

Károly, Tomáš

The universals of human nature : a method of their detection through scientific evidence and literary fiction

Pro-Fil. 2024, vol. 25, iss. 2, pp. 51-65

ISSN 1212-9097 (online)

Stable URL (DOI): <https://doi.org/10.5817/pf24-2-39121>

Stable URL (handle): <https://hdl.handle.net/11222.digilib/digilib.81254>

License: [CC BY-NC-ND 4.0 International](#)

Access Date: 24. 01. 2025

Version: 20250123

Terms of use: Digital Library of the Faculty of Arts, Masaryk University provides access to digitized documents strictly for personal use, unless otherwise specified.

THE UNIVERSALS OF HUMAN NATURE: A METHOD OF THEIR DETECTION THROUGH SCIENTIFIC EVIDENCE AND LITERARY FICTION

TOMÁŠ KÁROLY

Department of Philosophy and Applied Philosophy, Faculty of Arts, University of Ss. Cyril and Methodius in Trnava, Slovak Republic, tomas.karoly@ucm.sk

RESEARCH PAPER ▪ SUBMITTED: 8/4/2024 ▪ ACCEPTED: 16/12/2024

Abstract: With the arrival of biological evolutionism and behaviourism, the concept of human nature has become very unstable. The proposed *method for detecting the features of human nature based on discomfort* allows us to reconsider human nature and regard the species as ontological entities. The human species is represented by biosubstrates that instantiate essential universals. When society restricts fundamental behavioural expressions, individuals experience discomfort, which leads to rebellion. These expressions of discomfort lead us to recognise the basic universals of human nature. Discomfort arises from the disruption of the symmetrical relationship between nature and nurture. These propositions are also supported in fiction, as seen in *Brave New World*, *Fahrenheit 451*, *1984*, *The Island of Doctor Moreau*, *Men Like Gods*, *Abduction* and *Childhood's End*.

Keywords: behaviourism, fiction, human nature, nature versus nurture, species, universals

Introduction

Regarding defining human nature, two opposing camps have formed in the scientific community, the biological camp and the behaviourist or sociological camp. Universal representation of what constitutes human nature is more the effort of the biological camp, which operates with some immutable and necessary features. Biological particulars named with the same name should be instantiated by the same universals that assign them to a common species. Another alternative is that instantiating biological features is not essential because human manifestations depend on society—on unique social interactions. Such an untangling of the understanding of human nature, and thus also the human species, can be found in F. Fukuyama's definition, which nevertheless favours the causal primacy of the biological factor: 'human nature is the sum of the behaviour and characteristics that are typical of the human species, arising from genetic rather than environmental factors' (Fukuyama 2002, 130). I will also carry this work in the spirit of this definition.

One can understand genes in human nature as something stable and identical for all individuals of a given species. However, this is not the case because a characteristic of the evolutionary process

is that species evolve. Therefore, it is ‘extremely unlikely that all human beings are essentially the same...’ (Hull 1986, 4). From such a position, it is rather unlikely that anything stable would constitute human nature. In this article, I will propose a method for determining the universal essential features that are part of human nature and assign them to *Homo sapiens*. I will back these claims with findings from fictive literature, which should realistically reflect the basic character traits of individuals living in dys/utopian societies. These societies cause discomfort to their inhabitants, based on which we come to recognise their basic attributes of human nature.

Nature versus Nurture

According to the theory of behaviourism, human nature is a product of social interactions. These interactions are, of course, highly variable; therefore, we cannot speak of any common features that would be anchored in all individuals and thereby classify them into a common species. The statement of John B. Watson, the founder of behaviourism, which clearly describes the position supporting *only* the social character of human nature, is world-famous:

Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I’ll guarantee to take any one at random and train him to become any type of specialist I might select – doctor, lawyer, artist, merchant-chief, and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors (Watson [1925] 1970, 104).

In such a behaviouristic world, no intrinsic quality is essential; a person is an inactive matter from birth to which external qualities attach themselves from the outside. He is a Lockean bare substratum; the mind (if such a thing exists at all in the context of behaviourism) is a *white paper*. Biological inheritance is unimportant; ‘genetic endowment is nothing until it has been exposed to the environment, and the exposure immediately changes it’ (Skinner 1976, 165). The only way something can be passed down between generations is through education.

Perhaps it is possible to defend against these radical theses of behaviourism with empirical findings that the human creature is not a pure *tabula rasa* when it comes into the world from the womb¹. Newborns are not simply raw materials; individual differences can be observed between them even before they are affected by different experiences (Freeman – Fox 2017, 11). Just as newborns differ in their uniqueness, they also express the same instinctive attributes. Such instinctive manifestations are, for example, reflexive rooting and sucking and spontaneous cyclic activity (ibid., 14). Studies in cognitive neuroscience and psychology point to the incorrect interpretation of newborns as a *tabula rasa* because the brain is ‘a modular organ full of highly adapted cognitive structures, most of them unique to the human species. There are, in fact, what amount to innate ideas, or, more accurately, innate species-typical forms of cognition and species-typical emotional responses to cognition’ (Fukuyama 2002, 141). ‘There are, however, innate human emotional responses that guide the formation of moral ideas in a relatively uniform way across the species’ (ibid., 142). A language organ is necessary for a child to learn to speak, whereas individual differences in language skills could be entirely due to environmental factors,

¹ Not even John Locke viewed this so radically. He compared the mind to *white paper* and not to a *tabula rasa*, which in Latin referred to the state of a tablet after the inscriptions on the wax surface had been removed (Duschinsky 2012, 510). Locke only stated that all knowledge comes solely from the effects of external sensory experience and internal reflection. He did not say anything about the extreme formlessness of the mind at birth (ibid., 516).

such as educational opportunities. Therefore, if Watson wants to train his infants into a career of his choosing, this does not rule out the notion of evolved learning mechanisms (Workman – Reader 2004, 112). We observe a shift away from traditional behaviourism in research on phobias and preparedness, which suggests that humans are evolutionarily predisposed to fear certain stimuli, such as snakes or spiders, because of their ancestral significance for survival (Seligman, 1971). On the neural level, this predisposition is supported by an evolved fear module organized around the amygdala, originating in early mammals’ prototypical fear of reptiles, which functioned as a predatory defence system (Öhman – Mineka 2001, 486).

Overemphasizing the importance of environment or upbringing can sometimes negatively affect an individual’s inherent nature. If parents forcibly re-educate a child in their image and the child does not have the predispositions needed, the parents will never succeed; they will instead harm the child. The child bears only 50 % of genes from each parent; if they do not have the talent to be a violinist, they will never become a good violinist, despite the enormous demands of their parents. In fact, they will likely develop an aversion to the violin (Plomin 2018). According to R. Plomin, scientific findings support the claim that parenting hardly matters at all; in the case of psychological traits, DNA determines up to 50 % of who we will become. The remaining percentages are determined/completed by our environment, the people we meet, various random influences, etc., which activate or dampen the expression of our DNA. The genetic traits that we inherit are overweight and 80 % body height (ibid., 117, 141). Psychological attributes include intelligence, verbal abilities, spatial orientation, different types of memory (for example, for faces), the ability to read at seven years old, and character traits of infants, especially shyness (ibid., 17). In Plomin’s view even divorce rates and the time spent watching television are caused by genetics and not by our environment (ibid., 39, 41). Employment status and income also depend on genetics (ibid., 104). The same applies to various attributes of psychopathy: a lack of empathy, interest in others in childhood, callousness, insensitivity, hyperactivity, and inattention are determined by genetics (ibid., 22–23).

As Kluckhohn and Murray claimed, every man is in certain respects a) like all other men, b) like some other men, and c) like no other man. He is like all other men because some of the determinants of his personality are universal to the species. He is like some other men because the similarity may be to other members of the same socio-cultural unit. Finally, each individual’s modes of perceiving, feeling, needing, and behaving have characteristic patterns which are not precisely duplicated by those of any other individual (1954, 53–55). They stated that ‘The personality of an individual is the product of inherited dispositions and environmental experiences’ (ibid., 66–67). The world is never black and white, although we sometimes need to interpret it in such a way as to create clarity and order in the world’s terms and structure. Such a structure, however, is only an artificial construct and always excludes something essential from the world; thus, the structure, in the end, turns out to be unusable. The same thing happens when thinking about human nature. We noted that there are two extreme camps, but it seems that one cannot fully explain the behaviour of individuals without the other. For a person to accept some kind of education, manners, morals, education, etc., he must be *capable* of learning them and have the physiological prerequisites.

‘Human nature is a product of culture, but culture is also a product of human nature, and both are the products of evolution’ (Ridley 1993, 6). It is erroneous to state that biology does not influence an individual’s behaviour, and only culture does. There are universal attributes that all individuals

have in common, and these attributes should be shared across cultures. Many cultural customs are often universal, too, and no wonder since culture is an expression of human nature. Things like grammatical language, hierarchy, romantic love, sexual jealousy, long-term bonds between the genders ('marriage', in a sense), etc., are common human traits regardless of different cultures (ibid, 175). You can view culture as an extension of the human mind and body (Brown 2004, 52). From a metaphysical point of view, nature and nurture are strongly connected; they are two sides of the same coin.

The Problem of The Universality of Human Nature

The dispute over nominalism and realism is still current, though one can trace its beginning back to Plato and Aristotle. But what will help us decide which side to take? Sometimes, much depends on the context of philosophical inquiry. The dispute is much easier to resolve in the natural sciences, the world of elementary particles. For example, an electron has clearly defined essential properties that classify it into the species of electron. These properties consist of spin, a negative charge, mass, and other properties, as well as manifestations that inevitably appear under precisely defined conditions and *ceteris paribus*. Any entity that meets this enumeration of necessary properties is called an electron. It seems that some templates exist that instantiate specific electrons. Therefore, I think the position of realism is rather attractive in such a context, whether it be the Platonic *ante re* or the more moderate Aristotelian *in re*.

The situation becomes increasingly complicated and favours the nominalists when moving towards more complex systems. For example, what essential features must this complex particle arrangement system fulfil for a dog to be a dog? Does some pattern of canininess exist in such a case as well? Does some canine nature exist? Can these essential features also be expressed in numbers? In complex systems, our exact definitions of these systems blur.

The primary interest of this text deals with the complex entity called man, thus searching for the existence of some human nature template. After the discovery of DNA, and on the example of S. Kripke (1980), it might seem that DNA is that template; one would only have to point to a specific part of the chain and declare: this here expresses humanity. In this way, we would point to the essence that makes a person human. We would point to the type, to the 'thisness'. It is no longer as invisible as it was in antiquity and scholasticism but is precisely expressed numerically in the material carrier of the DNA macromolecule (Sýkora 2006, 99). More than 99 % of all DNA segments, the blueprint of human nature, are shared by all humans. The remaining not quite one percent of the differences in our personalities lead to our uniqueness – be it mental illness, individual personalities, or mental abilities (Plomin 2018, x).

My ambition in this text will be quite modest: to propose a method for discovering common features of human nature shared by most people on this planet. The resulting enumeration of these features will not apply to all people but only to the majority because we have to consider deviations. Therefore, my definition of a species in complex systems composed of elementary components is broader, relatively vague, and not strict – such a strict definition cannot even exist. Not even strict Platonists claim that copies of forms are perfect clones of them; material things are only *imitations* of ideal models. We can compare it to the moulds we fill with wet sand and the resulting product that we flip onto a tray. Let us imagine that we have such a mould of a dog. One product comes out with a damaged ear, another with an imperfect leg, and another quite successful favourite that most closely resembles the original form. But we will never obtain

perfect, identical, stable shapes in a world of changes. This is also true regarding our concept of human nature. There will always be deviations. Therefore, it is impossible to present a sample definition encompassing all the people in the world who have been, are, will be and could potentially be. We can, however, state the basic common features that are most often repeated and thus have the nature of universality. Without such a feature, we no longer even have to consider the individual as fully participating in human nature.

Suppose an individual cannot learn speech due to severe deviations from birth. In that case, we assess this as a defect because the individual no longer satisfies a basic attribute of human nature. An error occurred. Nevertheless, due to other human features and for different reasons, some parents feel a moral obligation to care for such a being. We do not even consider psychopaths as sufficiently human, and we attempt to identify them and isolate them. These aberrations deviate from the norm; therefore, we build institutions for deviant forms of people who do not fully participate with other bearers of the fundamental attributes of human nature. Are there any tolerance limits when we stop considering an individual to be fully human? Such boundaries can, of course, shift and lead to racial prejudice, depending on what group the enforcer of power belongs to and sets as the ideal. ‘Why can the one man be enslaved, and the other not? Because the one belongs to the natural-seeming kind of people that is suitable for enslavement’ (Smith 2015, 9). Indeed, it would be appropriate to enumerate the universal attributes of human nature so that discrimination does not occur for any reason in the context of various artificial structures. My proposed *method for detecting the features of human nature based on discomfort* could be helpful.

Our understanding of human nature can be limited only to knowing certain parts of it. This is similar to when we run our finger over the mould with our eyes closed and try to guess the shape. One can compare this blind research to the enumeration of common features the method should provide us with. We only get parts, and by reflexively combining them *a priori* in our mind, we can produce some kind of whole. Sometimes, upon learning of these parts, we are even shocked about what falls under human nature; we are shocked by the history of mankind, which suggests man hides an aggression capable of mass bloodshed. Sometimes, an individual is also seized with shame for his entire species and asks whether these manifestations are dormant within himself, too.²

Discomfort as an Indicator of Human Nature

I will propose a method for enumerating the attributes of human nature through a method of detecting discomfort. Discomfort shows in the discrepancy between the person’s requirements and his environment. If the expression of the individual’s nature is hindered, it expresses itself in discomfort and conflict with its environment; it oscillates, attempts to stabilise itself, remove the discomfort, and reach its natural state. For example, a hungry animal restlessly lurks and shows its aggressiveness. Likewise, a financially underappreciated person also shows aggressiveness towards an employer or a state institution; sexual suppression can lead to psychological deviations. Wherever basic components of nature are hindered, tension, restlessness, discomfort, or even a state of fighting to death occurs. The discomfort resulting from conflict shows us which indicators we should consider as universal features of human nature.

² That the human species is, in fact, inherently good and murder is repugnant to it can be found in the popular book *Humankind* by R. Bregman (2020).

Conflicts arise when society suppresses one of the human universals. Society is so interwoven with human nature – they must be in a symmetrical relationship.

I mentioned here the symmetrical relationship between human nature and society; discomfort occurs if this symmetry is disrupted. The connection of human universals with the environment should secure the stability of this symmetry. D. E. Brown (2004, 48–51) enumerates many features of human universals. He states the hierarchy between them from the less frequent (e.g., domestication of dogs) to absolute universals that occur in *all* people. For example, the use of language – grammar, logical concepts (and, or, not, greater/lesser, part/whole), emotional expressions (smiles, frowns), music, dance, child-care, incest avoidance. A. L. Kroeber (1986, 223) also mentions knowledge of death, concerns with the future, religion, extrasomatic visual art, and verbal or muscular expressions of humour. R. Plomin (2018, 5) lists features that are firmly determined by 99 % of our DNA: walking on two legs, eyes on the front of the head that allow us to see in three dimensions, basic reflexes – for example, blinking when someone blows in our face. R. Bregman (2020, 86) states these include blushing, flushing, and sociability. Nevertheless, we could certainly find many other universal features of human expressions. Discomfort is most intense when one of the natural universals is suppressed. For example, logic may not work in a powerful society: in George Orwell's novel *1984*, $2+2=5$ (Orwell, 2020); in Plato's *Republic*, children are taken away from their parents (Plato *Resp.*, 460 c, d).

One can express the basic thesis for enumerating the signs of naturalness by using the following universal sentence: If a being is prevented from expressing a need for p and suffers discomfort from being unable to express p , then p is a component of human nature. In the given sentence, p is a sign that represents a component of human nature. I would call this search for p a *method for detecting signs of human nature based on discomfort*.

Assessing the degree of discomfort and how long it occurs can be more problematic. If a child feels a lack due to being prevented from consuming sugar at a given moment, we do not assess this as great discomfort—rather, it is a caprice—but if the child is prevented from this permanently, it can have a fatal impact on his entire organism.

Sometimes, a person may feel discomfort but does not yet know why. If the discomfort is recognised, the individual starts to rebel and comes into conflict with the environment. Thus, conflict can be another indicator of human nature. Therefore, conflict occurs if the expression of a person's human nature is hampered and the person suffers discomfort.

If we want to discover the features of human nature, let us first ask ourselves why conflict has occurred with individuals in a given society. We then recognise discomfort and seek its causes, which come from the feeling of a lack of p . This p is an indicator of a feature of human nature. However, naming p may not always be clear. For instance, an *adequate standard of living* is a component of human nature. An adequate standard of living may hide other needs, including those without which a person can survive. For example, the undignified salary of teachers does not have a fatal effect on their survival. Still, it leads to feelings of societal underappreciation, which can already be considered a more profound common feature of the human species. This feeling of underappreciation can then lead to discomfort and even strikes.

Society's social norms and attitudes can change over time. For example, homosexuality, which was once considered unnatural and elicited strong negative reactions, is now perceived much

more positively.³ It is important to recognize that what society may have viewed as deviant in the past can now be seen as a natural part of some groups. Homosexuality has adapted in various animal kingdoms and, therefore, may prove to be a beneficial factor in evolution, which may have a cooperative or raising function ('helpers at the nest') about genetically related offspring (Roughgarden 2017). For this reason, we might consider homosexuality a natural part of the animal kingdom that society should not suppress. It is precisely ignorance or powerful influences that can negatively affect particular groups, which should be encouraged in order to show their usefulness. By suppressing the natural expressions of groups, we dull them; by supporting them, we provide a vital impulse that could benefit society.

One of the notable research examples highlighting the contrast between societal changes and human nature is the evolutionary mismatch in mating.⁴ Modern environments and societal shifts disrupt the reproductive strategies that evolved in our ancestors. Factors such as living in massive metropolitan areas, online dating, contraception, changing gender roles, pornography, sperm banks, freedom from parental influences, and potentially endless options of mates can lead to maladaptive outcomes, including relationship instability and dissatisfaction. Understanding these mismatches can help address modern challenges in romantic relationships and promote personal well-being (Goetz – Pillsworth – Buss, 2019).

Manifestation of Discomfort and Conflict in Literary Models

Personality in the dys/utopian society depicted in Aldous Huxley's novel *Brave New World* is formed by this suggestion: 62,400 repetitions = 1 truth. People in society are assigned to castes from birth using eugenic selection: Alphas, Betas, Gammas, Deltas and Epsilons. Society means more than an individual; the individual is only a means to a stable society. The stability of society is ensured through consumerism and the control of negative emotions using the drug *soma*. Hedonism has led people to intellectual and artistic ordinariness. People cannot think about the deeper meaning of their lives because there is no time or space for this next to their constant indulgence. A Savage from the Reservation, who cannot identify with this and manifests its fury, comes to join this society. Bernard, to whom alcohol was accidentally added in his embryonic stage, is also different; therefore, he is different from society. He enjoys seeking solitude, which is deemed unacceptable and suspicious. The intuitive sense that something is wrong with their society is also reflected by the Alpha caste 'artist' Helmholtz, who feels some artistic need to express himself but cannot find the words for these feelings:

I'm thinking of a queer feeling I sometimes get, a feeling that I've got something important to say and the power to say it – only I don't know what it is, and I can't make any use of the power. ... I feel I could do something much more important. Yes, and more intense, more violent. But what? What is there more important to say? (Huxley 1946, 82, 83).

Individuality is suppressed in such 'utopian' scenarios; if unique persons are found, they sense that something is wrong but do not find a verbal expression for it. *Brave New World* is 'a satire not so much of the future as of the present: of the future as it is implicit in the present' (Firchow

³ I am thankful at this point for the editor's comment.

⁴ As a reviewer pointed out, my reference to the discomfort that arises from the discrepancy between evolved human nature and the current environment is not an entirely new thesis. The concept of 'evolutionary mismatch' has been widely used in evolutionary psychology to describe issues that emerge when our evolved tendencies do not align well with modern environments.

1966, 451). A golden idol has replaced God, hedonism has replaced purpose, and people cannot think for themselves because there is no time for reflection, only desire (Wilkinson 2010, 22, 23). People are not fully human; something essential has been taken from them: part of their expression of human nature. The individuality suppressed by a one-sided system for the system itself has been lost. The system of the brave new world uses individuals as a means, and the features that could destroy it are suppressed specifically by hedonism.

In Ray Bradbury's novel *Fahrenheit 451*, reading books is forbidden. Firemen persecute people who hide books and burn the found books. People are average; they fill their lives by watching simple shows broadcast on TV walls. However, a turning point occurs in the protagonist Montag; a certain suspicion is awakened in him when he sees a woman who allows herself to be burned alongside books because her life without books has lost its meaning:

We have everything we need to be happy, but we aren't happy. Something's missing. I looked around. The only thing I positively knew was gone was the books I'd burned in ten or twelve years. So I thought books might help (Bradbury 2021, 298).

When exceptional individuals experience long-term suppression, suspicions arise from feeling a lack for which there are no longer precise words. In the given case, we could look for the words that Montag did not say, namely his desire for knowledge and art, which could be satisfied through books. This sense of lack manifests in discomfort until Montag's subsequent conflict with the regime.

A society that uses individuals as its means is also depicted in George Orwell's novel *1984*. Based on the dictates of the totalitarian regime, the history of Oceania is constantly being rewritten, as well as the people's memory, so that it best corresponds with the current claims of the Party – the whole of history is a palimpsest. The slogans of the Party are 'War is Peace, Freedom is Slavery, Ignorance is Strength'. In this case, we can note that logic is suppressed; what the Party says is valid and true, even if four fingers are five. In *New Brave World*, sexual polygamous hedonism replaces love; in *Fahrenheit 451*, it is blunted by the TV walls; in Orwell's novel, it is again forbidden, and marriage only serves to produce children for the Party.

Sometimes, in the background of an entire utopian or totalitarian society, certain leaders are aware that they act against human nature: the intellectuals. They frequently have rationalised their actions as a way of justifying their inhuman actions for the sake of preserving the entire system. Such a figure in *1984* is O'Brien, a member of the Brotherhood; according to him, the Party aims to have power. While in the polemic torturing Winston, he claims:

We control life, Winston, at all its levels. You are imagining that there is something called human nature which will be outraged by what we do and will turn against us. But we create human nature. Men are infinitely malleable (Orwell 2020, 339).

The suppression of the naturalness of individuals is very clearly depicted in Herbert George Wells's novel *The Island of Doctor Moreau*. In this case, we are not dealing with people but with humanised animals that are supposed to behave according to the principles of human nature and thus gradually become human. Creatures such as a Leopard-Man, an Ape-Goat Creature, a Hyena-Swine, a Swine-Man, a Swine-Woman, a Mare-Rhinoceros Creature, Wolf-Creatures, a Bear-Bull, a Saint-Bernard-Man, an Ape-Man, an old Vixen-Bear Woman, and a little Sloth-

Creature were all created (Wells 1896, 152–153). The animals transformed into human forms were supposed to follow the laws of their creator, Dr. Moreau:

“Not to go on all-fours; that is the Law.
Are we not Men?
“Not to suck up Drink; that is the Law.
Are we not Men?
“Not to eat Fish or Flesh; that is the Law.
Are we not Men?
“Not to claw the Bark of Trees; *that* is the Law.
Are we not Men?
“Not to chase other Men; *that* is the Law.
Are we not Men?” (ibid., 107).

Ultimately, their animal nature wins out; the *nurturing* influence cannot reshape their animal natures, and Moreau’s creatures break all laws until they finally attack their creator. Here is a demonstration of the fact that no authority can forever suppress individuals’ naturalness. Biologically, these creatures were animals, and the laws produced by authority prevented the manifestation of their animal nature. This led to a gradual sense that something was wrong, to awareness and rebellion, and finally to overthrowing authority and returning to one’s nature. H. G. Wells describes the gradual transformation of creatures, from the change in their posture to how they walk erect with increasing difficulty. Moreover, they gradually cease talking; Monkey-man’s jabber multiplied in volume but grew less comprehensible and more simian; they hold things more clumsily, drink by suction, feeding by gnawing, grew commoner every day (ibid., 230). They revert to their animal form very quickly: ‘My Dog-man imperceptibly slipped back to the dog again; day by day he became dumb, quadrupedal, hairy. I scarcely noticed the transition from the companion on my right hand to the lurching dog at my side’ (ibid., 231).

Another novel by H.G. Wells, *Men Like Gods*, describes twelve characters who find themselves in a parallel Utopian world, Earth’s counterpart, but 3000 years in the future. The people in it are socially and biologically more developed. However, some Earthlings do not like living in a Utopia and plan to attack its citizens and impose their own rules. The Earthly revolutionary Catskill argues with the Utopians about their perfect way of existence and compares it to his own life on Earth:

At times life reeks and stinks. ... Yea. But do we not also go higher? I challenge you with that. What can you know in this immense safety of the intensity, the frantic, terror-driven intensity, of many of our efforts? What can you know of reprieves and interludes and escapes? Think of our many happinesses beyond your ken! What do you know here of the sweet early days of convalescence? Of going for a holiday out of disagreeable surroundings? Of taking some great risk to body or fortune and bringing it off? Of winning a bet against enormous odds? Of coming out of prison? ... Because our life is dreadfuller, Sir, it has, and it must have, moments that are infinitely brighter than yours (Wells 1923, 100–101).

In these considerations, one can see disharmony in the social customs of two different worlds. Wells’s previous novel, *The Island of Doctor Moreau*, points to the suppression of biological advantages, while *Men Like Gods* points to social discontent. For example, this social discontent can also be observed in Robin Cook’s novel *Abduction* (2000). The workers from a submarine drill into an underwater mountain and are pulled into an underwater world where evolutionarily

advanced people live. These people evolved before modern man, before the dinosaurs even, and they hide from the world because they fear the people of today. Their life is immortal; they copy their consciousness into new bodies, parasitizing and overshadowing the other body's consciousness. They enjoy fun and pleasures; they are polygamous and bisexual. This Utopia disturbs the visitors from the surface; they are imprisoned in it, morally condemn it, and want to go home and eventually try to escape. They miss the tension and the struggle; they are bored in a world of pleasure, not the world they are used to.

Arthur C. Clarke's novel *Childhood's End* is also worth mentioning. An extraterrestrial civilization comes to prepare Earth for a new evolutionary change, as the universal cosmic mind orders. They plan to turn the world into a Utopia and prepare it for a new evolutionary leap. Humanity is to become extinct, and a new species will arise. During this time, people no longer have to work, so to avoid boredom, they become educated. The social system set up by an alien civilization suppresses human nature without violence. And here, too, people feel somewhat dissatisfied but still wait for new changes.

The end of strife and conflicts of all kinds had also meant the virtual end of creative art. There were myriads of performers, amateur and professional, yet there had been no really outstanding new works of literature, music, painting or sculpture for a generation. The world was still living on the glories of a past that could never return. No one worried except a few philosophers. The race was too intent upon savouring its new-found freedom to look beyond the pleasures of the present. Utopia was here at last; its novelty had not yet been assailed by the supreme enemy of all Utopias – boredom (Clarke 2001, 62–63).

Overlords had abolished war and hunger and disease, they had also abolished adventure (ibid., 80).

The Utopia came to people suddenly, by a great leap forward; it did not develop naturally, and it is not a Utopia they would have created. It does not reflect their nature, which is why people feel discomfort in it. The new species of people will share a collective consciousness that links to the universal mind. There is a significant species difference between parents and children; they are confronted with an evolutionary leap and no longer understand each other as their communication skills are all diametrically opposed.

Findings from the Analysis of Literary Texts

I would first ask the question: How is it even possible for us to interpret the mentioned works? How is it possible to capture the authors' points, the authors' messages? It is quite probable that several minds would intersubjectively and or similarly grasp the main idea of the texts. Understanding that discomfort from the suppression of human nature is expressed in the given texts is possible because human nature is composed of universal features that the reader recognises. A utopian society seems to be something artificial, not corresponding to the contemporary reader's demands and the fictional characters who represent it. The text can be put into different periods. A work of art becomes timeless when it expresses universal, timeless qualities, and with its aesthetics or imaginative narration, it can also affect the basic emotional experiences of the reader. The more imagery connected to fundamental emotional experiences, the more universal the message should be to appeal to a wider range of readers. Therefore, nearly every woman, for example, understands the taking away of children by a utopian regime is an unnatural state; the very idea of such an act emotionally affects our primary instincts. The same applies when we read about characters who are prevented from expressing erotic love; we know

the character is losing the experience of something very important for a satisfying life. We know this based on our own nature.

Universals of human nature are present in literature because the universal characteristics of human nature have been produced by the Darwinian adaptive process of natural selection (Carroll, 117). For the main claims of this text, these words by Carroll are important:

Universals are made up of motive dispositions that combine in relatively stable and consistent ways. The same motive dispositions can also be elaborated and organized, at higher levels of cultural complexity, in ways that vary widely from culture to culture. For instance, all cultures have marriage, but some cultures are polygynous and some monogamous; some allow divorce, and some do not. All cultures have games, but not all cultures play whist or football. All cultures have language, but not all cultures are literate; not all literate cultures have produced highly developed forms of prose fiction; and not all cultures with highly developed forms of prose fiction have produced stream-of-consciousness narrative styles (ibid. 200–201).

If there are no universals in the world, it would be difficult to imagine understanding or, more importantly, identifying with a work of art. For instance, we experience fear, joy, sadness, disgust, etc., alongside the characters. Universality itself is reflected in the work, and its comprehension relies on recognizing the universals embedded within it.

In the introduction of this article, I outlined the issue of nature versus nurture. I then argued that biology and the environment should be symmetrical, and when this symmetry is disturbed, a conflict of interest occurs. The illustrative works confirm this statement. The re-education of individuals by a Utopia, the Party, laws, and the establishment mainly causes this fluctuation. A society created by some regime or a few individuals is an artificial product that, in order to enslave the populace, must weaken them by suppressing the basic components of their nature. Demagoguery itself masks this suppression with utopian slogans, and dumbed-down individuals no longer know that they should defend themselves. Individuals, commonly the more intellectually gifted characters, begin to describe a state of discomfort and consider rebellion. We need to mainly realise that the dominant one-way orientation of nurture has a defective impact on nature. Any dictate of the totality is dangerous to the natural well-being of individuals.

I would summarise these statements in four points:

1. The control and ruling of human society are executed through interventions into human nature.
2. Interventions with human nature lead to discomfort.
3. Discomfort subsequently leads to unrest, revolt, riots, strikes, murders, suicides, etc.
4. Finally, a system that intervenes in individuals' human nature will face threats.

These four points are not only a product of the analysis of fictional worlds but also apply to humanity's history. If the personality were as malleable as the behaviourist J. B. Watson claims, such strong, uncomfortable feelings and confrontations could not occur. Nurture is certainly not everything. Nurture should work with nature, not completely rule over it. Therefore, man is more of a biosocial being. I deliberately place the word *bio* first. Bio is the bearer of social qualities; without bio, there would be no culture or society. These social qualities are instantiated on

several biosubstrates.⁵ If some destructive social accident *parasitises* the biosubstrate, the biosubstrate may be weakened or even destroyed.

Conclusion: The Universal Essences of the Biosubstrate

I aimed to propose a method for enumerating the basic features of human nature. This method is based on recognizing discomfort, which we also use to identify features of human nature. In order for something to be qualitatively identical for all individuals, I propose thinking about the universal essence of the biosubstrate. Each biosubstrate that contains the same universal essences is classified into a common species.

The history of biology has seen disputes over the definition of a species. According to phylogenetic theories, biospecies have their unique historical fate; each species arises only once and dies out irrevocably. According to an older interpretation rooted in scholastic natural philosophy, a species is universal and has no clear space-time boundaries, the same as chemical elements, which occur an unlimited number of times in any part of the universe (Pavlinov 2023, 189). I see a compromise position in the case of historical essences, which are a combination of two perspectives: one is the specific DNA of a dog perspective, and the other is the evolutionary, historical perspective, according to which the essence of a dog is determined by its origin, by the fact that it comes from a wolf or a hyena (Sýkora 2006, 13; 2007). We could then consider the extinction of a species and its re-creation. The extinction of mammoths severed their phylogenetic tree. If we were to revive the mammoth genetically, the phylogenetic branch would arise, and thus, the mammoth species would be restored. The new mammoth's DNA, however, will contain both its mammoth essence and its ancestral history.⁶

In the final parts of the text, I employed the term *biosubstrate*, which comprises the basic essential traits or necessary universals that classify it as a species. The DNA code forms these essential traits, which is their material basis. This biosubstrate can receive accidents from nurture: speech, manners, art, etc. In the case of harmful accidents, the biosubstrate begins to pass into a state of discomfort and even decomposition. From the nature of recognising the causes that lead to discomfort, we can uncover the essential traits of the biosubstrate that make up its naturalness.

I have argued that the intersubjective message of works of art lies in their linguistic representation of universals shared by the human species. However, for a work of art and its main message to be understood, the reader must possess a certain level of maturity and the ability to engage in basic interpretation. Through reading literature from childhood, individuals gradually gain experience and learn to articulate states they were previously unable to express—states that

⁵ I do not want to bind myself to the ontological existence of the substrate; we can also advocate for the bundle theory and understand the biosubstrate as a stable cluster of biological universals.

⁶ In order to preserve the mammoth species, there can be no significant interference with its DNA. This is why even the company Colossal Biosciences on the resurrection of mammoths talks about cloning a 'mammoth' in quotes – 'a cold-resistant elephant with all of the core biological traits of the Woolly Mammoth' (<https://colossal.com/mammoth/>). In the case of creating new life forms in synthetic biology, there are considerations as to whether this would be a biological species or an artefact, since these life forms have no history behind them and their DNA is reduced to the necessary minimum of fulfilling their basic functions and the functions for which they were created (Tomašovičová 2019). Furthermore, human enhancement poses issues – blurring the boundaries between what is still human and what is not (Tomašovičová 2021); at present, we are already witnessing the connection of biomass with technology in bioart (Suwara 2021). Due to the intervention of science into nature, some questions regarding human nature are currently being re-evaluated, so this is not merely a problem of the future or science fiction novels.

initially surfaced only through bodily expressions. Similarly, the characters in the analyzed works undergo a development: from a vague sense that something significant is missing to a full consciousness and articulation of their dissatisfaction. While high-quality literature speaks of fictional worlds, these worlds are analogous to the world we live in.

Acknowledgements

I would like to thank Pavlina Ann Novosádová for proofreading and providing feedback on this article. I also thank the editor and anonymous reviewer who provided me with very helpful recommendations, which I have tried to incorporate into the text.

This article was written within the project VEGA 2/0163/22 – Literature in bioethics and bioethics in literature.

References

Bradbury, R. (2021): Fahrenheit 451, in Eller, J. R. (ed.) *Ray Bradbury: Novels & Story Cycles*, New York: The Library of America, 231–362.

Bregman, R. (2020): *Ludskost'. Optimistická história človeka* [from the Dutch original: De meeste mensen deugen; English translation: Humankind. A Hopeful History], Bratislava: N Press, s. r. o.

Brown, D. E. (2004): Human Universals, Human Nature & Human Culture, *Daedalus* 133(4), 47–54, available at: < jstor.org/stable/20027944 >.

Carroll, J. (2004): *Literary Darwinism: Evolution, Human Nature, and Literature*, New York: Routledge.

Clarke, A. C. (2001): *Childhood's end*, London: Gollancz.

Colossal Laboratories & Biosciences: *The Mammoth*, [online] [accessed 2024-12-15], available at: < <https://colossal.com/mammoth/> >.

Cook, R. (2000): *Abduction*. London: Pan Books.

Duschinsky, R. (2012): 'Tabula Rasa' and Human Nature, *Philosophy* 87(342), 509–529, available at: < jstor.org/stable/41682980 >.

Firchow, P. E. (1966): The Satire Of Huxley's 'Brave New World', *Modern Fiction Studies* 12(4), 451–460, available at: < jstor.org/stable/26278482 >.

Freeman, D. – Fox, J. J. (2017): Human Nature and Culture, *Dilthey's Dream: Essays on human nature and culture*, ANU Press, 1–24, available at: < jstor.org/stable/j.ctt1rfsrvv.4 >.

Fukuyama, F. (2002): *Our Posthuman Future. Consequence of the Biotechnology Revolution*, New York: Farrar, Straus and Giroux.

Hull, D. L. (1986): On Human Nature, *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association*, 3–13, available at: < jstor.org/stable/192787 >.

- Huxley, A. (1946): *Brave New World*, New York and Evanston: Harper & Row, Publishers.
- Goetz C. D. – Pillsworth E. G. – Buss D. M. – Conroy-Beam D. (2019): Evolutionary Mismatch in Mating, *Frontiers in Psychology*, 10(2709), available at: < [dx.doi.org/10.3389/fpsyg.2019.02709](https://doi.org/10.3389/fpsyg.2019.02709) >.
- Kluckhohn, C. – Murray, H. A. (1954): Personality Formation: The Determinants, in Kluckhohn, C. – Murray, H. A. (eds.) *Personality in Nature, Society, and Culture*, Second Edition, Revised and Enlarged. New York: Alfred A. Knopf Inc., 53–67.
- Kripke, S. (1980): *Naming and Necessity*, Cambridge, Massachusetts: Harvard University Press.
- Kroeber, A. L. (1986): On Human Nature, *Journal of Anthropological Research* 42(3), 215–224, available at: < [jstor.org/stable/3630028](https://www.jstor.org/stable/3630028) >.
- Öhman, A. – Mineka, S. (2001): Fears, phobias, and preparedness: Toward an evolved module of fear and fear learning, *Psychological Review* 108(3), 483–522, available at: < [dx.doi.org/10.1037/0033-295x.108.3.483](https://doi.org/10.1037/0033-295x.108.3.483) >.
- Orwell, G. (2020): *1984*, Planet eBook.com, available at: < <https://www.planetebook.com/1984/> >.
- Pavlinov, I. Y. (2023): *The Species Problem. A Conceptual History*, London: CRC Press.
- Plato (2000): *The Republic*, Cambridge: Cambridge University Press.
- Plomin, R. (2018): *Blueprint: How DNA Makes Us Who We Are*, USA: MIT Press.
- Ridley, M. (2003): *The Red Queen. Sex and the Evolution of Human Nature*. New York: Harper Perennial.
- Roughgarden, J. (2017): Homosexuality and Evolution: A Critical Appraisal, in Tibayrenc, M. – Ayala F. J. (eds.) *On Human Nature. Biology, Psychology, Ethics, Politics, and Religion*. London, San Diego, Cambridge, Oxford: Academic Press, 495–516, available at: < [dx.doi.org/10.1016/B978-0-12-420190-3.00030-2](https://doi.org/10.1016/B978-0-12-420190-3.00030-2) >.
- Seligman, M. E. P. (1971): Phobias and preparedness, *Behavior Therapy* 2(3), 307–320, available at: < [dx.doi.org/10.1016/S0005-7894\(71\)80064-3](https://doi.org/10.1016/S0005-7894(71)80064-3) >.
- Skinner, B. F. (1976): *About behaviorism*. New York: Vintage.
- Smith, J. E. H. (2015): *Nature, Human Nature & Human Difference. Race in Early Modern Philosophy*, Princeton, Oxford: Princeton University Press.
- Suwara, B. (2021): Toward a bioethical perspective for posthumanistic aesthetics: Bioart as an example, *World Literature Studies* 31(3), available at: < [dx.doi.org/10.31577/WLS.2021.13.1.7](https://doi.org/10.31577/WLS.2021.13.1.7) >.
- Sýkora, P. (2006): *Historické esencie a problém univerzálií* [Historical essences and the problem of universals], Pezinok: Vydavateľstvo Formát.

Sýkora, P. (2007): Are species-kind and species-individual talks equivalent?, *Academia.edu*, [accessed 2024-12-15], available at: < academia.edu/48805513/Are_Species_kind_and_Species_individual_Talks_Equivalent_ >.

Tomašovičová, J. (2019): Relevance of ontological and anthropological concepts in synthetic biology, in Sýkora, P. (ed.) *Promises and perils of emerging technologies for human condition*, Peter Lang, 123–138, available at: < dx.doi.org/10.3726/b15689 >.

Tomašovičová, J. (ed.) (2021): *The Blurring of Boundaries in Bioscientific Discourse*. Berlin: Logos Verlag Berlin.

Watson, J. B. (1970): *Behaviorism*, New York: W. W. Norton & Company.

Wells, H. G. (1896): *The Island of Doctor Moreau*, New York: Stone & Kimball.

Wells, H. G. (1923): *Men like Gods*, New York: Macmillan.

Wilkinson, R. (2010): Teaching Dystopian Literature to a Consumer Class, *The English Journal*, 99(3), 22–26, available at: < [jstor.org/stable/40503477](https://www.jstor.org/stable/40503477) >.

Workman, L. – Reader, W. (2004): *Evolutionary Psychology. An Introduction*, Cambridge: Cambridge University Press.



This work can be used in accordance with the Creative Commons BY-NC-ND 4.0 International license terms and conditions (<https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode>). This does not apply to works or elements (such as images or photographs) that are used in the work under a contractual license or exception or limitation to relevant rights.
