) that the human being shares in the gene pool of *Homo sapiens sapiens*.

## **Further Reading**

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