3. The Origin of Morality: Prosocial Factors in the Evolution of Primates

Free Moral Behavior

Why you are an anarchist by nature

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being accepted into a foreign tribe if they left their own, and they treated their own guests accordingly [27.P.140].

Thanks to the freedom of movement, people had the freedom of non-compliance, which in turn was the foundation of the freedom to reorganize the political structure of the community. In a sense, the authors say, the Hurons had formal leaders and real freedom, while most of us today have to make do with real leaders and formal freedoms. The Hadza people, in general, have no concept of command – although they are an exception, it seems that in most cases, people structure their societies in such a way that no individual can systematically give orders to another individual. Graeber and Wengrow conclude: "The freedom to abandon one's community, knowing one will be welcomed in faraway lands; the freedom to shift back and forth between social structures, depending on the time of year; the freedom to disobey authorities without consequence – all appear to have been simply assumed among our distant ancestors, even if most people find them barely conceivable today. Humans may not have begun their history in a state of primordial innocence, but they do appear to have begun it with a selfconscious aversion to being told what to do" [27.P.142].

”kings” of Paleolithic Europe were without exception dwarfs, hunchbacks, and giants, or that we are in fact dealing with a local prophet or shaman chosen precisely because of their weirdness. Secondly, we do not know whether the honors paid to these people upon their burial were shown to them during their actual lifetime [27.P.113].

There is no evidence to suggest that hereditary monarchy in any form is something naturally inherent in people as a principle of organization or as a logical continuation of some evolutionary processes. Generally speaking, humans are free to reject any forms of organization they do not consider useful and are free to switch between them depending on the situation. For example, the Lakotas and the Cheyennes would unite in a large settlement twice a year to better prepare for the bison hunt. During this period, a police force was appointed with full coercive power against anyone who dared to interfere with the enterprise. But as soon as the hunting season ended and all the rituals were completed, people returned to anarchic forms of organization, dividing back into small mobile groups [27.P.119].

Homo sapiens, it seems, always assumed that outside any explicitly imposed limitation they are inherently free. For example, the Huron tribe, perhaps not having heard of any laws, undoubtedly had ritualistic restrictions. What unites the Hurons with the Nuer and the Hadza people is that, unlike Europeans, they always preferred substantial freedom over formal freedom. The actual freedom, or more accurately, the foundation of all freedoms, as the authors suggest, is the freedom of movement. Unmediated by formalities that we are so eager to strictly bound each other to comply with today, this freedom, it appears, was a guarantee for our ancestors that in the event of any conflict, any individual could safely leave their home and join another tribe. The mutual aid that the European researchers named communism was the basis of autonomy for these people, as they could always count on

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many researchers to unjustly deny any imagination to people who lived tens of thousands of years ago, just as Europeans once denied the Indians their intelligence. It is by no means necessary for humans to rely solely on those behavioral strategies that have been left to them by the evolution of their biological bodies – this is perhaps the essence of being human. Many problems we were able to overcome specifically through cultural transformation. The ignorance and a lack of imagination on the part of some researchers should not become the basis for us to blindly accept that the dominant characteristic of the behavior of humans who lived thousands of years ago was the struggle for power and nothing else, especially when there is evidence to the contrary. It will not be possible to speak of evolution from small groups to tribes, from them to chiefdoms, and from chiefdoms to states if your starting point is groups that smoothly switch between these forms depending on their whims and habits [27.P.120].

If we insist that we should tie the idealized egalitarianism to some objective factor, then the emerging picture is tragic. Research, for example, by James Woodburn, suggests that genuine egalitarianism is only possible in societies of hunter-gatherers that rely exclusively on the gathering of resources day by day, without possibility of accumulating any kind of surplus [27.P.138]. This pushes the ideal of equality even further, making it unattainable and unimaginable in societies whose culture is built on the accumulation and management of surplus. However, the assumption of the predestined authoritarian hierarchy in human societies also turns out to be no more than a fantasy. Such discoveries as the beads found in a burial at Sungir (30,000 BCE), which required up to 10,000 hours to make, should not lead us to believe that the bodies on which they were found belonged to some kings or any kind of an emerging hereditary aristocracy. Firstly, these bodies always exhibit dwarfism, or gigantism, or gibbosity, or some other similar characteristic, which suggests either that all the

only useful and natural for their organisms is completely distorted and wiped out, to go to work, to voluntarily limit their sexual behavior, to drive cars, to go shopping, to fly into space, and to engage in evolutionary psychology, of course. It was well put by an anarchist Emma Goldman – "With human nature caged in a narrow space, whipped daily into submission, how can we speak of its potentialities? Freedom, expansion, opportunity, and, above all, peace and repose, alone can teach us the real dominant factors of human nature and all its wonderful possibilities"[1].

In the history of humanity, a sensitive attitude to freedom has been encountered long before the appearance of constitutions, world religions, and states. If coercion is always based on inequality, as it is usually presented, then our first question is – what is the relationship between freedom and inequality in human societies that have existed before the advent of writing? Anthropologists David Graeber and David Wengrow believe that the question of the egalitarianism of prehistoric people leads to misconceptions because it is posed within the framework of today's understanding of inequality, which is still defined, thanks to Adam Smith, Jean-Jacques Rousseau, and many others, by a purely quantitative measure of property. Graeber and Wengrow fight against the idealization of our past as either overly hierarchical or overly egalitarian and innocent. They also fight against the idea of progress that arises from these views, or at least always accompanies them.

There is every reason to believe that prehistoric people, like the Nambikwara tribe described by Levi-Strauss, could change their political organization from season to season [27.P.110]. The last hundred thousand years have allowed humanity to experiment with a wide variety of forms of political organization. The historicism and the tendency to worship authorities cause

[1] Goldman E. (1969) Anarchism and other essays. New York: Dover Publications.

Free Moral Behavior: Why You Are an Anarchist by Nature

Introduction

If freedom is not a natural need for our species, then it only remains for us to conclude that it is a spontaneous product of culture. There is still a desperate need for a theory of free behavior in philosophy. I do not mean freedom from causality, freedom as a political ideal, freedom expressed in a set of rights, or freedom as an existential burden of human condition. What I mean is a mechanistic description of an explosive psychological potential for actual observable resistance to limitation. This is what I mean by freedom.

I find myself obliged to fight morality as it is usually reduced to a system of prohibitions, which does not leave any theoretical possibility for someone to behave morally correct in a situation of complete freedom. Both freedom and morality become subjects of disputes and discussions only when they are violated. This means that for us they are already given as a naturally necessitated reality, and not as some distant ideas that, needing metaphysical justification, take their empirical origin in some kind of agreement or other such magical moment. Any attempt to prove the necessity of these principles only distorts their meaning. At most, we can confidently say that freedom and morality have practical value in moments when they are violated. What, then, is the original norm of free moral behavior for a human as a biological organism? This I hold to be the most relevant question for philosophy today.

It is customary to speak of freedom in relation to morality either in the language of political rights, in the language of metaphysical principles, or in the language of empirical science. We'll join the last tradition. When defining freedom, we

Freedom and Its Natural Environment

Once we get rid of the assumption of reactance being rooted in dominance, we are no longer obligated to deny the feeling of violated freedom of behavior to all living beings except those who, first of all, live in groups and, secondly, have strict hierarchies. Otherwise you'll never get to talk about animal freedom unless these specific animals have hierarchies. When a predator bites into the flesh of its victim, the victim does not resist to simply show who's boss. When a fly gets caught into a web, when a zebra is attacked by lions, or when primates see someone foreign entering their territory, we cannot assume that the behavioral options threatened in such situations are made desirable by the mechanisms of struggle for social status.

If you grab a cat by its tail, its fierce reaction will reflect one simple truth – for a cat, dragging a huge bald monkey by its tail is neither normal behavior, nor something that would have contributed to its well-being over millions of years of its evolution, nor something inherently pleasant or in any way desirable. In other words, such a situation and the acceptance thereof for a cat is not and should not be considered natural for as long as the cat is a living being striving to satisfy its needs. It is not natural for birds to spend their entire lives in cages, and for fish in aquariums. It is not natural for primates to live in zoos, cities, and prisons. It is unnatural for them to study in schools where they are punished for their "restlessness", to live in concrete houses with the people they do not know and do not wish to know, to serve in armies where everything that is

ing a link between PR and the body's defensive functions[8]. For explaining the negative aspect of reactance, any behavior related to opposing another living being would be much better suited. However, by far, not all defensive behavior is a struggle for status within the group.

[8] Clayton, R. B. (2022) On the psychophysiological and defensive nature of psychological reactance theory. Journal of Communication, 72(4), 461475. https://doi.org/10.1093/joc/jqac016

will, however, with some reservations, start from the division into positive freedom (for) and negative freedom (from), proposed by philosopher Isaiah Berlin in 1958. Berlin himself understood negative freedom as the condemnation of any coercion and the practice of non-interference. He understood positive freedom as the tyrannical coercion of persons to engage in certain activities in the name of the true nature of humanity – the idea born out of the troubled mind of Rousseau, as Berlin himself would define it. For Berlin, the question of freedom is a question of such a distribution that leaves all parties satisfied as much as possible – this is his ideal of negative liberty.

Speaking about the boundaries of non-interference, Berlin writes: "But whatever the principle in terms of which the area of non-interference is to be drawn, whether it is that of natural law or natural rights, or of utility, or the pronouncements of a categorical imperative, or the sanctity of the social contract, or any other concept with which men have sought to clarify and justify their convictions, liberty in this sense means liberty from: absence of interference beyond a certain frontier"[1]. I argue with this statement. In my view, principles such as natural right, natural law, and the social contract themselves distort the perspective on the relationships between people in society so much that it is no longer possible to speak of "liberty from," however paradoxical it may seem, even if the initial discussion is about non-interference. These principles are based on false pessimistic views of human nature, and therefore, in their context, freedom always acquired the status of a commodity, the status of an object that can be possessed, an object that can be taken away or delegated (distributed also). So, the principles on which someone will interpret non-interference have enormous importance for whether you are at all talking about freedom or, perhaps, about something like an ultimate set of rights, which

[1] Berlin, Isaiah. *Four Essays on Liberty*. Oxford: Oxford University Press, 1969. (Originally delivered as the "Two Concepts of Liberty" lecture, 1958.)

is how we propose to understand positive freedom, thereby dividing Berlin's understanding of negative freedom in two.

Philosopher Daniel Dennett proposed to consider the evolution of freedom as the evolution of the ability of man to consciously manifest and control a wider range of behaviors, thereby increasing our freedom from genetic determinism[2]. He considered the most successful short definition of freedom to be the definition of philosopher Nicholas Maxwell – "the capacity to achieve what is of value in a range of circumstances". Dennett also claimed that "human freedom, in part a product of the revolution begat of language and culture, is about as different from bird freedom as language is different from birdsong"[3]. By bird freedom, he meant the freedom of a bird to fly wherever it wants.

It is striking how quickly we notice in the definition favored by Dennett that very "freedom for" – achieving what is valuable does not mean doing it freely or choosing what to pursue by oneself. Moreover, freedom from genetic determinism suffers from the lack of possibility to be realized as such, for only a scientist can understand from the outside perspective that a certain species A, by demonstrating behavior B, frees itself from genetically predetermined set of behaviors C, the actual contents of which are never known in full detail to any scientist. Furthermore, the ability to control a range of behaviors is nothing but free will, not freedom as such – this thesis requires clarification.

Two factors hinder the definition of freedom: the philosophical category of free will and the political category of freedom as a collection of rights. Ultimately, Dennett and Berlin's concepts are not concepts of freedom as such, but rather exercises in smuggling moralism and riddles of responsibility into the very attempt to systematically pose the question specifically

[2] Dennett D. (2003) Freedom evolves. New York: Penguin Group. 361

[3] Dennett D. (2003) Freedom evolves. New York: Penguin Group. 361

state arises precisely at the moment of external limitation and is unimaginable without this limitation. The feeling of strangulated freedom does not have to be based on the feeling of one's status within the hierarchy – as your status is not directly linked to the maximum of your possible behaviors per se, but is merely linked to the perception of your behavior by others, and, of course, their willingness to cooperate with you based on how you're perceived. Aren't we, perhaps, attributing a little too much vanity to our distant ancestors? In short, yes – reactance might as well be a lot older than our sophisticated cognition, but not due to hierarchies.

Dominance is based on intimidation, aggression, and violence, which are indeed very ancient reactions accompanied by the release of corresponding hormones and so on. However, it should be clarified that the so-called alphas are not the most aggressive individuals either, but merely those who, by definition, are at the top of the hierarchy in the group – they, according to research, on the contrary, have the greatest empathy and a tendency to prevent the development of conflicts[7]. The higher the level of empathy in an individual primate, the higher we find it within the hierarchy of its group. Thus, reactance, even understood as a form of justified anger, does not necessarily owe its origin to the struggle for high status within the group. If reactance could be fully described as aggression or a struggle for status through violence, then, naturally, it would be necessary to study it on corresponding examples – examples of aggression and violence. However, these are by no means necessarily associated with the limitation of behavioral options. There is also information about increased heart rate, greater activation of the corrugator supercilii muscle, and increased skin conductance levels in people in a reactance state, indicat-

[7] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

behavior in the same species, which we will discuss later[6]. Secondly, the reaction to any kind of restriction has a wider range of possible reasons than just conflicts tied to the dominance hierarchy. Meanwhile, evolutionary psychologists who are in great favor of the right-wing politics might just admit already that, in their view, if a stone had any consciousness, then after being slightly lifted above ground this stone could rightfully consider itself to be an alpha male, much like any falling stone, according to Schopenhauer, falls of its own free will. "All social relations are manifestations of the struggle for power" is as unfalsifiable a statement as "the universe is will." To trust these people to study the mechanisms of freedom is the same as asking a stock market analyst to give a lecture on gift economies. And thirdly, for various reasons, not all observed behaviors of people today actually satisfy the same functions for which these behaviors were once evolved and established. This is perhaps the broadest possible comprehensive criticism of modern evolutionary psychology.

When we observe elements of reactance in behavior during a struggle for status, it does not mean that we should attribute the emergence of reactance to the constant repetition of such situations, just as we would not attribute the emergence of the grasping reflex in humans to the supposed fact that our ancestors, in order to survive, constantly participated in arm-wrestling competitions. Of course, the feeling of being at the top of all others can be a way to satisfy the psychological need for freedom – this does not mean that we should explain the presence of the latter by an evolutionary necessity in the former. Life is full of contradictory evolutionary necessities – some of them are compatible, but are simply of different origins. Reactance does not occur due to anticipation – this

[6] Sapolsky R. M., Share L. J. (2004) A Pacific Culture among Wild Baboons: Its Emergence and Transmission. PLoS Biol 2(4): e106. https://doi.org/10.1371/journal.pbio.0020106

about freedom. Freedom is the ability to avoid making undesirable immoral decisions for Dennett; and in Berlin's writing we encounter discussions about whether the freedom to do evil is freedom at all. The freedom which Dennett offers is not freedom, but a set of cognitive abilities and cultural practices.

What I'm doing is I'm breaking away from both the philosophical tradition (that uses questionable methods like appealing to metaphysics and ethics) and the semi-philosophical tradition that weaves rationalism into biology. I say: there is no free will, but there is freedom of action, for which our organisms fight to the death against what we call our will. I deal with questions of moral behavior separately. Only in this way can something be confidently said about these two aspects of behavior (freedom and morality) without one being subordinated to the other.

When talking about the absence of free will, I refer to the formulation usually given by the American neuroendocrinologist Robert Sapolsky – there is simply no part of the brain that provides people with autonomy from the determinism of their bodily processes: no homunculi, no chance, no divine sparks, no magical emergent properties. Most choice situations you might hear about in free will debates I would rather consider illustrations of the problem of moral consistency and cultural conditioning – mind you, the options in these choices always have to do with either self-preservation or some form of mutual aid. If there isn't a way for us to stay morally consistent to the point of complete logical coherency of our actions, it does not mean that inventing a metaphysical chooser is going to add some moral meaning and responsibility to where there simply isn't any. If you help someone in need of help, I would much rather try to explain your behavior as a natural occurrence, than, for example, ask you about your ethical standpoints.

When it comes to the origin of morality, many have tried to protect common sense from the attacks of biased pessimism on

the subject. One of the most relevant authors is the anarchist philosopher Peter Kropotkin. In his work "Mutual Aid: a Factor of Evolution," he provides many examples indicating the evolutionary advantage of cooperation over mutual struggle. There always, he says, "were writers who took a pessimistic view of mankind. They knew it, more or less superficially, through their own limited experience; they knew of history what the annalists, always watchful of wars, cruelty, and oppression, told of it, and little more besides; and they concluded that mankind is nothing but a loose aggregation of beings, always ready to fight with each other, and only prevented from so doing by the intervention of some authority"[4]. Kropotkin's arguments, and indeed the achievements of biological science since then, have by no means shaken the authority of such thinkers as Thomas Hobbes. The myth of the natural state in which people lead an endless war of all against all is still alive today. The idea of impossibility of natural freedom and natural morality has firmly taken root in people's minds – man to man is a wolf, an irreconcilable opponent, and any kind of freedom is and should be limited to what is allowed on paper and ensured by the instruments of organized violence. Freedom, we are told, was invented by humans, it is as much a subject of cultural luxury as morality. I assume this to be unscientific and false. Fortunately, today I have enough evidence to hold such a position.

The origin of morality is a serious fundamental question that must be approached separately from the consideration of questions about the autonomy of morality from specific cultural phenomena. Otherwise, there is always the temptation to raise the stakes and oppose absolute evil with absolute good. Take, for example, the cases when public figures like the American journalist Christopher Hitchens, referring to examples of altruism, have attempted to prove the autonomy of morality

[4] Kropotkin, Peter. *Mutual Aid: A Factor of Evolution.* London: Heinemann, 1902

cite experiments that completely fail to reflect this aspect, that is, to cite the experiments that have nothing to do with dominance;

Thirdly, to prove the unconsciousness of any psychological reaction in humans, and in our farthest ancestors, with just two examples that remotely resemble its single aspect in the behavior of rats and pigeons is simply absurd.

The information obtained, says Almeida Neto, strongly supports the view that the mechanism responsible for PR has an ancient evolutionary past. Such behavior, he believes, is most likely unconscious and automatic, "like the workings of any body organ." Biologically rooted resistance to change in behavior, he continues, can be expected in situations where the individual feels compelled to act in a certain way, or in situations where the individual feels that others are manipulating them, since being manipulated is a sign of low social status. From the conclusions of Almeida Neto, one might assume that the behavior of our distant ancestors mostly consisted of setting up numerous intricate traps and manipulations for each other; and that in an endless counteroffence to these manipulations our ancestors spent their short brutish lives as if they were episodes of a political thriller? Here, the actual theory of PR, along with all its factors, turns into dust, so I abstain from further explaining this researcher's position.

In my view, the issue is not even with the form of the argument itself, but rather with the fact that almost any aspect of "normal" human behavior can be attributed to the pursuit of status within a dominance hierarchy, which is what most of the so-called "evolutionary psychologists" naturally do to begin with. The following criticism of such generalizations I consider to be sufficient. Firstly, group behavior is plastic. The dominance hierarchy and its unique characteristics in different species are a special case of culture – the mode of behavior which is constructed depending on the environment. In nature we encounter diametrically opposite ways of organizing group

hierarchy[5]. He explains that even today in human societies, people who are easily influenced have a low dominance status and are called "pushovers" (for that he even refers to the Merriam-Webster dictionary). Throughout human evolution, he says, acting against or ignoring external recommendations from peers has meant sending a dominance signal within the group – "it is possible that acting contrary to direct argumentation for change from an interventionist, which is avoided in MI, is adaptive in the context of establishing and maintaining social hierarchies favorable to one's survival and reproductive success." Almeida Neto emphasizes that the ability to build interpersonal hierarchies has become a key step in the evolution of humans as social beings.

He then asserts that reactance (as a reaction to the threat of status within the dominance hierarchy) is entirely unconscious and does not depend on higher cognitive functions unique to humans. Reactance, he claims, is even observed in animals, and he cites two studies where pigeons and rats have demonstrated such behavior that helped preserve the freedom to choose different behaviors. Both studies, he says, demonstrate a greater preference for selecting the options that are related to choice as if it was one of the factors of reinforcement. Here everything is wrong up to bottom.

Firstly, the choice as a form of reinforcement does not explain either the negative or positive aspects of reactance (in the case of reactance in humans, a certain option is valued higher precisely because of its obvious limitation or prohibition, not because it simply exists and promises to offer more than other options);

Secondly, if reactance is such an interpersonal phenomenon, rooted in the struggle for dominance, then why

[5] de Almeida Neto, A. C. (2017) Understanding Motivational Interviewing: an Evolutionary Perspective. Evolutionary Psychological Science 3, 379-389. https://doi.org/10.1007/s40806-017-0096-6

from religion. In one of the debates, Hitchens says: "There are people who will, when the grenade is lobbed through the window, throw themselves on it before it can blow up – it does happen. There are people who die under torture without giving away the whereabouts of their comrades. There are people who go do bomb disposal work" <…>"It does happen, it always happened, its common to every known human society, it's a part of every heroic narrative, of every known society that has ever been. Those who do it are honored, they are sung, as we say, in the times when there was no literal record. And it doesn't require divine sanction or permission. It is, we're proud to say, if not innate in us – we'd be too humble to say that – it's something we can all aspire to. But we do not get it from big brother. If we did, that would degrade it – that would mean it wasn't heroic, it wasn't brave, it wasn't individual, it wasn't exemplary, it didn't deserve anything, because it would be in a hope either of a reward from big brother or for fear of punishment from it, it would abolish morality, it destroys ethics"[5]. There is a big trick in Hitchens' words. Such behavior certainly deserves all praise, but to cite it when talking about the autonomy of morality from religion is the same as, to try and prove the existence of artists in the world, by pointing only to the great artists of the past, and only to the most outstanding ones.

Of course, moral norms in any culture are constantly enriched by idealized examples of heroic self-sacrifice, but what interests us is the question of the origin and structure of the very mechanisms by the grace of which our cultures absorb prosocial norms in the first place. We provide arguments for the position that altruism cannot be limited to situations where prosocial behavior necessarily implies sacrifice. Otherwise, by proving the autonomy of human morality in this way, we shoot

[5] YouTube. (May 24, 2011) Does God Exist Frank Turek vs Christopher Hitchens [video file], https://youtu.be/S7WBEJJlYWUsi=1MMPUsGKhPi6wx_W (access date: 03/29/2025)

ourselves in the leg. If we necessitate sacrifice we thus unfairly separate morality from the vital catalyst of beneficial behaviors that nature has graciously left us as a guiding star for organizing all of our activities – from pleasure.

egalitarianism, but surely, for the tendency of human beings to violently take down oppressors when they emerge – first with gossip and disapproval, then with collective measures. Anything reminiscent of dominant behavior of alpha males or females in humans can evoke a certain form of righteous anger, which is, as he writes, sometimes called reactance[4]. Haidt interprets reactance here as a feeling caused in an individual by an attempt of an external authority to control their behavior, where what is forbidden grows to be desired even more strongly. However, firstly, Haidt does not provide any evidence that reactance arose from such conditions, and secondly, he understands reactance a bit differently than it is presented in the work of Brehm that he himself refers to (and generally differently from how it is presented in relevant research). Righteous anger is still not reactance. The connection between PR and interpersonal power pressure is obvious, but is the struggle for power an exhaustive explanation of PR? I don't think so.

There is a view that reactance as a human trait has evolved partly as a means of preserving and maintaining dominance hierarchies as such. If during therapy, one directs the client's thinking towards independently articulating dissatisfaction with their negative behavior, using the so-called "change talk" to have the client themselves decide to change their behavior (through active listening, open questions, affirmations, and summarizing statements), then the effectiveness of therapy is higher than in those cases where the client is simply told what specific behavior they need to change. This approach is applied in the technology of Motivational Interviewing, or MI.

Researcher Abilio de Almeida Neto believes that the tendency to act against communication from others (as he interprets reactance) has an evolutionary function – it is a signal that carries information about the status in the dominance

[4] Haidt, J. (2012) The Righteous Mind: Why Good People Are Divided by Politics and Religion. New York: Pantheon Books.

attacks the organism's access to an object, the organism begins to consider this object to be more valuable, as there is obviously competition for it, and as a result, the value of the behavior in question increases. The value of all other behavioral options fades in comparison with the value of the one over which others are willing to fight. But this is not even a natural competition anymore – it is a mere conflict for the sake of conflict, and a repulsion of everything for which there is no competition. Would evolution equip us with a mechanism to fight for everything for which we observe competition, regardless even of the usefulness of the object itself? Very unlikely. I'd rather assume that reactance is a byproduct of the initial pursuit of what is useful for the gene – not of anything for which there is an apparent competition.

It has been proven that in interpersonal communication, reactance decreases when the individual who gives an advice is found to be similar to the subject. For example, if in an experiment where the literary creativity of the respondent is to be evaluated by a second person, the respondent knows in advance that they share the same names, birthdays, or have congruent values, then the respondent will perceive the criticism positively and with enthusiasm, unlike in the cases where there is no similarity at all, and where criticism will only evoke reactance[3]. Therefore, repulsion is intensified proportionally to how alien and different the restrictive authority appears to us. We always treat our kin with generosity.

Jonathan Haidt, an expert in moral psychology, believes that the opposition of freedom to oppression arose in humans as a reaction to the challenges posed by the life in small communities where individuals could abuse their status, intimidate and coerce others. Haidt builds the case, if not for the innate

[3] Silvia, P. J. (2005). Deflecting Reactance: The Role of Similarity in Increasing Compliance and Reducing Resistance. Basic and Applied Social Psychology, 27(3), 277284. https://doi.org/10.1207/s15324834basp2703_9

1. Anthropology of Slavery: David Graeber and the Legal Foundations of Freedom

Morality and Freedom of Action

The way we think about freedom is that it justifies the responsibility we impose on each other. More precisely, only rational beings are considered responsible, who, thanks to their ability to "think," are capable of "knowing" some "state of affairs." Thinking as a primary principle is used by many as a basis for moral behavior. The autonomy of thinking, it must be said, is not a matter of preference. Without fulfilling the condition of autonomy, the concept of thinking itself has no content. We rely on the responsible behavior of others exclusively by assuming that they think independently when making decisions. It is in this meditated way that we endow them with individuality. In everyday life, the decision is understood by us as an act, not as a mechanical consequence of a finite set of causes. Similar considerations can be found even in Hegel: "People often say 'think for yourself' as if it were something of real significance. But no one can think for another, any more than he can eat or drink for him; the expression is therefore pleonastic "[1].

Heteronomy of the will is, therefore, impossible – the thinking self is always the one who sets for itself all of the imperatives that it follows, down to the last. When it obeys the outside authority, it does so, again, with accordance to its own maxim of obedience to that authority. Even from the most uncontrollable natural tendencies of behavior, the thinking self

[1] Hegel, G. W. F. *Hegel's Logic: Being Part One of the Encyclopaedia of the Philosophical Sciences*. Translated by T. F. Geraets, W. A. Suchting & H. S. Harris, Hackett, 1991

the community of individuals to be a single organism, a unified undifferentiated mass, then we must assume that we are dealing with individuals who feel their individuality perfectly well through appreciating the boundaries of what the body itself considers to be tolerable.

There is an opinion that the Reactance theory of Brehm can be justified by means of general theory of evolution, but only halfway. The justification is as follows – the struggle of an organism for the maximum amount of everything (food, partners, territories) increases the chances of its genes to continue, which is why we observe an increase in value of behavioral options that are being taken away, in other words, we observe the mechanism of restoring their possibility. But how do we explain the decrease in value of those options that remain untouched, especially considering that this second effect manifests itself even more intensely than the first[2]?

Of course, one may argue and say that if switching to another type of food poses no danger to healthy metabolism, for example, then the lost diversity is not so crucial for natural selection. Among primates, we also, although rarely, but do still sometimes encounter monogamy. And it is not to say that humans are territorial animals compared to, for example, lions or tigers. In other words, natural selection is arbitrary – if genes can find a better way to ensure their own future than forcing their carrier to fight for each and every behavioral option every time, then genes will blindly choose the better way. However, the complexity and intricacy of the human body clearly shows that nature always prefers to play it safe, meaning to always maximize.

Perhaps any external encroachment on possible behavior is associated with a direct encroachment on an object that could potentially be obtained through this behavior. When someone

[2] Roes F. (1993). Reactance theory and Darwinism: an example of theoretical reduction. International Society for Human Ethology. 8(2), 6-7.

The Question of Evolutionary Origin

In the 19th century, philosopher Mikhail Bakunin have said, ”Every living being strives for well-being and freedom, and to hate one’s oppressor or robber one does not even have to be a human being – it is enough to be an animal”[1]. Can we today establish the causes that relate our aversion to restrictions with the same phenomenon in other animals? This is indeed a clear path to coherently establishing our innate need for freedom, so let’s see where we currently are in terms of giving a proper evolutionary account of reactance.

If we were asked idly to propose the most plausible version of the origin of freedom, we would first point to the most obvious distinction, namely, that A≠B. An organism A is not an organism B. If nature had in mind for the two organisms to interact always in such a way that one would entirely direct and govern the other, it wouldn’t have gifted both of them with independent mechanisms of regulating their own behavior. If the functions they perform individually could – or for some reason should – be performed in the strictest mutual agreement, we would observe rather a single organism, and not a multitude of independent ones. To submit to the power of another means to serve the interests of the strong, to be the continuation of their body, the instrument of their pleasure, to be their organ, their limb, but never an independent being. And since we are not ready to renounce this simplest division, not ready to consider

[1] Bakunin, M. (1990). *Statism and anarchy* (M. S. Shatz, Trans.). Cambridge University Press.

is radically separated already by the mere possession of the ability to reason about these tendencies, to observe patterns within them, and, in general, to perceive its own behavior as a sequence of acts, each of which is consciously recognized as unique and irreversible. By shedding responsibility for violating its own imperatives, the self acknowledges in the act of ”free will” the unconditional authority of its biological basis, surrenders to that authority – and it does so, again, in perfect accordance with its own freely made decision.

Russian philosopher and cultural theorist Mikhail Bakhtin have suggested to understand responsible act in the following way – ”The responsible act alone overcomes any hypotheticality, for the responsible act is the realization of a decision – already hopelessly, irreversibly, and irrevocably; the act is the final outcome, a comprehensive and final conclusion; the act draws together, relates, and resolves in the single and unique and already final context the meaning and the fact, the general and the individual, the real and the ideal, since everything enters into its responsible motivation; in the act there is a transition from mere possibility to uniqueness once and for all”[2]. From this perspective, one must assume, what allows us to coexist with our own nature – however gentle or vicious – is the actualization of the self in the form of self-control, the immediate realization of the irrationality of one’s behavior, the feeling of the last frontier of responsibility for all living beings, including oneself, for one’s nature, and for its unreasonable desires. These presuppositions constitute the core idea for the moralization of rationalism.

Rationalism is closely linked to moral behavior or, at the very least, to the responsibility that civilized people bear towards themselves and each other. Isaiah Berlin writes: ”the

[2] Bakhtin, Mikhail M. *Toward a Philosophy of the Act.* Translated by Vadim Liapunov, in *The Bakhtin Reader*, edited by Pam Morris, 32–53. London & New York: Arnold / Continuum, 1994

'positive' conception of freedom as self-mastery, with its suggestion of a man divided against himself, has in fact, and as a matter of history, of doctrine and of practice, lent itself more easily to this splitting of personality into two: the transcendent, dominant controller, and the empirical bundle of desires and passions to be disciplined and brought to heel. It is this historical fact that has been influential. This demonstrates (if demonstration of so obvious a truth is needed) that conceptions of freedom directly derive from views of what constitutes a self, a person, a man"[3].

Our tragedy is that we are now accustomed to speaking about freedom almost exclusively within the framework of this one specific anthropological paradigm, which has placed the ideal of 'reason' at the very top of our intellectual discussions, thus making reason into a necessary condition for freedom and responsibility. It never occurs to people that they are free by nature, that the intermediary of reason is not a necessity for freedom, that freedom does not need to be proven using metaphysics, appeals to compassion, divine institutions, political doctrines, constitutions, and philosophical arguments against scientific determinism. The ability to feel this freedom, to feel its lack or complete absence, originates, like all of our other abilities, from the very specific and very measurable conditions of existence and survival of living organisms throughout natural history. Bergson wrote that the role of philosophy is to commit violence against reason – this is what we're going to do now.

[3] Berlin, Isaiah. *Four Essays on Liberty*. Oxford: Oxford University Press, 1969. (Originally delivered as the "Two Concepts of Liberty" lecture, 1958.)

this in the first place? Where this psychological attraction to freedom comes from?

We are fully equipped to defend our freedom of behavior. The resistance to external threats for living beings seems to be a natural requirement that the corresponding mechanisms, stress responses, and the physical ability to commit deadly violence are meant to satisfy. The limiting of freedom can thus be understood as an indirect threat, when we mentally imagine the worst possible outcomes of events, or once we have learned to do so, we expect the worst possible outcome in any external limitation and so we react to it immediately. A verbal prohibition is not an actual limitation in itself. We are merely activating our ability to plan and consider its interpersonal implications, how this prohibition will affect the behavior of others towards us. Strictly speaking, when we encounter a prohibition, we imagine not the limitation of freedom of action in general, but the limitation of freedom of action in the eyes of others – the limitation of our freedom in other people's minds.

Is there any measurable kind of reactive behavior in situations where the source of the limitation is inanimate, that is, when the final choices and preferences of an individual are influenced, for example, by completely random impersonal difficulties that they have encountered while interacting with an object and which have set them against this object, etc.? Unfortunately, no specific studies on this topic have been conducted so far, but we can already make some assumptions: will we not in such cases observe the same irritation and the same attempt to get rid of this irritation? Much of our understanding of freedom depends on the answer to this question, which is why the development of a corresponding experimental method seems very desirable. It is also very important to establish how the factor of the subject's awareness of external observation of their reaction affects the level of reactance – both in the case of intersubjective limitation and in the case of impersonal limitation.

freedom truly priceless. If an individual is free not on the basis of the obviousness of freedom, then he is free, at least, to the extent to which the briefness of his life is evident to him. A purely positive activity will always be recognized as excessive and futile, for in our nature and culture, everything carries this cursed mark of lack and shortage – in food, in others, in the power over them, in space to live, and in that very thing which constitutes the ultimate, relentlessly distancing goal of any interest and curiosity. And here lies my pessimistic account of humanity – if you take away their enemy, they will invent one, just to avoid living a hollow, average life, in which any positive change is doomed to feel excessive and meaningless. The joy of conquest and the overcoming of obstacles is a common temptation, under the influence of which we'll never start to think objectively, to strive for what is useful, and not for what is great.

Reactance as a phenomenon helps us better understand the effectiveness of reverse marketing and seduction strategies. If the choice situation is constructed in such a way that one option will stand out as most advantageous among the others due to its artificial limitation and taboo, we can predict the choice of this option with high probability. If you know in advance about someone else's high level of PR, it will be easier to convince or seduce them by taking advantage of their tendency to restore freedoms that you have artificially limited for them. On the one hand, reverse pre-suasion seems exotic, but on the other hand, it is obvious that in many respects culture exploits this very property of our psyche perfectly well – most of the topics that interest us the most are always tabooed in one way or another. It is difficult to establish the exact nature of this correlation. Certain images are tabooed because they are often valuable to most people and constantly cause conflicts between them, or they become valuable specifically as a result of these taboos. It can be confidently said that for the people with high reactance, the latter will seem more probable. But how do people have

Slavery, Honor, and Legislation

According to an anarchist anthropologist David Graeber, Western European society, ever since the Roman Empire, has lost the natural understanding of freedom (if it ever even existed discretely, as a concept), and distorted the meaning of this word under the pressure of the bureaucratic hell to which Roman law had to adapt, thus turning freedom into an object of property and political power. This conclusion is reached by Graeber in his "Debt: The First 5000 Years of History." It's overall difficult to even grasp the very formulation of the question about debt that Graeber undertakes. I put it in this way: "How does the phenomenon of debt relate to the functioning of coercion in all known human cultures?" The deeper we delve into the internal logic of his research, the more grounds we have to assert that at the foundation of Western European "Reason" lies in complete opposition to freedom.

From an anthropological perspective, the foundation of slavery is the separation of a person from their social-kinship connections upon their abduction[1]. Slavery is the logical conclusion of the expulsion of a person from society: "Groups like the Aro Confederacy represent an all-too-familiar strategy, deployed by fascists, mafias, and right-wing gangsters everywhere: first unleash the criminal violence of an unlimited market, in which everything is for sale and the price of life becomes extremely cheap; then step in, offering to restore

[1] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

a certain measure of order – though one which in its very harshness leaves all the most profitable aspects of the earlier chaos intact. The violence is preserved within the structure of the law. Such mafias, too, almost invariably end up enforcing a strict code of honor in which morality becomes above all a matter of paying one's debts <…>If we have become a debt society, it is because the legacy of war, conquest, and slavery has never completely gone away. It's still there, lodged in our most intimate conceptions of honor, property, even freedom"[2]. Graeber believes that slavery, due to its very ability to turn people into abstract concepts, played a key role in the emergence of markets.

The story of Equiano, a freed slave who himself then engaged in the slave trade, is illustrative. It refutes, for example, the unfounded assumption of Holbach that the slave has no conception of honor [15.P.374]. On the contrary, it is precisely this conception that makes slavery possible. A man of honor living in a culture of honor is unable to reject the institution of slavery, as slaves are those who lose honor as a last resort to save their lives. There is nothing left but to submit to a system based on honor if one wants to succeed in it. The use of money was and is an acknowledgment of the state's ability to cause the greatest possible harm to the greatest possible number of people in the shortest possible time. In other words, money functions through violence and through the threat of violence for non-compliance – "Some of the most genuinely archaic forms of money we know about appear to have been used precisely as measures of honor and degradation: that is, the value of money was, ultimately, the value of the power to turn others into money "[3]; "At first sight it might seem strange that the honor of a nobleman or king should be measured in

[2] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

[3] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

The existing need to restore lost freedom makes people resist limitation at all levels, which places even more of those same unpleasant thoughts into our cognitive life – in other words, they borrow their unpleasantness directly from what is condemned in society. It's good when the individual immediately reacts to the limitation, since it is such a big priority, but what if the consequences of such a reaction promise to be fatal? This is why I say that, in the existentialist sense, the devil is a repressed kind of freedom. Freedom that the individual lacks, freedom for which he does nothing externally. Any conscious prohibition only feeds such ideas. This myth is firmly rooted in Western European consciousness. As Spengler writes, "The great myth of the Renaissance was precisely this, and without it we should never understand the luxuriant, truly Gothic power of this anti-Gothic movement. Men who did not feel the Devil very near at hand could not have created the *Divina Commedia* or the frescoes of Orvieto or the ceiling of the Sistine Chapel. It was the tremendous background of this myth that awakened in the Faustian soul a feeling of what it was. An Ego lost in Infinity, an Ego that was all force, but a force negligibly weak in an infinity of greater forces; that was all will, but a will full of fear for its freedom"[7]. Although variably expressed, the correlation might be universal. Temptation is only there when something is denied – and, when denial occurs voluntarily, and for long enough, such fearful obedience breeds weakness, which reinforces the will to get even using extreme measures.

For any activity to have meaning the heat of resistance is essential. Nothing motivates action more than the awareness of obstacles and limitations, the greatest of which is death. Death and freedom have always gone hand in hand. It is not the fear of death, but rather its mature and cold realization that makes

[7] Spengler, Oswald. *The Decline of the West: Volume II — Perspectives of World-History*. Translated by Charles Francis Atkinson. London: George Allen & Unwin; English edn (vol. II) 1928

hand washing, painful concern about the risk of harming others, excessive preparedness – all this is a pathological distortion of the mechanisms of avoiding harm[4]. When someone has unpleasant thoughts about the possibility of harming others, this is not evidence of their moral decay, but rather evidence of their deep concern about such a possibility. The brain burdens you with these thoughts precisely in an attempt to prevent such behavior.

Public regulations serve as an external authority that severely limits the spectrum of acceptable actions and thoughts. Sociality is woven from prohibitions. That is why, for example, Nietzsche saw Schopenhauer as Mephistopheles among a crowd of hypocrites who suppress their true opinions and desires – "Speaking the truth openly seems to these people to be an expression of malice, for they hold that preserving their halfnesses and daydreams is a duty of humanity, and they think that only by being evil can one destroy their plaything"[5]. Thus, the father of lies turns out to be the only one who has a stake in the truth. Many virtues are derivatives of demonization. For example, conscience is nothing but a super-ego, an internalized set of external social demands that the individual rationalizes and, as a result of that, considers to be the set of his own moral principles: "Conscience is a slave driver, put into man by himself. It drives him with harshness and cruelty, forbidding him pleasure and happiness, making his whole life the atonement for some mysterious sin"[6]. Conscience per se is the product of a distorted Protestant view of human nature.

[4] Brune, M. (2006). The Evolutionary Psychology of Obsessive-Compulsive Disorder: the role of cognitive metarepresentation. Perspectives in Biology and Medicine 49(3), 317-329. https://dx.doi.org/10.1353/pbm.2006.0037.

[5] Nietzsche, Friedrich. *Untimely Meditations*. In *The Complete Works of Friedrich Nietzsche*, vol. 2. "Schopenhauer as Educator." Translated edition (e.g., by R. J. Hollingdale or others)

[6] Fromm, Erich. *Escape from Freedom*. New York: Farrar & Rinehart, 1941

slaves, since slaves were human beings whose honor was zero. But if one's honor is ultimately founded on one's ability to extract the honor of others, it makes perfect sense. The value of a slave is that of the honor that has been extracted from them"[4].

So, what happened in Ancient Rome? Graeber cites the research done by Orlando Patterson, which proves that the ancient Roman legal concept of complete private ownership originates from the bureaucratization of slavery – "One can imagine property not as a relation between people, but as a relation between a person and a thing, if one's starting point is a relation between two people, one of whom is also a thing. (This is how slaves were defined in Roman law: they were people who were also a res, a thing.)"[5]. The word dominium (complete ownership) appeared in Latin only during the late Republic, when a flood of slaves was poured into it. Dominium comes from the word dominus (master), which, in turn, originates from domus (house) – "Domus overlaps somewhat in meaning with familia, 'family' – but, as proponents of 'family values' might be interested to know, familia itself ultimately derives from the word *famulus*, meaning 'slave.' A family was originally all those people under the domestic authority of a *paterfamilias*, and that authority was, at least in early Roman law, conceived as absolute"[6]. Due to the widespread presence of slaves, it can be assumed that the first sexual experience for many Romans was with slaves, that is, legally speaking, with defeated enemies – "Over time, this became more and more of a legal fiction – actual slaves were much more likely to have been paupers sold by parents, unfortunates kidnapped by pirates or bandits, victims of wars or judicial process among barbarians at the fringes

[4] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

[5] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

[6] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

of the Empire, or children of other slaves. Still, the fiction was maintained"[7]. Initially, slavery is favored by the ruling class as a military precedent of capturing individuals from foreign societies. Then slavery is solidified in cultural and social practices, creating a constant need for new slaves. Now they're being taken from the poor of Roman society itself – anyone who can be stripped of their human status due to conditions of the same effect as the absence of friends, relatives, and acquaintances. Legalized slavery creates a niche that at some point will legally require debtors, their children, and women from poor families to fill up with themselves, as did happen in Rome, millennia after it happened also in Mesopotamia.

The most insidious consequence of Roman slavery, according to Graeber, was that through Roman law it had distorted our understanding of human freedom. To be free in Ancient Rome meant not to be a slave. A slave freed became a citizen, with all the obligations that came with this status. By the second century, the situation had changed – "Jurists gradually transformed the definition of *libertas*, until it became virtually indistinguishable from the power of the master — that is, the right to do anything except what cannot be done"[8]. This, in turn, destroyed the difference between private property and political power, as power was based on violence. This understanding of freedom was preserved in the Middle Ages as well – the freedom of the lord to do anything with his property. It is in this distortion that David Graeber sees the main problem – "This is a tradition that assumes that liberty is essentially the right to do what one likes with one's own property. In fact, not only does it make property a right; it treats rights themselves as a form of property. In a way, this is the greatest paradox of all. We are so used to the idea of 'having' rights – that rights are

[7] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

[8] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

example, is very much capable of liberating an individual as well. Philosophy is reflection on the otherwise uncritically perceived behaviors, beliefs, and prejudices. By taking a critical position of an observer relative to ourselves and to our lives through philosophy, we, ideally, become free from subjectivity for a moment, free from the direct influence of emotions, as we now hold them in mind as a given object for consideration and rational influence. Both these freedoms are negative – the second merely substitutes real liberation with a "spiritual" one.

We can now speculate a little bit about the natural origins of the devil as a myth (the evil deceiver and tempter). The human experience of "I want this, I can't have it, and it makes me want it even more" is now much more transparent to us. The evil spirit is a neglected case of OCD, that is, a set of obsessions that the individual cannot suppress because they perceive these obsessions as uncontrollable and inevitably leading to action. The high PR exacerbates these processes, turning the life of a freedom-loving individual into an existential hell. The individual begins to distinguish their own thoughts from these obsessive thoughts, but the obsessive thoughts never cease to be their own (although they do feel too "bad" to be so). The same could be said of reason or mind, that we so hopelessly objectify and distinguish from the body (for it feels too sophisticated and "good" to be explained mechanistically). Oh, the woe of owning up to your nature – endless!

OCD can be a consequence of trauma or of perfectionism as a personal trait, however, the natural cause of the emergence of OCD as a phenomenon is still unknown. There is an opinion that in the evolution of the psyche, OCD played the role of warning. This disorder can be understood as an extreme manifestation of a harm avoidance. OCD is found in all cultures. The manifestations of this disorder most resemble the ritualistic behavior, serving to maintain order and regularity, preserve existing boundaries and strictly differentiated categories. Repeating actions until they feel "good," excessive orderliness, ritualized

axiological transformation of the original noema of behavior into a more valuable one. When I use the word "sensation," I mean an extract from hyletic stream. Our conclusions do not contradict the phenomenological aspect of reactivity that Jack Brehm himself saw in his theory. In his writing, we see only an additional emphasis on the awareness of reactivity itself, which, if it occurs, leads to increased attention to one's own ability to direct one's actions and the attention to one's behavior as a whole[2].

Husserl proposed to consider every consciousness as implicitly possessing a horizon of empty intentions[3]. The prohibition in so far as it is able to express itself by the means of thought, necessarily violates the very structure of perception, that is, it does not simply add and fill a new intention, extracting it from a constantly expanding horizon of empty intentions, but also violates the functioning of this horizon itself, destroying what seemed to be not yet even actualized, destroying the very protentionally conceived possibility of filling these empty intentions. On the other hand, nothing fundamentally changes in the work of consciousness – we only practice one way of thinking instead of another. The actual difference can be felt by violating the phenomenological stance (Einstellung) and by turning to the empirical data naively and simply as we usually do. That way, it is impossible for us to deduce the origin of this felt difference between freedom and unfreedom with the mind-boggling scrupulousness of phenomenology, but, in many aspects, such a turn is very productive, as we have tried to briefly demonstrate when we spoke of reactance.

Scientifically speaking, one is liberated through direct action that destroys limitation. Such freedom we consider to be real. In the phenomenological sense, however, philosophy, for

[2] Brehm, J. W. (1966). A theory of psychological reactance. New York: Academic Press.

[3] Husserl, E. (1983). *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy, Book I* (F. Kersten, Trans.). Boston: Kluwer.

something one can possess – that we rarely think about what this might actually mean"[9]. Inspired by Roman law, the advocates of "natural law," such as Thomas Hobbes and, of course, the father of this very concept, Jean-Jacques Gerson held a very advantageous view for their societal position – that freedom is property, that freedom is something that can be bought, sold, bargained for, given away or – *drum roll* – transferred to the authority.

[9] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

The Genesis of Political Necessity in "Reason"

There is a particularly clear connection between how, for a thousand years, lawyers have tried to give meaning to Roman conceptions of property, and how, in a strikingly similar manner, philosophers have tried to find a basis for people to have the same relationship of ownership and possession with themselves. "The most popular solution – to say that each of us has something called a 'mind' (or 'reason') that is completely separate from something else, which we can call 'the body,' and that the former naturally dominates the latter – flies in the face of just about everything we now know about cognitive science. It's obviously untrue, but we continue to hold onto it anyway, for the simple reason that none of our everyday assumptions about property, law, and freedom would make any sense without it"[1].

Erich Fromm observed similar processes in the emergence of Protestantism. However, he was more interested in the psychological dynamics of rationalizing the rejection of one's own individuality. In the figure of Luther, he saw an authoritarian personality that skillfully played on the anxieties of his contemporaries, who felt the decline of medieval culture and the birth of a new world order. By means of hatred towards his own nature, by self-belittlement, and by renouncing his pride and will, Luther, as Fromm believes, had satisfied his displaced hostility towards authority that was mixed with a desire to submit to

[1] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

Phenomenological Perspective on Freedom

Phenomenology of freedom, thus, finds its first apodictically obvious element precisely in limitation, accompanied by irritation of varying degrees of intensity. The constitution of freedom requires a pointing towards the overcoming of a conceivable set of these very limitations, which themselves are negatively valued. The actualization of freedom is equal to the constitution of these externally limited intentions as more valuable, as being of greater interest due to their special mode of givenness (forbidden, reduced, taken away by someone for some purpose, etc.).

Freedom is expressed as a second-order intention in relation to limitation, that is, as an intention about an intention. Its noematic nucleus may contain a retained sensation that took place before the sensation of external coercion, that is, effectively, the retention of both these contrasting sensations in the unity of consciousness, and the direction of the present intention towards this unity. Edmund Husserl believed that any consciousness of difference presupposes first of all a matching in the unity of consciousness[1]. The noema of behavior is given to consciousness as noetically limited, this intention is perceived at once with any other "normal" intention, which doesn't have such prohibitive noetic component. This happens within the framework of a new intention that serves as a platform for the

[1] Husserl, E. (1964). *The phenomenology of internal time-consciousness* (J. S. Churchill, Trans.; M. Heidegger, Introduction). Bloomington: Indiana University Press.

out history, moral justifications for slavery are rarely taken particularly seriously even by those who espouse them"[2].

It is also impossible to be satisfied with one's own "freedom for," whilst understanding how many surrounding people are denied such privilege. This is a direct limitation even for this illusion itself – however "free" we'd be individually, surrounded by slaves, we'll never be able to extract any joy from our own set of rights and stay human. Such joy would be malicious mockery of the misfortune and the ignorance of those slaves, whose position we thus approve of at best, and deliberately contribute to, at worst. There can be no theory of "freedom for" that would be independent of the ever-changing state of affairs in society and would not be of great service to the whims of some powerful minority in charge of the current political regime.

[2] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

it. In this way, Protestantism becomes a vehicle for the idea of power over oneself – "As a matter of fact, the development of modern thinking from Protestantism to Kant's philosophy, can be characterized as the substitution of internalized authority for an external one. With the political victories of the rising middle class, external authority lost prestige and man's own conscience assumed the place which external authority once had held. This change appeared to many as the victory of freedom. To submit to orders from the outside (at least in spiritual matters) appeared to be unworthy of a free man; but the conquest of his natural inclinations, and the establishment of the domination of one part of the individual, his nature, by another, his reason, will or conscience, seemed to be the very essence of freedom"[2]. The "reason", imposed as a supervisor over "human nature", ensured the deformation not only of the emotional life but also of the intellectual, so that both aspects of the human personality were mutually crippled.

Worthy of special attention is the bear service done to philosophical anthropology by Thomas Hobbes, who, justifying the culture of his time, believed that people driven by "private interest" cannot ever deal with each other justly by themselves. Therefore, for society to arise, there must be an authoritative institution that subordinates them all – before it they must equally bow and slave themselves away, thus forgetting their supposed fear of each other. The concept of "interest" also curiously dates back to Roman "interesse" (percentage payment) – "when the idea first entered the English language, many writers considered the notion that all human behavior could be reduced to the pursuit of private interest to be profoundly cynical and alien – a Machiavellian import, more suited to Italian courts than English morality. By the eighteenth century,

[2] Fromm, Erich. *Escape from Freedom*. New York: Farrar & Rinehart, 1941

however, educated Englishmen were already treating it as self-evident"[3].

It is not difficult to notice that Hobbes always considered himself a fortunate possessor of reason, that he, nonetheless, denied to all others, branding their words with hypocrisy, lies, and incorrectness when their content contradicted his own views on the motives of human behavior. "Hobbes read only very good books and therefore very little. He often even said that if he had devoted as much time to books as other scholars, he would have remained as ignorant as they" [23.P.138]. Hobbes considered it important to acknowledge the necessity of a healthy distance between what a person says and how they will behave if they find themselves in a situation of an overt struggle for resources. He shattered the ethos of human culture, reducing people down to the animalistic, sensual, dirty and yet very true criterion for evaluating their behavior – to survival. The figure of Hobbes is largely tragic, as there seemed to be enough personal reasons for him to be so disdainful of human nature. There is no shortage of viciousness in the world, but there's an abyss between admitting it and treating it as constituent of humanity. "Perhaps today we can recognize how much of malice, vanity, and even aggression is often present in what we do, without drawing an immoralist conclusion"[4].

Of course, the birth of "Reason" can be traced back to the works of Descartes, however, reason itself is not an instant invention of anyone, and the cult of reason is firmly rooted in the Western European tradition ever since Ancient Greece. On one hand, cognitive and linguistic abilities we refer to (in their current form) have accompanied us for 150-200 thousand years, of which writing has only existed for 5400 years. The simplest

[3] Graeber, David. *Debt: The First 5,000 Years*. New York: Melville House, 2011

[4] Foot P. Natural Goodness. Oxford University Press. 2001.

give you nothing of their own, but stolen wares: they give you your own freedom, the freedom that you must take for yourselves; and they give it to you only that you may not take it and call the thieves and cheats to an account to boot. In their slyness they know well that given (chartered) freedom is no freedom, since only the freedom one takes for himself, therefore the egoist's freedom, rides with full sails. Donated freedom strikes its sails as soon as there comes a storm – or calm; it requires always a – gentle and moderate breeze"[1]. Here we notice two things. Firstly, Stirner still understands freedom as something that can be taken, and by force. This is not surprising, considering that the aspect of ownership is directly mentioned in the very title of his work. Ironically, there is much more in common between Stirner and Hobbes, than one might expect. Secondly, although he has this very strictly political notion of freedom in mind, indeed, no institution in the world actually gives or is able to give anyone any objectively measurable freedom. There we agree.

Freedom, which implies a master who grants it, has nothing to do with the actual psychological need. This has always been obvious for all people, whether they felt this need in their own example or in someone else's. Any self-limitation based on the fear of violence is a form of slavery, fed by collective mutual alienation and repulsive slavish love, mixed with imposed ideas of honor and duty. Most people have a wonderful opportunity to understand what freedom and restriction represent through their own experience. Slavery has never been considered and will never be considered normal for beings in whom freedom is manifested as an inborn psychological need – "At the very least, there was always seen to be something disreputable and ugly about slavery. Anyone too close to it was tainted. Slave-traders particularly were scorned as inhuman brutes. Through-

[1] Stirner, M. (1907). *The Ego and Its Own* (S. T. Byington, Trans.). Moscow: C. W. Daniel & Co. (Original work published 1844)

heritance of the Roman legal tradition. Measuring freedom in terms of rights and benefits over which a person has political power and legally established ownership is the same as to measure the total population of some animal species exclusively in such quantities and diversities which can be observed in a zoo – it's the same as to compile a short list of the opportunities provided to these animals. Reactance is only observed as a response to direct restriction, that is, as a psychological impulse to restore "liberty from." "Liberty for," one might assume, is supposed to be measured in the degree of dissatisfaction with the refusal of a request, that is, the refusal to provide those opportunities that the petitioner does not have, and perhaps never had originally. "Freedom for" is the privilege of patronage, the result of generous care, the positive opportunity to exert influence – in other words, it is power, a right (something with which the political freedom of citizens is measured by to this day). In nature such positive assistance occurs at best between representatives of the same species in the form of mutual assistance, as a result of attachment between parents and children or between sexual partners, and at worse between subordinate individuals and those who subordinate them by force as a result of the threat of violence for disobedience.

When we talk of "liberty for," we're talking about the very "freedom" that one is given as if there had never been any other. The condition for the existence of such freedom is always another living being which takes it upon itself to provide the individual with new opportunities. Such freedom is not measurable, as there is nothing to measure in the obligations of the ruler to its subordinate. All these obligations are imaginary and rely merely on a promise. Promise is nothing. The only thing that can be measured is the observable free action against the prohibition, and the prohibitor himself for that matter.

Max Stirner (the anarcho-individualist) writes: "If they [representatives of the state] nevertheless give you freedom, they are simply knaves who give more than they have. For then they

tools that cannot be copied without the use of language have been around for nearly a million years. On the other hand, reason has its functions in law, philosophy, and science, where it is presented in different ways to better fulfill them. These functions are accordingly described in more or less clear definitions – reason as the only party responsible for the body in law and culture; reason (or thinking) as an undeniable first principle in Descartes's method; reason as a reliable alternative to the state of infancy in Kant; reason as the repository of all the tools, principles, and contradictions of cognition (also Kant); reason as a set of cognitive abilities selected by arbitrary criteria, such as problem-solving; reason as the enemy of blind faith, etc.

We only wanted to show how a very particular and a very real kind of violence, which had continued in one form or another for millennia, is still shaping our current abstract and legislative understanding of reason – the very Reason in which we see our human nature, and onto which we place such great responsibilities. Power over oneself is not the same as freedom, and freedom is not a right if the rights are provided from the outside and can easily be taken away at any moment. It is not reason that is free, but we are. And we would, I think, enjoy even more of what we usually imply by freedom if we did not so radically distinguish and differentiate this reason from ourselves, if we did not insist on it being our strict legislator, or, even more so, our enemy. To trick someone into believing that they "should" is by far not the same as simply encouraging them to do as they naturally "would."

2. Freedom as Reactance: Psychophysiology of Free Action

the establishment of artificial rules, imposition of unavailability, and so on, cause a reverse reaction in people to a greater or a lesser degree. What does it mean for the customs and institutions that we have today I don't fully know, but to me it would be insincere not to admit that most of what we call freedom has nothing to do with freedom at all.

We also do not need to uncover the black box of subjective experience to determine the measure of resistance to limitation. Describing the situation of resistance from the perspective of an individual in a reactive state seems to be the most convenient and understandable, but it is by no means a necessary perspective for us to take. We see that freedom for our body and its cognitive apparatus is something quite real, fundamental, valuable, and measurable. Freedom, thereby, does not need to be proven by sophistry. It is something quite obvious and objective when it is being violated. Freedom is measured in the intensity of resistance – it is the measure of action in response to its limitation. We are aware that this is an aphoristic circular definition, however, all things considered, it seems to be a good one.

How do I tell if someone is acting freely? For that I need to see their reaction towards an outside attempt to limit their behavior. For example, if someone is trying to arrest you. If you resist, I could suppose that being coerced for you is unnatural, and that your actions indicate an attempt to preserve your behavioral options, meaning that after all there is something to be preserved here. Resistance is a free action by definition – it is directly caused by an outside attempt to limit behavior. It is by observing the instances of resistance that I get acquainted with such a thing as the inclination to act freely. Effectively, people who resist are acting freely; they're acting as if they're free and as if they wish to stay that way; as if subordination is something that they would prefer to avoid.

We see how our conclusions contrast with the understanding of freedom that philosophy has come to through the in-

Negative Freedom as an Object

Why are we even talking about all of this? To strictly distinguish the phenomenon of a person's direct perception of their own freedom or lack thereof from other psychological phenomena, such as anger, resentment, narcissistic desire for attention from others, deliberate antisocial non-conforming behavior, obsessive-compulsive disorder associated with unwanted thoughts, psychopathic disorder provoking antisocial behavior, and so on. Freedom has nothing to do with these things.

Freedom, as we now may see, first of all, is the perception of limited behavioral options; secondly, a negative arousal caused by this limitation; thirdly, resistance to this limitation in the form of an attempt to regain access to the limited behaviors. We are accustomed to understand freedom as the result of successfully restoring such limited options for behavior, however, it seems that only the resistance to the limitation itself can be subject to measurement, which we consider sufficient from a pragmatic point of view to explain this phenomenon. That is because we thus observe the practical consequence of not only equally practical, but also of "theoretical" interaction with one's behavioral options (practical consequences of verbal prohibition and conditional limitation).

Reactance is of interest to me because it allows for the multifactorial measurement of the felt unfreedom which is manifested in direct observable action. We can now speak about freedom more specifically and more tangibly, tracing its origin in situations that imply PR. We see that limitations on choice,

Methods of Definition

Everything that can be observed in human behavior, in one way or another, aims to satisfy biological needs. Humans have no freedom of will, in the sense of freedom from causal relationships that produce any observable change. Free will is a helpful myth that supports the functioning of our institutions. I'll be told: "But we do have free will! To prove this, we can do something that wouldn't be desirable for the organism from a biological perspective, and we can do it at any moment." And I will answer. First of all, not at any moment per se, but at the moment of this specific discussion. Secondly, from a biological point of view, it is desirable to survive. To survive, it is desirable to copy successful variants of behavior from each other, thus creating a culture. To make good use of all the advantages of having a culture, it is desirable for us to be able to play any game that the culture provides – our status and prestige within the group depends on that ability as well. Within culture, there is such a game where you need to argue and win in arguments. To win an argument, one can use any means, including, for example, demonstrating one's ability to manifest useless or even harmful behaviors. When we demonstrate our so-called 'free will,' we are in fact conforming to the cultural principles which are based on the principles of cooperative living, which, in turn, are based on the functioning and the structure of our biological bodies, the mechanisms of which are thoroughly determined by genes and the environment into which our bodies, bearers of these genes, were placed.

My task is to bring physiology and cognition together – not to refute the entire enterprise of thinking. Can there even be

such an achievement of biological science that would be sufficient to deny the achievements of philosophy? I don't think so. It is inappropriate when some people completely identify philosophical freedom with the freedom from causality and, by proving – as though it was necessary to do so every time – the impossibility of the latter, believe that they have also refuted the former. However, if we cannot live in peace and harmony with our purely intellectual freedom (freedom of reason), if we cannot value and respect it both in ourselves and in others, then why shouldn't we fill it up with its own flesh and blood, give freedom its due as an objective factor of evolution and a fundamental principle of individuality? Such freedom, rooted in empirical measurement, can no longer be refuted metaphysically – such freedom has teeth.

People generally interpret freedom too arbitrarily, too freely, as it were, introducing much confusion and, at the same time, making it into a slave to their theories. Some understand it as the absence of limitation from whoever else, others as a legal right, others as a form of chance, and some, like Kant, as the inability of reason to be included into the list of objects onto which the reason itself projects the laws it has itself established – laws such as causality: "The intelligible character, of which the former is but the sensuous schema, knows no before or after; and every action, irrespective of the time-relation in which it stands with other phenomena, is the immediate effect of the intelligible character of pure reason, which, consequently, enjoys freedom of action, and is not dynamically determined either by internal or external preceding conditions"[1].

For us, the commonality here is a specific kind of sensation that such definitions aim to evoke within us, a sensation that can somehow influence our action. Is there a possibility of re-

[1] Kant, I. (1998). *Critique of Pure Reason* (P. Guyer & A. W. Wood, Eds. & Trans.; B-edition) (p. 569). Cambridge University Press.

situation, leaving the person with less control over thoughts about alcohol. Obsessive thoughts themselves are a symptom of obsessive-compulsive disorders[21]. It has been proven that people who are convinced that their obsessive thoughts can make them act accordingly, and who, at the same time, perceive their obsessive thoughts as uncontrollable, actually have these thoughts more frequently and consistently[22].

[21] Purdon, C., & Clark, D. (1993). Obsessive intrusive thoughts in nonclinical subjects. Part I. Content and relation with depressive, anxious and obsessional symptoms. Behaviour research and therapy. 31. 713-20. https://doi.org/10.1016/0005-7967(93)90001-B

[22] Purdon, C., & Clark, D. (1994). Obsessive intrusive thoughts in nonclinical subjects. Part II. Cognitive appraisal, emotional response and thought control strategies. Behaviour research and therapy. 32. 403-10. https://doi.org/10.1016/0005-7967(94)90003-5

advertisements that they wanted to change the participants' thoughts, values, and beliefs, in contrast to companies planning to change their behavior. A link was established between this pattern and the participants' belief that the institution controlling their thoughts is more likely to try and control their behavior. This was proven in four different experiments within one study[18].

When people with increased reactance are asked to suppress their obsessive thoughts during a task on written stream of consciousness, compared to the expressive group with increased reactance, they feel less control over their thoughts, and they are more disturbed by them. One might think that reactance is not involved here, however, in groups with low reactance, the opposite result was observed – those asked to suppress their thoughts experience greater control over their obsessive thoughts[19]. This result is also confirmed by current research in this field – an increase in cognitive load promotes a decrease in stimuli to activate resistance, which leads to better results in thought suppression[20].

Generally, suppressing obsessive thoughts is a very ineffective tactic of mental control, as it is necessary to constantly monitor one's thoughts for the very unwanted ones, which paradoxically allows them to remain within reach of consciousness. In the case of highly reactive individuals, the situation worsens – when the doctor motivates such an alcoholic not to think about alcohol, the same resistance to external control and suggestion comes into play, which only exacerbates the

[18] Ma, A., & Tang, S., & Kay, A. (2019). Psychological reactance as a function of thought versus behavioral control. Journal of Experimental Social Psychology. 84. https://doi.org/10.1016/j.jesp.2019.103825

[19] Kelly, A. E., & Nauta, M. M. (1997). Reactance and Thought Suppression. Personality and Social Psychology Bulletin, 23(11), 1123-1132. https://doi.org/10.1177/01461672972311001

[20] Wallaert M., Ward A., Mann T. (2023) Taming the white bear: Lowering reactance pressures enhances thought suppression. PLoS ONE 18(3): e0282197. https://doi.org/10.1371/journal.pone.0282197

viving this very lost clarity of what freedom is? In practice, we do not need to give clear definitions of such notions as freedom every time we use them – as Gilbert Ryle points out – we already skillfully use the factors of human relationships implied by them. Ryle says, "It is, however, one thing to know how to apply such concepts, quite another to know how to correlate them with one another and with concepts of other sorts. Many people can talk sense with concepts but cannot talk sense about them; they know by practice how to operate with concepts, anyhow inside familiar fields, but they cannot state the logical regulations governing their use"[2]. We have a slight disagreement here. Logical relationships are certainly important, but they themselves are not sources of new knowledge. Now, assuming that we still do not know everything about such things like freedom, we are forced to rely more on the empirical data that is still coming in, which constantly changes the position of certain concepts in relation to one another – that is if we remain completely honest, keeping our fingertips on the pulse of experiential cognition. Thus, creating an actual map of consciousness in real time is a very difficult task – everything just might turn upside down and back again any minute.

As was the case with reason, different definitions of freedom solve different tasks, the existence and diversity of which I won't deny. I'll only say that these definitions can be arranged on a gradient of clarity, where the darkest point represents the most abstract formulation, and the brightest point represents the most physically tangible or vice versa. I think the feeling of freedom can be defined roughly, but quite quantitatively – it is a feeling of unlimitedness of one's body in movements and means of interaction with the largest possible number of objects and beings, which at the cognitive level is expressed only as the absence of awareness of limitations in one's own opinions, choices, and behaviors. This definition fails to account for

[2] Ryle, G. (1949). *The Concept of Mind*. University of Chicago Press.

the active aspect of freedom, and for its cognitive content, but I'll sharpen it later. Freedom can be completely present or completely absent only when we share someone else's strict regulation of purely logical establishment of its existence. On its own, freedom is felt as something we always have to a greater or a lesser degree.

When a goal becomes unattainable, and the habit associated with its effortless achievement is already present, we usually experience irritation and even aggression. We're eager to personify and curse any external obstacle, just to find an outlet for the overwhelming indignation that we feel. In our attempts, we become more stubborn, and in the heat of passion, we completely forget all other concerns. Such a goal-oriented nature cannot be an exclusive characteristic of human being, as its behavioral advantage seems too obvious. We, humans, have distanced ourselves from other animals, as we like to think. Indeed, we have managed to free ourselves from the food chain and from many other natural conditions. Perhaps freedom is our special talent, a desire not to depend at all on the surrounding environment, as Henri Bergson proposed. In his view, while the brain of an animal is completely absorbed by its materiality and corporeality, human consciousness is able to detach itself from the processes of its body, to ignore them, to distract from them, and to automate them in such a way that intelligence can calmly entertain itself elsewhere. Bergson gives an example of a steam engine, which requires constant supervision, and its improved version, making the presence of the observer unnecessary for its operation[3]. According to Bergson, life is the overcoming of limitations, the struggle against them, and constant development. Therefore, when thinking is used for its intended purpose, that is, as a means to achieve a goal, it solves the problem of overcoming

[3] Bergson, Henri. *Creative Evolution.* Translated by Arthur Mitchell. New York: Henry Holt and Company, 1911.

(3) Less tolerance for others' beliefs;

(4) Resistance to rules and regulations;

(5) Greater concern about problems and anxiety about the future;

(6) A greater tendency to express strong feelings and emotions[15].

Negative correlation was established between increased reactance with Agreeableness and Conscientiousness[16]. This means that the higher the observed reactance on the earlier mentioned Hong scale[17], the lower the indicators of the tendency to agree and the indicators of honesty are in the five-factor model, and conversely, the lower the reactance, the higher these two factors become. The authors also clarify that the difference in the intensity of this correlation in different studies may be due to the semantic difference in the Finnish and Swedish translations of the same English questionnaire, and even the same word "submit," the meaning of which is softened in the Finnish translation, but corresponds well to the English original in Swedish, which is why there is a discrepancy in the results of these two questionnaires specifically in the questions that use this word.

It is also known that restrictions in thought cause a stronger reactance than restrictions in behavior, control over thought is perceived much more seriously. Participants more often rejected job offers from companies that said in their

[15] Dowd, E. T., Wallbrown, F., Sanders, D., & Yesenosky, J. M. (1994). Psychological reactance and its relationship to normal personality variables. Cognitive Therapy and Research, 18(6), 601612. https://doi.org/10.1007/BF02355671

[16] Waris, O., Karlsson, L., Antfolk, J., Karlsson, L., Karlsson, H., & Soveri, A. (2020). The factorial structure of the Hong Psychological Reactance Scale in two Finnish samples. Nordic Psychology, 73(1), 6890. https://doi.org/10.1080/19012276.2020.1800508

[17] Shen, L., & Dillard, J. P. (2005). Psychometric Properties of the Hong Psychological Reactance Scale. Journal of Personality and Assessment, 85(1), 7481. https://doi.org/10.1207/s15327752jpa8501_07

the variability of psychopathic symptoms by the expression of specific genes between prisoners with psychopathy and healthy individuals. These same genes are responsible for autism and social interactions, allowing researchers to believe that they also relate to emotional insensitivity and a lack of empathy[14]. Authoritarianism is also passed on to children by strict, power-hungry parents, but firstly, this is done through education, and secondly, a psychopathic disorder is not an essential criterion for this. Entire layers of culture may have authoritarian prejudices underneath them.

Scientists have also found that freedom is kind of good for you… Reactance is contrasted with learned helplessness in some studies. When the individual encounters several failures, he enters a reactive state and still tries to overcome. However, the more failures occur, the worse becomes the effectiveness, and the more obvious becomes the learned helplessness [32.P.17]. And since the movement towards freedom rebels against helplessness, reactance can be considered a sworn enemy of depression. Highly reactive individuals have certain characteristics that are condemned in society, but studies have shown that these individuals often turn out to be leaders and people oriented towards action [32.P.19]. It has also been proven that optimal autonomy and a sense of identity are achieved through the presence of an optimal level of reactance [32.P.34]. A positive link has been established between PR and healthy autonomy, and there is no link between PR and the types of attachment.

According to the five-factor model of personality (Big Five), the personality style of reactive individuals is distinguished by:

(1) Lower interest in making a good impression on others;

(2) More casual attitude towards fulfilling obligations;

[14] Tiihonen, J., Koskuvi, M., Lähteenvuo, M. et al.(2020) Neurobiological roots of psychopathy. Mol Psychiatry 25, 34323441. https://doi.org/10.1038/s41380-019-0488-z

any material necessity. Maybe we should consider freedom as a practical action as well, view freedom necessarily as the acquisition of freedom and as its own development?

Charles Peirce believed that any concept is meaningless in itself if its constituent parts do not depend on any practical difference. The basis for making theoretical distinctions within the object of study can only be the empirically observable practical consequences of the complexity of that object. The concept of the object should be exhausted by its practical effects. Peirce distinguished the sphere of certainty from the sphere of opinion – "We believe the proposition we are ready to act upon. Full belief is willingness to act upon the proposition in vital crises, opinion is willingness to act upon it in relatively insignificant affairs"[4]. So, freedom, as we believe, should finally be pulled out of the realm of opinions and firmly be placed in the realm of those inevitably obvious matters, which we consider to be such on the basis of practical effect and practical difference. What exactly, what actual mental change is missed by the cynic when he says that there is no fundamental difference between a free person and an unfree person, and that freedom is always an illusion? How does an unfree person differ from a free one, that is, what are the practical effects necessarily inherent to a free person? If you try to restrict them, what would be the effect that would constitute a difference? I claim that by answering this question about the practical effects of restriction, we will obtain a complete understanding of freedom as an object. This seems like a great unprovoked externalist shift, but that's nothing out of the ordinary for a pragmatist to encounter. Freedom, in fact, becomes a topic of discussion only at those moments when it is threatened. Thereby, it is discov-

[4] Peirce, Charles Sanders. *Collected Papers of Charles Sanders Peirce*, Vol. 1: *Principles of Philosophy*. Edited by Charles Hartshorne and Paul Weiss. Cambridge, MA: Harvard University Press

ered contextually – in a world where there are no limitations, talking about freedom is useless.

people alone: "The attitude of the authoritarian character to life, his whole philosophy, is determined by his emotional strivings. The authoritarian character loves those conditions that limit human freedom, he loves being submitted to fate. It depends on his social position what 'fate' means to him. For a soldier it may mean the will or whim of his superior, to which he gladly submits"[12]. The authoritarian also believes in the survival of the fittest, but the source of strength lies beyond himself, beyond his own interests and desires. Such external power must be invincible and immutable, otherwise it only elicits his disdain. All the courage of the authoritarian personality is to submit and endure fate, to endure god and the leader (his representative on earth) without complaint. However, the authoritarian personality and psychopathy are very different things.

We can already distinguish a sharp sense of unfreedom from the banal indifference to others as one motive for action from another motive for action that has nothing to do with the first one, and is really more of a condition for action than a motive. People with a personality disorder under the influence of impulsiveness and anger are indeed more likely to restore their taken away freedoms by antisocial tactics, more likely to show aggression towards those who establish the rules, and to resist treatment in every way. This does not mean, however, that all holders of high PR scores are psychopaths. Psychopathy, it must be said, is a disorder that is largely hereditary, at least for men – psychopathic personality traits are passed from father to son, but not to a daughter for some reason[13]. A neurobiological study explained 30-92% of

[12] Fromm, Erich. *Escape from Freedom.* New York: Farrar & Rinehart, 1941

[13] Beaver, K., & Rowland, M., & Schwartz, J., & Nedelec, J. (2011). The genetic origins of psychopathic personality traits in adult males and females: Results from an adoption-based study. Journal of Criminal Justice. 39. 426-432. https://doi.org/10.1016/j.jcrimjus.2011.07.002

Psychological Reactance

Now we need to discuss some actual psychology. Let's consider one interesting phenomenon – Psychological Reactance (PR), that is, resistance to restriction. In psychology reactance is an unpleasant motivational arousal that arises in people when they feel that their free behavior is being threatened. The direct manifestation of reactance is observable behavior aimed at restoring the lost or threatened behavioral options [10.P.4]. This motivates people to act in the opposite way to what is being proposed to them. Prohibited or anyhow limited behavior becomes behavior of high priority – for the individual, in fact, it becomes the most desired course of action. The strength of the reaction is directly proportional to the importance and quantity of the lost freedom of behavior. This resistance is related to anger, although it is mostly cognitive and can even be measured. The theory of reactance was developed by the American psychologist Jack Brehm in 1966.

PR manifests itself, for example, in situations where someone claims that our behavior is predictable. People who are told that their aesthetic choice is likely to be correctly predicted based on previous tests they have taken will, in 25% of cases, choose an option opposite to what was predicted[1]. The limitations, of which it is known that they will inevitably take effect, cause rationalization in one group, however, if another group is told that there is a small chance that the same limitations

[1] Hannah, T. E., Hannah, E. R., & Wattie, B. (1975). Arousal of Psychological Reactance as a Consequence of Predicting an Individuals Behaviour. Psychological Reports, 37(2), 411-420. https://doi.org/10.2466/pr0.1975.37.2.411

tance compared to those who did not. Men here are ahead only by one factor of PR to submission[8]. Increased reactance is a predictor of two out of the three factors of psychopathy identified[9] – egocentrism, anti-social behavior, but not callousness. People with increased psychopathy (egoistic, manipulative, angry, and/or impulsive) show high levels of PR, but at the same time, increased PR was not observed in individuals with high levels of only callousness[10]. The factor of callousness is understood as a cold-blooded, heartless predatory attitude towards life. This factor is identified in surveys through the assessment of the degree of agreement with such statements as "Success is based on the survival of the fittest; I do not care about the fate of the losers"[11]. Reactance doesn't seem to be related to such attitudes. Cold-bloodedness, I think, implies recognition of all the existing hierarchies, and if such a person finds themselves at the bottom of the hierarchy, they're more likely to blame their own weakness, and not the existence of hierarchies themselves or any hidden injustice within them.

These attitudes are reminiscent of the authoritarian personality type described by Erich Fromm, who sharply distinguished the love for freedom and the painful desire to resist any authority out of powerlessness. Subconscious disdain for the weak and a desire to submit never leave such

[8] Hockenberry, S. L., & Billingham, R. E. (1993). Psychological Reactance and Violence within Dating Relationships. Psychological Reports, 73(3_suppl), 1203-1208. https://doi.org/10.2466/pr0.1993.73.3f.1203

[9] Brinkley, C., & Diamond, P., & Magaletta, P., & Heigel, C. (2008). Cross-Validation of Levenson's Psychopathy Scale in a Sample of Federal Female Inmates. Assessment. 15. 464-82. https://doi.org/10.1177/1073191108319043

[10] Lewing, C. A., & Caraway, S. J. (2019). Psychological reactance as a motivation in psychopathy. Personality and Individual Differences, 139, 355359. https://doi.org/10.1016/j.paid.2018.12.007

[11] Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a noninstitutionalized population. Journal of Personality and Social Psychology, 68(1), 151158. https://doi.org/10.1037/0022-3514.68.1.151

may or may not take effect, then instead of rationalizing, reactance is observed – they respond to limitations more negatively, and the restricted freedoms, compared to the control group, are evaluated as more significant[2]. When people find the slightest reason to doubt the necessity of something, they internally take the path of overcoming this possible hindrance.

Another study found that individuals subjected to unauthorized restrictions to provoke a reactive state demonstrated the same level of reactance and anger as those whose restrictions were justified, which was reflected, among other things, in an increased heart rate. However, the difference was as follows: in individuals subjected to unjustified restriction, the heart rate increased immediately, while in the second group, it occurred with a slight delay, indicating a cognitive component of justified restriction[3].

From the 1981 study, we learn that male children show stronger reactance, which confirms the results of studies starting from 1977 – in situations of limited choice, an unavailable object is evaluated as more valuable, and the PR in sixth graders is weaker than in first graders, which is most likely due to their inherent chaotic behavior in general compared to older children[4]. The 2000 study examined the influence of parental choice on their children's choices, specifically the evaluation of goods by children that their parents either approve or disapprove of – here the influence was the same regardless of the child's gender, and the older the child, the

[2] Laurin, K., Kay, A. C., & Fitzsimons, G. J. (2012). Reactance Versus Rationalization: Divergent Responses to Policies That Constrain Freedom. Psychological Science, 23(2), 205-209. https://doi.org/10.1177/0956797611429468

[3] Sittenthaler S., Steindl C., & Jonas E. (2015) Legitimate vs. illegitimate restrictions a motivational and physiological approach investigating reactance processes. Front. Psychol. 6:632. doi:10.3389/fpsyg.2015.00632

[4] Brehm, S. S. (1981). Psychological reactance and the attractiveness of unobtainable objects: Sex differences in children's responses to an elimination of freedom. Sex Roles 7, 937949. https://doi.org/10.1007/BF00290976

stronger the reactance[5]. In the 1990 study, no significant differences related to gender or even church attendance frequency were observed among adult students aged 18 to 25[6]. Many other studies, however, have still found a greater tendency towards reactance in men than in women [32.P.22] To better understand the details of the phenomenon itself and to distinguish it from pathological tendencies, it is necessary to see the various layers in this phenomenon.

Four factors were identified for measuring reactance:

(1) Freedom of choice (emotional reaction to its restriction);

(2) Reactance to submission (rejection of rules and conformity);

(3) Freedom of behavior (reaction to influence from others);

(4) Reactance to advice and recommendations (protest against intrusion into one's personality)[7].

It can be assumed that the ideal conditions of unfreedom would be situations where you are being forced to choose from only two or three remaining alternatives (1), while being threatened with punishment for not choosing, as if it were a violation of some rule (2), while also being influenced to "choose" one specific option (3), and while someone else is graciously whispering their most indispensable advices into your ear (4). Indeed, even if you're already a slave, your freedom can still be taken away even further.

Students who characterized themselves as more prone to violence in romantic relationships also showed increased reac-

[5] Rummel, A., Howard, J., Swinton, J. M., & Seymour, D. B. (2000). You Cant Have That! A Study of Reactance Effects & Childrens Consumer Behavior. Journal of Marketing Theory and Practice, 8(1), 3845. https://doi.org/10.1080/10696679.2000.11501859

[6] Hong, S.-M. (1990). Effects of Sex and Church Attendance on Psychological Reactance. Psychological Reports, 66(2), 494-494. https://doi.org/10.2466/pr0.1990.66.2.494

[7] Shen, L., & Dillard, J. P. (2005). Psychometric Properties of the Hong Psychological Reactance Scale. Journal of Personality and Assessment, 85(1), 7481. https://doi.org/10.1207/s15327752jpa8501_07

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The Myth of Social Contract

Why is it such a hard task to explain mutual responsibility? I believe that the blame lies with the philosophical and religious concepts of ”human nature” that portray ourselves, our kin, and our ancestors as evil, selfish, bloodthirsty, ”fallen” creatures. Every philosophical concept strives to exhaust the content of its object. A scientific concept is subordinate to a method which makes it necessary to formulate hypotheses, test them empirically, and only consider something to be true or false when it is equally possible to either confirm or refute it by experience. Scientific knowledge must possess predictive power. Philosophy, unfortunately, like religion and politics, relies solely on its persuasiveness.

The very fact of moral behavior, free from religious and legal restrictions, is a direct proof of the arbitrary influence of these very restrictions on morality itself. Such restrictions may be sufficient to enforce morality, but they are not necessary for its functioning. If you believe that all that is ”good” in humanity is only thanks to culture or, more specifically, to religion, then there’s nothing to prevent you from assuming the same about all that is ”bad” in humanity. I will rather interpret morality as an objective need and a necessary criterion for evolutionary selection.

In the 19th century, the opportunity to turn biological science into a tool for moral progress was missed, largely because Darwin’s discoveries were weaponized by predatorial politics and were used by people like Thomas Huxley to inadvertently diminish the authority of the church yet in favor of the authority of the state. Europe has paid greatly for its statism. The ir-

rational belief in god the father and the savior of mankind was defeated by an equally irrational belief in a nearly Heraclitean, Hobbesian, Nietzschean antagonism of all living things until the death of death, so to speak. Meanwhile the church continued to pursue its political goals, collaborating at times with whomever necessary [35.238]. And so, bio-militarism had crystallized ideologically. All this in a culture where, since ancient Greece, the canon of proper historical writing has been primarily concerned with territorial warfare – "Thus, in Herodotus, the existents can be reduced to dynasties, princes, generals, soldiers, peoples, and places, and the occurrents to actions like laying waste, putting into slavery, making alliances, organizing expeditions, reigning, using stratagems, consulting oracles etc. <...>The units found in Herodotus, for example, depend largely on a single lexicon, which is that of war."[1].

Any theory produced in our agonistic culture must first gain support and "understanding" from people who largely regard each other as raging dogs held civilized either by fear or by half-Kantian, half-biblical ethical leash. "Darwin's theory as such was not an expression of the feelings of a sado-masochistic character. On the contrary, for many of its adherents it appealed to the hope of a further evolution of mankind to higher stages of culture. For Hitler, however, it was an expression of and simultaneously a justification for his own sadism. He reveals quite naively the psychological significance which the Darwinian theory had for him"[2]. The problem is that the Darwinian metaphor of struggle can be understood quite literally, which is why philosophy, history, science, and the ideologies of the time all begin to look a certain way. Claiming that the entire nature, from top to bottom, is all about predation, violence, and struggle is the

[1] Barthes, R. (1981). The discourse of history. In *Comparative Criticism* (Vol. 3, pp. 7–20)

[2] Fromm, Erich. *Escape from Freedom*. New York: Farrar & Rinehart, 1941

References

same as reducing all human life to nothing but wars and genocides. Europeans in the 19th century, after perversely and metaphorically interpreting Darwin's significance, obtained a "scientific" justification for the absolute right of the strong, a moral excuse for colonialism, racial theory, and eugenics. We are indeed still experiencing the aftermath of this catastrophe with high public tolerance for nationalism and "geopolitics."

In his "Leviathan," Hobbes explains how humans never truly recognize that there are many other people as intelligent as themselves. He cynically notes that such state of affairs produces universal equality of intellectual abilities – since everyone is thereby satisfied with their share. From this equality, follows the equality of hope to achieve the same goals, that is, to obtain the same things. Same things, however, cannot be possessed simultaneously by different people – thus, they become enemies. Hobbes considers competition (the desire for wealth), distrust (the desire for security), and the thirst for glory as the primary causes of wars between people. From this, he believes that, "During the time men live without a common power to keep them all in awe, they are in that condition which is called war; and such a war, as is of every man, against every man"[3]. The idea is that people are naturally solitary, vicious, fearful of one another, and that they cannot coexist peacefully without a state. If Hobbes' views on human nature were not still used to justify political positions, then one wouldn't be compelled today to explain not even as much the metaphysical nature of these views, as their trivial falsehood.

In Western Europe, the political question of inequality was constructed in parallel with the understanding of property. It is the fear of losing property, we are told, that is responsible for the people's desire to establish certain norms of social life.

[3] Hobbes, Thomas. *Leviathan*. 1651. Edited by Richard Tuck, Cambridge University Press, 1991

David Hume, for example, believed that people escape barbarism and solitude by forming communities and overcoming natural egoism precisely through establishing stable property[4]. Property begins, as we are led to believe, precisely at the birth of civilization. To this day, it is a common opinion that for humans "the agricultural revolution" marked a point of no return to the innocent state of nature: people engaged in land cultivation, they settled down, private property had emerged, with private property inequality came along, and thus the fall of man successfully took place. Anthropologists Graeber and Wengrow present numerous proofs that this view is false.

Strictly speaking, there was no revolution at all, and even those communities that came to heavily rely on agriculture, as a result, became even more egalitarian than before [27. P. 259]. Researchers have also been accustomed to believing that our ancestors, for some reason, would not have been able to distinguish between the painstaking labor of land cultivation and the more advantageous and flexible alternatives that could be consciously preferred over farming. Cultures that had a perfectly clear understanding of plant domestication sometimes consciously chose not to make it the foundation of their economies. However, all this is ignored by those who are determined to interpret history teleologically – that is in such a way that the current state of affairs appears as the only possible and inevitable outcome. As if people in the past could not have consciously influenced the course of history as we do today. Agriculture was not even necessary for the emergence of cities, just as any kind of monarchy was not necessary for that purpose as well [27. P. 157]. This is particularly important for us to establish, since, as we know, the land of the indigenous Australians, New Zealanders, Africans, and Americans was transferred to European settlers precisely

[4] Hume, David. *A Treatise of Human Nature*. Edited by L. A. Selby-Bigge, revised by P. H. Nidditch. Oxford: Clarendon Press, 1978

dom. Why do people resist someone taking away their ability to act freely? – because such an encroachment threatens their chances of survival, and therefore, their bodies experience a corresponding feeling of displeasure.

Thus, free moral behavior is a natural, culturally independent norm of human behavior. "If all laws were abolished," said Aristippus, "we [philosophers] should live in the same way as we do now"[1]. Fortunately, we, philosophers, are not so alone. If the state, religion, and philosophy were to disappear all at once and forever, we would all live in exactly the same way. In the overwhelming majority, people have always acted morally, always felt, if not freedom itself, then at least a radical repulsion to whatever it is opposite to. Neither the instruments of organized violence (the state), nor the omnipotent characters of folk tales (god), nor philosophical inventions like Reason were ever needed for that to be the case. Free moral behavior is an admirable part of our common evolutionary heritage. Thank you.

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[1] Diogenes Laertius. *Lives and Opinions of Emininent Philosophers.*

of agreement guaranteeing punishment for deviation from the cultural norm of behavior. Morality, however, does not arise from culture at all – not from philosophy, not from legislation, not from religion. Our cultures merely find various ways to satisfy the already existing need for maintaining prosocial behavior. When life as a group, mutual cooperation, and long-term care for the offspring became necessary conditions for survival, blind selection equipped our ancestors with all of the emotional, cognitive, endocrine, and other physiological mechanisms that we have now, and which are now involved in what we call moral behavior.

Moral behavior and its mechanisms are clearly observed in many mammals, if we were not to elevate sacrifice to the status of an essential criterion. Prosocial behavior for humans, as well as for other primates, is natural, and therefore, such behavior brings us pleasure. Dominance hierarchies, as they are powered by violence, are in fact capable of ensuring discipline and, in this sense, contribute to the strict adherence to norms, including the norms of moral behavior. However, the mechanisms that make mutual assistance, friendship, care, attachment, empathy, compassion, and love possible have their origin not in violence, but in such behavioral tendencies that are opposite to violence; such tendencies without which our ancestors would not have survived. Prosocial behavior arises from the need to avoid violence; to help your fellow beings, thereby increasing overall chances of survival.

The values that guide human behavior have a natural origin – they are formed in strict dependence on the functioning of the pleasure/pain mechanism, and without this mechanism they are meaningless. Natural science today is able to provide an exhaustive explanation of why humans behave morally without being threatened by physical, emotional, imaginary, divine, or any other form of punishment – our genes extract great benefit from our moral behavior, and therefore, from such behavior our bodies experience pleasure. The same is true for free-

on the legal basis that these cultures were not agrarian, and therefore they were considered to be in a "state of nature." This so-called 'agrarian argument' served as an excuse for the process accompanied by rapes, tortures, mass murders, and the destruction of entire civilizations.

For a while, the anthropological data supported the view that we, humans, are naturally capable of living peacefully only in small communities, and that when we come together in larger groups, we immediately start to experience a strong need in institutions such as the state. However, this has changed – "In fact, much of what we have come to learn in the last forty or fifty years has thrown conventional wisdom into disarray. In some regions, we now know, cities governed themselves for centuries without any sign of the temples and palaces that would only emerge later; in others, temples and palaces never emerged at all" [27. P. 285]. It is not so hard for people to use their imagination in order to compensate for their socio-psychological limitations. It's not so hard for them to consider themselves part of a larger community of residents in the city where they live, with all the obligations that come with it – we are undoubtedly doing the same thing today. The complexity of social organization (often used synonymously with hierarchy) does not increase proportionally to population density. There is no necessity for large groups of people to collectively renounce their freedom of disobedience solely because they live in the same place. Thanks to archaeological discoveries, the anarchic periods of supposed decline and chaos, as they are sometimes described in the history of certain cities, turn out to have been periods that lasted for centuries and were accompanied by the expansion of the area of these very cities, which means that these were actually periods of considerable prosperity [27. C.332].

The Leviathan doesn't solve the problem of fear between people; it merely adds more reasons to fear, and to even hate. War, often cited as a justification of the necessity of the state,

itself is a product of statehood and of a certain notion of identity. There is no basis to assume that wars have existed forever. Technically, war is a clearly defined competition between two clearly defined sides, where what counts is not the killing of some specific individual for some specific offense, but the killing of any representative of the enemy group. To compel a person to engage in something like that systematically requires very complex multi-step rituals, various psychological techniques, and other methods [27. P.507]. Warlike behavior cannot be called natural by any means. According to Greber and Wengerow, such behavior is the result of the application of the three principles underlying all power – violence, control of information, and individual charisma. Their manifestation is found in different cultures, in different periods, in varying degrees, combinations, and forms, which also makes it unacceptable to consider that current states, which prominently exhibit all three, are the embodiment of some evolutionary necessity.

People are quite capable of managing without a state based on the fact that they can participate in political life consciously and independently. But the arguments we use could be much less sophisticated. Generally speaking, the concept of "social contract" in its inappropriate precision and discreteness is similar to the concept of "the emergence of man." If we consider that he "emerged" at some point, then how do we account for the 4% of the Neanderthal genome in his blood and other artifacts indicating his further interaction with other hominoid apes?[5] In nature, nothing can correspond to those strict boundaries between species and between the of forms of their social organization that we would like to see. Perhaps any other social animal, if it had the philosophical ability, would enthusiastically tell us about the existence of the bee contract, the anchovy contract, the organization of united ant hills, or the

[5] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

the organism, reflecting a fundamental bluntly commonsensical truth – voluntary behavior for an individual is always prioritized over forced behavior.

Whether we like it or not, freedom per se does not have any other tangible evidence of its natural origin. Rights and freedoms differ from constitution to constitution. Every philosophical definition either tries to refute biological determinism (vainly) or grants an "inner freedom" of conciliation and non-resistance. I propose to define free behavior relative to those natural negative reactions to its complete opposition, that we already have. No transcendental subjects, no freedom of the spirit, no Free Will, no political freedoms granted and taken away randomly at the whims of chance – only the true freedom, expressed in direct resistance to limitation. Without identifying the mechanisms of this resistance, it is impossible to establish whether free behavior is a natural norm. There is no point in talking about freedom outside the context of limitation, where freedom acquires its tangible value. Outside this context all behavior is free.

Further research would be most productive if it would focus, firstly, on developing terminology and methods for measuring freedom in various species of mammals using reactance theory; secondly, on developing methods for measuring PR in situations without the external constraints being obviously personal and manmade (both in animals and in humans), and thirdly, on properly clarifying the origin of this need as a factor of survival and prosperity without reducing it to the mere struggle for status.

There is a certain difficulty that prevents us from loving our natural inclination towards freedom. Namely, we are accustomed to speaking about the principles of moral behavior in the language of prohibitions – those enshrined in laws, commandments, and conclusions of our reason. By violating these prohibitions, we supposedly violate the only basis on which people behave morally, namely, the cultural prescription – the form

lexicon used by the apologists of these establishments. We are aware of the natural sources of our freedom. In anthropology, we observe many possible societies with many possible internal structures, and we know enough about the evolutionary origin of morality to finally stop worrying that someone else might take away our speculative toys.

Freedom is a natural, inborn need and a norm of human behavior. If it were not so, we would not observe resistance to limitation as a separate psychological phenomenon. "What distinguishes an unfree person from a free one?", asks the cynic. Let's rephrase this question a bit: "What are the practical effects necessarily inherent to unfreedom?" By answering this question about the practical consequences of limitation, we'll have a complete understanding of freedom as an object. According to Peirce, it is only due to the presence of these very practical consequences that we can make any assertions about the object; otherwise, there is no difference at all, and freedom might as well be defined as anything. Suppose that the object is the threatened freedom. Resistance expressed in action can confidently be considered the practical consequence of this object, as it is measurable and very much a subject to explanation through the theory of reactance.

Reactance is the psyche's reaction to an external limitation of the set of possible behaviors; a state of negative arousal in which the threatened behavioral option begins to be valued and pursued as an end in itself, which ultimately leads to direct resistance, expressed through action. In other words, this is a condition for freedom – the only thing that makes an organism directly resist an intrusion into its behavior, and has no other purpose. We associate this feeling with the temptation to cause harm, attract attention, and act immorally out of existing hatred for authority. However, the more we study this phenomenon, the less similarities we see between it and the reactions of anger, enmity, obsession, struggles for status, etc. Reactance, it seems, is no more than a protective reaction of

union of bonobos. I'll be told: "but the social contract is just a metaphor that, nonetheless, points to the actual principles behind the organization of any community." I respond: speak for yourself. You don't need any "actual principles" of having a brain if you can trace its origin and function – just as much as you don't need "actual principles" behind having a society. The social contract either took place or it didn't.

My general position with regards to morality is very similar to that of Hume, and there's even an argument to be made that Hume also denies the social contract altogether or that at least his approach differs radically from the Hobbesian one. But I maintain that as far as our unity is explained by rational utility, we're still dealing with a social contract hypothesis.

Let us even assume that there were no biological causes for us to live as a community, which, as we can see, would be absurd – the question itself here is posed incorrectly, since the life of our species doesn't require any contract to begin with. However, let us assume that man is asocial, that he is not a social being, that he is forced to lead a lonely, rough, and joyless existence. Does it follow from this that the only basis for us to unite in communities would be the fear of each other, as was believed by Hobbes? We operate from the assumption that human relationships are built on the mutual satisfaction of biological needs, and that the power relations are merely an elaborate form of exploitation of some of these needs to the extent to which they manifest themselves in our psychological lives. Even without the mass of today's knowledge about human nature, Hobbes's error could have already been slightly corrected by the philosophers of the Enlightenment – "it is the variation of their faculties, the inequality which this places them in with regard to their fellows, that renders morals necessary to man," says Holbach right after supposing, that we're solitary by nature [16. P.156].

Human beings need each other (from the most banal meaning of this expression to the deeply personal), and any highly

organized culture, to the extent to which it's possible, promotes the pragmatically and axiologically regulated satisfaction of most of the needs of most of the individuals. Different groups cope with this task with varying degrees of success, depending on the development and refinement of culture, which is why some views, traditions, and societies are always preferred over others – people vote with their feet, so to speak[6]. As the Canadian scientist Joseph Henrich writes, "Since social norms can create groups with greater internal harmony, cooperation and economic production, many individuals will be inclined to migrate into more successful groups from less successful ones. Meanwhile, few will want to move to less successful groups, unless forced to. Over time, more successful groups will expand through immigration while other groups will contract through emigration. This has been observed in both the differential rates of switching groups at boundaries of small-scale tribal populations, and in migration patterns among nations in the modern world"[7].

[6] Harari, Yuval Noah. *21 Lessons for the 21st Century*. Spiegel & Grau, 2018.

[7] Henrich, Joseph. *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter*. Princeton: Princeton University Press, 2015.

Today's understanding of freedom is a product of the infiltration of the legal foundations of Roman slavery into philosophy. Since then, in the Western European tradition, freedom has been equated with the unlimited power of the pater familias, the signore, and the master to do as they please with their property. Freedom turns into property when we attempt to express it in the language of law – freedom is granted, distributed, bought, sold, and delegated. Everywhere, with the strengthening of the state and of the market that it generates, grows the likelihood that human freedom will gradually acquire monetary value, that the means of coercion will become a terrifying guarantee of universal participation in the economic dehumanization of everyone within reach of the leviathan. The payment of debts, adherence to duty, respect for duty – all this, with the vitalization of states, becomes part of our moral reasoning, becomes the sick delusional foundation on which we begin to rationalize morality. We plainly see the connection between how, for a thousand years, lawyers have tried to give meaning to Roman conceptions of property, and how, in a painfully similar manner, philosophers have tried to find the basis on which a person could engage in the same relationships of ownership and possession with themselves.

We see how people start to believe they lose ownership of their bodies, and to correct this, Reason is introduced – an inner tyrant that splits them in half and "gives" them the power over their own bodies, making them masters over their bodies. I believe it is called "create a problem to solve it." Reason for the body is what the right is for freedom – a tool for restriction, subjugation, and mutilation of our natural abilities and inclinations. The Soul, The Free Will, The Reason, The Right – these are ways of saying to ourselves that we are not free; that someone else has to allow us to be free; that in order to be free we need religion, rationalism, and the state, which is clearly not the case. We see the history of the emergence of these establishments, we see also the history of the emergence of the

Conclusion

Mutual Aid

The Russian anarchist Peter Kropotkin considered it necessary to dispel the myth of universal natural antagonism. In his work "Mutual Aid: A Factor of Evolution," he regards man first and foremost as a social animal. Gradually moving from describing the mechanisms of mutual assistance in animals to describing contemporary European society, Kropotkin demonstrates the inherent contradiction of the metaphor of struggle in the evolution of species. In animal life, mutual assistance is as much a law as mutual struggle. In his view, mutual assistance as a factor of evolution has much greater significance, as it "favors the development of such habits and characters as insure the maintenance and further development of the species, together with the greatest amount of welfare and enjoyment of life for the individual, with the least waste of energy"[1].

Today Kropotkin's reflections can be accompanied by new observations and arguments with the remark that any form of mutual assistance, no matter how beneficial it may be for the survival and prosperity of the species, like all other behavior, is subject to the mechanism by which genes create their own copies. This clarification does not diminish the contribution Peter Alexeyevich has made to the understanding of moral behavior. What prevents us from taking Kropotkin's works at face value today is, for example, the concept of the selfish gene popularized by Richard Dawkins and the accompanying assumption of universal antagonism.

[1] Kropotkin, Peter. *Mutual Aid: A Factor of Evolution.* London: Heinemann, 1902

The assertion that "all life in all its manifestations is a struggle" is not a necessary consequence of all life being subject to self-reproduction of the genes. Unfortunately, the concept of selfishness is far from molecular precision. When selfishness is understood as the fundamental principle of all organic transformation, such a view completely undermines not only the concept of altruism but also the concept of selfishness itself. The Dutch primatologist and ethologist Frans de Waal writes: "some like to label care for family and close associates "selfish," at least at an emotional level. While not incorrect, this obviously undermines the whole distinction between selfishness and altruism. If my eating all the food on the table is just as selfish as my sharing it with a hungry stranger, language has become obsolete. How can a single concept cover such divergent motivations?"[2]. For one reason or another the body mechanistically requires and supports mutual aid. Why should anyone first deny that moral behavior brings pleasure, and then attribute suffering as an obligatory criterion to altruism? It is done to glorify the meaning of selfishness in all human relationships at the expense of the notion of altruism.

Nature, says Kropotkin, "is variety itself, offering all possible varieties of characters, from the basest to the highest: and that is why she cannot be depicted by any sweeping assertion. Still less can she be judged from the moralist's point of view, because the views of the moralist are themselves a result – mostly unconscious – of the observation of Nature"[3]. Kropotkin merely acknowledges a simple fact – people live and have always lived in groups; it is impossible to ignore how this fact appropriately affects the biological nature of their relationships.

[2] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

[3] Kropotkin, Peter. *Mutual Aid: A Factor of Evolution*. London: Heinemann, 1902

voluntary ignorance, reductionism, and romanticization of the conditions over which we have no control. It is better to lose all theoretical standing and survive, to find another, to mix hundreds of them, than to slowly but surely sink into the darkness of illusion, dragging everyone else along. By combining many worldviews, I have none, and that is exactly what I offer – openness, adaptability, nothing. The best way to destroy your worldview is to educate yourself until the end.

bullshit, and if you speak your mind about it you'll be fired, expelled, shamed, silenced, beaten, imprisoned, deported, killed. Until there's bullshit, we're all slaves. My problem isn't that the pride owners of a worldview do not bear personal responsibility for it – it's that they demand consideration, respect and admiration for their fantasies; they demand that their mental self-entertainment be respected, even though they themselves have no clear understanding of what a worldview is. Truth is a common good – if you have something to tell me, that I don't know about, please oblige me.

Am I not making a terrible mistake here? Worldview, after all, is thought of as a vital necessity, as an inevitability, as the adornment of one's person, and as a source of meaning in one's life. Let's perform the following mental exercise. I am a living being, and this is not a matter of anyone's worldview. As long as I live, objects, people, and events are presented to me differently, depending on whether they are accompanied by pain, pleasure, or some neutral sensation. Strictly speaking, either of these two circumstances is enough to convey meaning to all my activities at each specific moment. Therefore, having a worldview is not an essential requirement for making my activities meaningful. The fact that someone's biased opinions help their owners to extract greatest benefits from the unique privileges and disadvantages they had from birth and up until the end of their childhood, in no way prevents them from renouncing these opinions based on acquaintance with the facts that directly refute them.

People are divided not by their individual worldviews, but by the worldview as such, as a phenomenon, as a parasite with whom we collectively exchange explanatory potential for obedience and loyalty. By saying "my worldview is…," we call ourselves slaves to everything we are about to say next. Worldview is the opposite of clear sight, a virus that one catches while avoiding to call things by their proper names. I think chance is safer to be trusted than such kind of certainty that leads to

The call to rise against our replicatory creators is an ethical position in itself – one that lacks sufficient scientific explanation, just like the position of the church that Dawkins have criticized. It is possible, however, for us to explain the evolutionary origin of his position, to point to the survival factors that make moral or proto-moral behavior in communities of living beings beneficial for their genes. This will not prove the necessity of morality, but it will at least indicate the reasons for its emergence, consolidation, and spread. This knowledge would be sufficient for us to stop attributing our moral behavior to either god or to the fear of physical punishment.

It must be said that Kropotkin sometimes went so far as to choose the words "Avoid competition!" as the main slogan for evolutionary progress, which even today would still provoke radical rejection in many researchers – "In the great struggle for life – for the greatest possible fulness and intensity of life with the least waste of energy – natural selection continually seeks out the ways precisely for avoiding competition as much as possible"[4]. Such statements were possible for him to make due to the observations he had at hand – that of ants avoiding internal competition, birds migrating for the same reason, deer and bison acting similarly, rodents going into hibernation during periods of possible competition, beavers dividing their colonies in half in case of overpopulation, and sparrows changing their own food preferences as necessary.

Kropotkin had enough examples of cohesive behavior from the animal kingdom – crabs helping their compatriots when they fall on their backs; ants feeding each other on the first request for food; a huge number of birds and other animals hunting in flocks; friendship bonds between parrots, reaching the point of death from grief for the deceased; colonies of monkeys, which may include representatives of different

[4] Kropotkin, Peter. *Mutual Aid: A Factor of Evolution*. London: Heinemann, 1902

species, and which allow to effectively repel attacks from almost all types of carnivorous animals and predatory birds, as it is enough even for one individual to simply call for help. We find such evidence today as well, firstly, in an even greater quantity, and secondly, with the possibility of visually confirming this through simply watching video recordings on the internet. Videos, for example, where a herd of buffaloes saves a calf from lions – "or the "Hero Dog," who risks his life dragging a half-dead comrade off a busy highway in Santiago, Chile. There is also the dog who refuses to leave an injured companion after the recent Japanese tsunami, African elephants who pull a calf from a mud hole, and beluga whales at a Chinese zoo who save a human diver who stopped breathing at the bottom of a freezing tank. One beluga gently takes her in its mouth, the way a dog picks up a puppy, after which both whales push the diver to the surface"[5].

Today, there is data proving the existence of altruism in rats – for example, in an experiment where a rat, when faced with the choice of freeing a companion from a locked container or immediately rushing for the food container, always headed towards the food container only if the other container was empty – the value of freeing a companion from a trap, based on empathy, is found to be equal to the value of access to food, which refutes Skinner's behaviorist model. Many documented relationships between chimpanzees can only be described as friendships – individuals do not necessarily have to be related to each other at the DNA level to spend a significant part of their lives together, to migrate together, to hunt together, to share food, to support each other in fights with other individuals, and to fall into self-isolation and mourning when their friends pass

[5] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

There is No Worldview

After discussing what freedom, morality, people, and their values represent in terms of what is observable, we can finally touch upon the topic of worldview. Suppose that members of all societies can be arranged in an ascending order, with the starting point being the people who in their perceptions, thoughts, and judgments cannot afford to deviate from the actual state of affairs even by a millimeter. On the other end of this chain will be people whose errors and liberal interpretations of reality are guaranteed to go unpunished, as others will always pay the price for their mistakes. The worldview is a privilege of the latter. The former have no worldviews – they either see the world for what it is or they die. A worldview is a collection of one's imaginary representations of one's own values, expressed as a rationalization of a certain kind of behavior. This whim has nothing to do with any kind of world, any kind of reality.

Without resorting to the indulgence of our minds to justify our opinions by claiming that we're exercising a certain "worldview," we're perfectly able to specify everything that pleases or displeases us in others, and to even explain why. By using the word "worldview," we absolve ourselves of all responsibility for the words and actions which base themselves on the things that we refuse to clarify and discuss. These may be vague or false assumptions, illusions, gaps in our knowledge – in short, everything worth hiding when you really want to obtain something you need.

Worldview is just a way of lying. It's an unnatural sophisticated attitude towards reality. We're constantly surrounded by

(5) All values are born naturally. Satisfaction of one's immediate needs gives rise to a certain way of life, consisting entirely of goals and methods of achieving them – in each individual case this way of life consists of methods of moving from pain to pleasure, where pleasure is always the goal, and pain is either the starting point or an obstacle on the path towards the goal.

Endowing an object with the meaning of existence occurs only on the basis of the need to distinguish important objects in the environment. Actual existence of a threat, for example, highly prioritizes an object in relation to the other ones. All other meanings, including the meanings of value, are organized in the same way. Possible objection: "Why then do we find some phenomena to be meaningful for us even though we deny their actual existence?" Answer to the objection: for reasons described in the explanation of the thesis number four.

Everything is refutable – everything except pleasure and pain. Pain is the foundation on which violence has any power over us. Pleasure is the foundation of demand, the foundation of any free preference. In complex combinations of our planned reactions with future events, we express the entirety of the plans that we have for our lives. All ideas, all complex and intricate schemes, structures, sets of words, sequences, maps, images, branching models, systems, chains, and scenarios – all these are ways in which the brain organizes long-term access to pleasure. It's not just that many other categories can be described through the category pleasure and pain – it's all of them, through and through. You'd only be upset about this fact if you had a certain worldview. But…

away. The same word "friendship" is also used to describe relationships between elephants, dolphins, and other animals[6].

In the case of humans, mutual assistance permeates everything. The human tribe is a single organism, with its constituent members united in their efforts to confront the challenges of the environment. Kropotkin's examples show the primitive, natural forms of what is somehow separated from our physical life and called morality. It is customary for all primitive societies, from the Hottentots to the Eskimos, to always share food with their compatriots – a Hottentot cannot eat alone, "however hungry, he calls those who pass by to share his food"[7]. The Eskimos, Tlingits, and Aleuts live in families, but the family bonds are still weak, and there are periodic exchanges of wives and husbands. Families are united in clans. In the culture of the Eskimos, there is a centuries-old respect for public opinion. Those tribes of Eskimos and Aleuts who lived near Europeans and partially adopted their notions of private property, resorted to all sorts of tricks to maintain equality among themselves – they distributed any surplus to their kin at special festivals, so that each guest left richer than the hosts remained. Over 60 years in the Aleut society with a population of 60.000 there was only 1 murder. Profane words are practically absent – the strongest expressions in their speech are phrases like: "Your mother does not know sewing," or "Your father is blind of one eye"[8].

Not every indigenous society is like this. Kropotkin acknowledges, for instance, that Papuans sometimes ate their prisoners, killed the oldest and weakest among them, and sold the rest into slavery. But otherwise, he notes, they are

[6] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

[7] Kropotkin, Peter. *Mutual Aid: A Factor of Evolution*. London: Heinemann, 1902

[8] Kropotkin, Peter. *Mutual Aid: A Factor of Evolution*. London: Heinemann, 1902

quite "sociable and cheerful"[9] – they live in peace, work together, raise children together, and befriend tribes. I wouldn't underestimate individual differences between independently developing communities, but they in no regard undermine the common origin of altruism in mankind.

The 18th-century myth of the noble savage was overturned in the 19th by Kropotkin's contemporaries, and the scientific consensus was pushed towards the opposite extreme. Of this he says: "the savage is not an ideal of virtue, nor is he an ideal of "savagery." But the primitive man has one quality, elaborated and maintained by the very necessities of his hard struggle for life – he identifies his own existence with that of his tribe; and without that quality mankind never would have attained the level it has attained now"[10]. The evolution of human ancestors, which granted us our current 'rationality,' occurred in parallel with the development of human cultures, any complex and branching organization of which would have been impossible if their bearers had not lived as a cohesive community. No leap of faith is required to acknowledge the continuous connection between the way of life of humans and the way of life of their animal ancestors – at least, no more than what is necessary to understand the theory of evolution as such. There is an excellent methodological principle that allows one to avoid errors in interpreting the evolutionary origin of certain behaviors – "if two closely related species act the same under similar circumstances, the mental processes behind their behavior are likely the same, too. The alternative would be to postulate that, in the short time since they diverged, both species evolved different ways of generating the same behavior. From an evolutionary standpoint, this is a convoluted proposal. Unless it can be

[9] Kropotkin, Peter. *Mutual Aid: A Factor of Evolution.* London: Heinemann, 1902

[10] Kropotkin, Peter. *Mutual Aid: A Factor of Evolution.* London: Heinemann, 1902

(3) The pleasant is pursued and welcomed. Pleasure, comfort, and interest are the simplest automatic reactions to those stimuli whose objective sources, in one way or another, ensure our continued existence. "Invariably, nature associates things that we need to do with pleasure. Since we need to eat, the smell of food makes us drool like Pavlov's dogs, and food consumption is a favorite activity. We need to reproduce, so sex is both an obsession and a joy. And to make sure we raise our young, nature gave us attachments, none of which exceeds that between mother and offspring"[2].

(4) Comfort is rationalized in proportion to the unattainability of what is desired. All living things strive to shorten their path from pain to pleasure, including through the sacrifice of common sense. We, against our will, are all subjects to the principle of maximizing pleasure, and any formal morality we are capable of producing is either a rationalization of this principle or an attempt to negate this principle while still retaining (explicitly or implicitly) a distorted view of its possible realization.

In situations of discomfort people prefer comfort way over genuine pleasure, and then repeatedly explain to themselves how each individual source of comfort, regardless of its existence and validity, brings them closer to pleasure. Behind each source of comfort lies an illusion, serving as an excuse to no longer pursue genuine pleasure. We mostly value things that bring us comfort during periods of stress, because it is easier for us to establish such associations when they are desperately needed. Objects, words, and ideas that flicker before us and distract us from the stress itself are thus effectively thought to be life-saving and vitally necessary. We self-condition ourselves into superstition, and always will.

[2] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates.* New York, NY: W. W. Norton.

pleasure as a sufficient basis for the axiological autonomy of living beings:

(1) Pleasure and pain are a survival mechanism. All living things remain so only as long as they are capable of responding appropriately to external stimuli. The presence of the mechanism is explained by this very principle.

(2) The painful is avoided and rejected. Pain, discomfort, and disgust are the simplest automatic reactions to those irritants whose objective sources, in one way or another, threaten our existence. On these very grounds I recognize freedom (resistance to coercion) as a natural bodily value.

When experiencing moral rejection, people activate the same brain areas that are involved in rejecting spoiled food, which is why, when placing someone in a situation where they are forced, for example, to be right next to the source of an unpleasant smell, we observe changes in their assessment of certain actions and lifestyles in general. "How can a disgusting smell or tactile sensation change unrelated moral assessments? The phenomenon involves a brain region called the insula (aka the insular cortex). In mammals, it is activated by the smell or taste of rancid food, automatically triggering spitting out the food and the species's version of barfing. Thus, the insula mediates olfactory and gustatory disgust and protects from food poisoning, an evolutionarily useful thing. But the versatile human insula also responds to stimuli we deem morally disgusting. The insula's "this food's gone bad" function in mammals is probably a hundred million years old. Then, a few tens of thousands of years ago, humans invented constructs like morality and disgust at moral norm violations. That's way too little time to have evolved a new brain region to "do" moral disgust. Instead, moral disgust was added to the insula's portfolio"[1].

[1] Sapolsky, R. Determined: a science of life without free will. New York: Penguin Press, 2023.

proven that if an ape comforts another its motivation differs from that of a person doing the same"[11].

Anthropologist Stanislav Drobyshevsky provides some interesting explanations of pro-sociality also. In early australopithecines (4.2 – 1.8 million years ago), there is already a decrease in sexual dimorphism, that is, the visible difference between males and females. The size of the fangs also decreases, indicating a reduced need for intraspecies mutual intimidation. While ancestors of baboons indeed adapted to the environment through the hierarchical structure of their communities, our ancestors, since the time of proconsuls and australopithecines, on the contrary, began to become "kinder" and to collectivize, which allowed them to jointly resist predators such as the saber-toothed tiger[12]. Prosocial behavior, that is cooperation, became the criterion for selection. 2.6 million years ago, australopithecines lost to the more aggressive and hierarchical baboons in the struggle for resources and territory, which, however, led our ancestors to consume meat, which, in turn, led to the gradual "invention" of tools, and then language, through which the culture of using and producing these tools could be preserved and developed. This could easily be the beginning of a scientific "History of Thought."

[11] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

[12] YouTube. (April 3, 2022) Drobyshevsky. Anthropology of power [video file], https://youtu.be/8ozepoLBMvEsi=N0aNdfSQ0qD6cn7a (access date: 02/21/2025)

Empathy

Primate researcher Frans de Waal has occupied, as it were, a niche once created by Kropotkin. In his ”Bonobo and the Atheist” he examines the painful historical path that biology has taken before the moral behavior of animals and the presence of emotions in them were finally established. He considers the factors that influenced the fierce rejection of these facts, examines relationships that have developed between biological science and religion, provides numerous examples of prosocial behavior in primates, and explains why it is ridiculous to assume that our moral principles have come from either religion, law, or reason. He particularly emphasizes the study of the behavior of two species of monkeys that are equally related to humans but, at the same time, are very different to one another – the strictly hierarchical but also empathetic and consolidated chimpanzees, and the equally empathetic yet extremely more egalitarian bonobos, ”emancipated” to the point that sex is used by them to resolve literally all conflicts.

Let’s start with how human moral behavior is represented in the so-called Veneer Theory. Advocates of this view believe that human morality is merely a thin layer of veneer, a thin veil, covering our true egoistic nature. Any natural manifestation of kindness, whether in animals or humans, is thus either entirely denied or understood as an evolutionary error of genes. In recent decades, this theory has finally collapsed under the pressure of empirical data that points to the altruistic significance of empathy. Not to consider the acts of kindness as an objective need for mammals is to deny the very evolutionary purpose of empathy. De Waal also says that the theory of ”misfiring

Five Theses on the Natural Origin of Values

At some point it becomes evident that in the business of explaining behavior, we cannot do completely without observable patterns, and completely without subjectively experienced motives. As a compromise, we reduce all necessary external constraints to the concept of objectivity, while also reducing all internal features of prioritized perception to the concept of value. And thus, through various speculative procedures we try to find a timeless justification for the so-called ”objective values,” which now become a constant obstacle to any sort of sophisticated debate about human behavior.

A participant in the debate about ”objective values” will try and prove, first of all, that it is their lifestyle and their set of opinions that are the embodiment of a sincere pursuit of an ideal standard of behavior that corresponds to ”objective values.” Secondly, they’ll try and prove that no other lifestyle or set of opinions has an independent source of ”objective values,” for if their values are objective, then any conceivable alternative is either false or secondary to them.

Values are sets of ideas, images of objects and actions that an individual, for various reasons, prefers to other ideas, other images of objects and actions, that appear to this individual to be less important, less related to the possibility of comfortably continuing behavior that brings pleasure. For you to prove the natural origin of values to anyone who wills to listen, I have formulated five common-sense theses about the principle of

5. Value of Pleasure and Pain

genes," which supposedly make people better than it would be beneficial for them be, does not apply to genetics at all – "The reason why misfiring genes don't exist as a concept in genetics is that genes are just little chunks of DNA that know nothing and intend nothing. They have the effect they have without any goal in mind, hence are incapable of mistakes"[1]. De Waal notes that we do not call the movement of fingers on the piano keyboard an error, for example, but we must somehow consider any help to our fellow human being as an error. Such a bias towards altruism has formed over a very long time, and many people endorse it. De Waal calls the idea of the necessity of sacrifice in altruistic behavior the "altruism-hurts hypothesis" and considers it deeply wrong. Maternal care, for example, does not imply any sacrifice. As already noted earlier, if we call altruistic behavior egoistic just because it brings us joy, then we can call "egoistic" anything we want. Is there not some kind of a presupposition external to biology hidden behind such an understanding of altruism?

Economists were first to criticize the results of the experiment conducted by De Waal's team on prosocial behavior in chimpanzees. The experiment involved counting instances where an individual chose prosocial green tokens, for which both the individual and their compatriot received a reward, instead of red "egoistic" tokens, for which the reward was received only by the chooser. According to the results, chimpanzee Peony chose green tokens two out of three times. In some pairs, nine out of ten tokens were prosocial, but on average, most were two out of three. One economist, writes De Waal, "complained that since the chimpanzees faced no cost to their behavior, it didn't really count as altruism. Another pointed out that the chimps weren't prosocial *all* the time. Since they ignored their partner's interest one out

[1] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

of three times, they weren't particularly nice, he said, calling them "mean-spirited" instead"[2]. This is precisely the theory of sacrificial altruism – that is, the only form of altruism that the *homo economicus* can imagine. If a living being is capable of helping other living beings not out of some noble idealism, but simply for the sake of doing so, without experiencing any discomfort, and may even do so for their own pleasure, then it is a scandal! This means that the very foundation of economic theory is a fiction; that economics raises a universal artificial wall between people, with no natural foundation for doing so! This, of course, cannot be true – this is a heresy and a mockery of common sense… Remember, says De Waal, that in terms of altruism "for an entire decade humans had been considered unique because chimps, it was said, didn't even help each other when doing so didn't cost them anything"[3].

Many believe that to behave morally a person must through the power of thought and self-conviction overcome the natural inclination of their organism to act in its own interest. Empathy is also casually included here, as something that one must learn oneself and preach to others. However, for humans, helping one another is a natural norm of behavior. One has to subject their brain to significant cognitive load to find a reason not to do so. In the early 1990s, it was believed that empathy was controlled by the cortex. Today, however, we know that this is not the case – "Humans don't decide to be empathic; they just are"[4]. Empathy is the feeling of another body and of the actions of that body as one's own, based on the work of mirror neurons which do not make such a distinction to begin with. Essentially, the work of mirror neurons can be observed every

[2] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

[3] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

[4] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

there will be neither an increase nor a decrease in meaning of human life, as nature herself is indifferent to such speculative matters; she values only that which promotes life for the sake of life. Nature alone do we oblige ourselves to praise for everything that makes life joyful. For everything that makes us suffer, it's only her we can legitimately hate.

them[5] (thus the sequence is: sensory register; selective filter; perception). Deutsch and Deutsch's late selection theory suggests that sensory data acquire meaning in our perception even before the filtering process begins[6] (sensory register; perception; selective filter). In Treisman's theory of attenuation, meaning is subconsciously partially ascribed even to such sensory data that isn't specifically attended to. Thus, instead of a full-fledged filter, we have only an attenuator, that is, a tool for attenuation[7] (sensory register; attenuator; perception).

Whatever the elements of these sequences are, the theory of attention should in principle be able to place meaning somewhere in between these elements. The earlier we observe the intrusion of the world of meanings into the world of sensation in these theories, the greater the importance we are forced to attribute to the influence of culture on our behavior – the more significance we thus ascribe to the activity of the "consciousness," and the more convincing we find teleological and deistic explanations of the world – that is because meaningfulness, active intentionality, and deliberateness then all become part of our common perceptual ontology. If Kant can afford to end his epistemological investigations with the thing in itself and call it a day (call it ontology), so can we call the natural basis of our perception our ontological starting position, if we were at all to address the human-specific ontology. Other than that, I almost find the question of meaning to be kind of meaningless.

What we now know about life on earth is enough to confidently assert that even with a complete destruction of culture,

[5] Broadbent, D (1958). Perception and Communication. London: Pergamon Press.

[6] Deutsch, J. A., Deutsch, D. (1963). "Attention: Some Theoretical Considerations". Psychological Review. 70: 8090. doi:10.1037/h0039515. PMID14027390.

[7] Treisman, A. (1964). "Monitoring and storage of irrelevant messages in selective attention". Journal of Verbal Learning and Verbal Behavior. 3 (6): 449459. doi:10.1016/S0022-5371(64)80015-3.

time someone is "infecting" us with their expression, laughter, sadness, yawning, anxiety, comfort or discomfort; when we, observing the performance of complex actions, tense the same muscles that facilitate these actions. Generally speaking, if it were not for these neurons, we might have not end up becoming so dependent on culture as a species, and we would not have launched the process of complex co-evolution of the body and culture that led to the development of such a sophisticated neocortex that we now have.

We have learned to measure empathy in both chimpanzees and humans by measuring the tendency to catch yawns – the effect is stronger the more familiar we are with the one who is yawning. To feel another's pain and to experience the strongest discomfort associated with it, we do not even have to be of the same biological species as the animal that is experiencing this pain. However, empathy, we must say, is hopelessly biased. There is data showing that football fans not only lack empathy for fans of the opposing club – we see the activation of pleasure centers when they observe how their opponents receive electric shock[5]. So much for the humanistic significance of football…

According to Robert Sapolsky, the feeling of empathy becomes more complex with age, moving from a direct sensation of another person's pain (through the activation of the central gray matter) when it is felt so acutely that the natural reaction is to entirely avoid the one who is in pain, to a more moderate feeling when an adult has the ability to understand the emotional position of another in a more detached way, which allows for effective pro-social action[6]. The urge to empathize necessarily passes through a cognitive filter, where we first identify the sufferer as a member of our group, and only then allow

[5] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

[6] Sapolsky, R. M. (2017). *Behave: The biology of humans at our best and worst*. Penguin Press.

ourselves to feel compassion for them – otherwise, empathy is hindered by the cognitive load, as it is much more difficult to put oneself in the position of "one of Them" rather than "one of Us." When it comes to empathic states, he writes, ""emotion" and "cognition" are totally false dichotomies; you need both, but with the balance between the two shifting on a continuum, and the cognition end of it has to do the heavy lifting when the differences between you and the person in pain initially swap the similarities"[7]. Thus, according to Sapolsky, as far as the real altruistic action is concerned, empathy is a cognitively regulated physiological response, where the role of "reason" is precisely the cold-blooded distancing from the contagious element of another's suffering and the intellectual resistance to the natural division into 'Us' and 'Them'.

[7] Sapolsky, R. M. (2017). *Behave: The biology of humans at our best and worst.* Penguin Press.

of works defending naturalism through modern evolutionary psychology. It is indeed difficult to speak of any division between nature and nurture when the main point of the research is the study of the co-evolution of culture and the body, where for hundreds of thousands of years, the structure of the human body (nature) has changed in accordance with the cultural traditions (nurture), so that culture has eaten its way into the body, providing it with a set of benefits that eliminate the need to strengthen and preserve physical characteristics that previously served the function of achieving these benefits.

Overall, Henrich, through vivid examples and an enormous amount of data, demonstrates the counterintuitive basis of our total dependence on cultural practices that are passed down orally and hand to hand, over many thousands of years. However, it is unclear to what extent this deep dependence on the reproduction of traditions reflects on the mechanisms of our perception. Certainly, as a result of various forms of learning and different sets of social influences, our perception and evaluation, for example of the opposite sex, tends towards those that better integrate us into society – in this specific case, the knowledge of public opinion has a mind-boggling influence on the 'individual' evaluation of beauty[4]. But can it really be argued that our inborn patterns of perception are culturally altered to the point that we inevitably live, first and foremost, in the world of meaning?

The theories of selective attention outline the possible spectrum of the assumed essence of the relationship between sensations and meanings. In Broadbent's theory, sensory data undergo selective filtering, so that only distinguishable parts reach the level of perception where we ascribe meaning to

[4] Henrich, Joseph. *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter.* Princeton: Princeton University Press, 2015.

that are approximately 80% (or entirely) social learning[1]. In the experiment[2] where, in front of human children and chimpanzee children, the scientist poked a stick into the holes of a plastic box until sweets fell out of one of them, it was shown that the chimpanzees, understanding the principle of the mechanism, immediately chose the hole that was responsible for receiving the reward, while the human child was inclined to repeat all of the actions of the scientist, including the useless ones – such is the extent to which our behavior is dependent on learning by imitation, or in other words, on culture.

Human culture has had a substantial impact on the human body, and perhaps this is one of the most important arguments in favor of our radical difference from the other forms of life – "many aspects of our physiology and anatomy make sense only as genetically evolved responses to selective pressures created by the cultural evolution of things like fire, cooking, cutting tools, projectile weapons, water containers, artifacts, tracking know-how, and communicative repertoires. Among our numerous features, these help explain our small teeth, short colons, shrunken stomachs, poor plant-detoxification abilities, accurate throwing capabilities, nuchal ligaments (head stabilizer for running), numerous eccrine sweat glands, long post-reproductive lives, lowered larynxes, dexterous tongues, whitened sclera, and enlarged brains"[3]. This conclusion is presented by Joseph Henrich in his book "The Secret of Our Success…" This work cannot be placed either in the corpus of literature supporting social constructivism, nor in the list

[1] Rendell L, Boyd R, Cownden D, Enquist M, Eriksson K, Feldman MW, Fogarty L, Ghirlanda S, Lillicrap T, Laland KN. (2010) Why copy others Insights from the social learning strategies tournament. Science. Apr. 9;328 (5975): 208213. doi: 10.1126/science.1184719

[2] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates.* New York, NY: W. W. Norton.

[3] Henrich, Joseph. *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter.* Princeton: Princeton University Press, 2015.

De Terrena Hierarchia

Another source of moral behavior, among many we've talked about so far, is the social hierarchy. Humans are hierarchical primates, and this is evident even from the early childhood. De Waal emphasizes how much easier it is to compare the behavior of human males with the behavior of male chimpanzees than with that of any other species. However, you might accuse me in hypocrisy – aren't natural morality and dominance hierarchies mutually exclusive things? No. For two reasons. First, except for reinforcing the mechanisms of actual violence during the periods of the establishment of hierarchies, dominance hierarchy itself does not contradict the emergence, development, or preservation of all those mechanisms of mutual assistance and cooperation that we have spoken of earlier. Second, and this is the most tragic conclusion that can be drawn from researching the origin of morality – the tendency of people to submit to a strict regulation of social interactions based on the fear of violence is one of the sources of de facto reinforcement of moral norms.

Strict social hierarchy stands behind all disciplined behavior, determining who has the right to mate with whom, who gets access to food first, and so on. We are not the only primates to strictly follow rules. De Waal gives an example of how chimpanzees, after the keepers have distributed nuts to them, gather in a certain part of the enclosure and take turns splitting the nuts open with a stone and a metal block – "If one of the lower-ranking females and her offspring had tried to claim the cracking station before their turn, things would have gotten ugly <…>they knew what to expect in case of a breach of rule.

A social hierarchy is a giant system of inhibitions, which is no doubt what paved the way for human morality, which is also such a system"[1], says de Waal. However, what is remarkable for us is that nothing more is demonstrated here than the mere fact that rules, wherever they come from, are best followed where punishment for breaking them is immediate. This does not contradict the fact that moral behavior free from external coercion is natural for humans. The very mechanisms through which mutual assistance, friendship, care, attachment, empathy, compassion, and love are made possible, all find their origin not in violence, not in hierarchy, but in precisely the opposite tendencies of behavior.

Prosociality arises from the need to avoid violence, to help your kin, thereby increasing the overall chances of survival. Moreover, it is misleading to believe that prosocial behavior in primates is not predominant over mutual struggle – "Most pertinent for morality, which is also normative, social mammals strive for harmonious relationships. They are at pains to avoid conflict whenever they can. The gladiatorial view of nature is plainly wrong. In one field experiment, two fully grown male baboons refused to touch a peanut thrown between them, even though they both saw it land at their feet"[2]. Moreover, there are examples of how the entire social order of primates is reconstructed depending on the presence or absence of particularly aggressive individuals within the community. Robert Sapolsky's research on this topic demonstrates the social plasticity even in such die-hard adherents of hierarchy as wild baboons. As soon as all aggressive individuals disappear from the group for one reason or another, the remaining individuals not only start to lead a peaceful egalitarian existence – they also fully incorporate the incoming males from other groups into

[1] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

[2] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

Human Culture

People spend most of their lives orienting themselves towards satisfying their immediate needs. Culture creatively uses our most banal desires to maintain social homeostasis – be it the impulses of egoism, empathy, thrill of gain, fascination, aggression, love, attachment, rivalry, or anything else. This exploitation can be accurately understood and described in reverse, from the need itself to the tradition that satisfies this need. This kind of description is a task of science. For the genes human cultures are disposable material, for when a specific culture dies, all vital mechanisms of the organism remain in place, including those necessary for receiving an alternative culture or building a new one from scratch.

Culture does not emerge from the predetermined inborn pattern – it starts, continues and develops with imitation; it dies where imitation ends. All spoken language along with the whole worlds of meanings it carries, is but a pragmatically advantageous collection of traditions. Without these traditions, people become unable to live in society with others, which indicates the extent to which the well-being of our biological bodies (throughout their co-evolution with culture over millennia) depend on the preservation of these functional traditions of speech. Imitation, that is, social learning, is proven to be the most advantageous strategy of behavior. If one has to choose between spontaneous action, repetition of a learned action, and a repetition of an action of a fellow being, the latter turns out to be the most advantageous option, even for an algorithm in a mathematical model – the winning algorithms are the ones

speak of testosterone levels, or the conditions of the environment in which someone grew up; or the hormonal background of the womb in which they were carried before birth. No – we talk of responsibility.

Whether you hold yourself or someone else accountable for something; whether you do it in a positive or a negative way – the highly developed tool for reasoning is thus constantly assumed. This Reason is merely a sophisticated trick that you expect yourself and others to perform. The more achievements you attribute to your own self, the more you emphasize how every other self out there is responsible for you having such a hard time achieving what you've achieved. It feels as if it should be the other way around, but it isn't – you don't get less resentful towards others by simply attributing responsibility to yourself. The only true function responsibility has is the social order function – without the community all resentment is baseless, all achievements are futile, all sins and faults are meaningless. Community necessitates the self as a complex combination of rituals, stored and monitored by the prefrontal cortex, and this is the limit of the extent to which the self is materialized.

I contrast the theories of metaphysical responsibility with a realistic and scientifically grounded view of the human organism. Individually it is preferable, I think, for people to cultivate a sense of harmony, that would protest every time we are fiercely compelled by external circumstances to perceive ourselves as something that we're not. The culture of the society that raised us has gifted us with an obligation to participate in the selection for compliant shameful computational machines with an extremely developed prefrontal cortex and a taste for subordination. A harmonious person, on the contrary, evenly utilizes all of the helpful functions of their body – especially the ones that let them live harmoniously with everyone else.

their newly formed "hippie culture," which is maintained and kept alive for decades[3].

There is a strong connection in many minds between morality and external control. This connection is a lot easier to understand when we take our hierarchical nature into account. One hears that without laws, without the state, without religion, or without the cult of reason, people would behave immorally, they would steal, rape, torture, kill, and, most importantly, have sex wherever they want (what a horrifying atrocity...). As de Waal writes, "we come from a long line of ancestors with well-developed hierarchies for whom social inhibition was second nature. If doubters need proof of how much we owe to this history, they need only consider how much we invest moral rules with authority. Sometimes the authority is personal, like a super alpha male, as when we claim that God handed us the rules on a mountaintop. At other times, we fall for the authority of reasoning, claiming that certain rules are so logically compelling that it would be silly to disobey them. Humanity's reverence for the moral law betrays the mindset of a species that likes to stay on good terms with higher-ups"[4]. The power of law or the power of a myth that has a lot of supporters conveys great significance to the words of some negatively gifted individuals. Such significance would have been completely absent if only they didn't speak on behalf of institutions in possession of more than enough potential for direct violence on a mass scale. There is indeed a lot of servility in humankind in general. The mechanism of shame, to which the category of conscience usually appeals, originates from crawling and groveling before a dominant individual. An ashamed person lowers their face, avoids eye contact with others, drops

[3] Sapolsky R. M., Share L. J. (2004) A Pacific Culture among Wild Baboons: Its Emergence and Transmission. PLoS Biol 2(4): e106. https://doi.org/10.1371/journal.pbio.0020106

[4] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

their shoulders, shrinks, lowers the corners of their mouth, and arches their eyebrows in a dome shape – all echoes of a posture of submission, in which a weak individual visually makes themselves as harmless as possible – "shame reflects awareness that one has upset others, who need to be appeased"[5]. If submission, weakness, and the exaggeration of one's harmlessness are called morality by religious apologists and the likes of Hobbes, then indeed, yes, morality comes from god, indeed, morality comes from Caesar.

The "Us" is held together by empathy and cooperation, which all are natural occurrences. "Them" are only so until you befriend them, to which there is no insurmountable obstacle. Dominance hierarchies are held together by violence – if there aren't any violent individuals in the group, they dissolve; if there is nothing to compete for, they never emerge; if life is more bearable the more united we are as a group, our means of competition degenerate and disappear quite naturally. Hierarchies of prestige are mediated through collective perception of value and the imitation of successful behavior – if you come up with a new successful model for behavior, thousand-year-old traditions rapidly become unpopular and die. Should one respect and worship that which is above him because it's somehow morally necessitated? Hierarchy spreads obedience. There is little good to be found in its existence – most of it is slavery, abuse, antagonism, aggression, and fear. We might turn out to be so hierarchically defined by nature, that we'll see each other in these terms without end. But one can never build a notion of morality by looking up to despotism, or better yet by looking up at all. The idea that one person is ever able to define the best kind of future for any group of people is the most sinister, callous and detestable idea in all of history. This is what I think of morality and rank.

[5] de Waal, F. (2013). *The bonobo and the atheist: In search of humanism among the primates*. New York, NY: W. W. Norton.

a tiny range, while hormones, due to their spread through the bloodstream, affect the most distant cells.

Amazingly, we do not find here any of the so-called "passions" as distinguished from the so-called "reason." And the presence of an independently existing reason itself here accordingly tends towards none. It should be noted that the structures and systems we've referred to also themselves consist of other structures and systems, of their transitions and interactions (some of which may still be awaiting discovery and proper description). When clinging to empirical, testable knowledge it is not always possible to arrive at a convenient and compact explanation. However, at the very least, we're not worshiping the idols of the cave or of the theater, which is nice.

Should anyone wish to philosophize about passions, reason, or "the spirit" in general, all the aforementioned mechanisms will have to be taken into account. One fine day, every possible behavior will be explained by referring to the principles behind theses mechanisms' functioning and the "deviations" in their functioning. By then, there will be no need to further participate in philosophical debates about human nature, just as there is no need today to prove the advantages of Western astrology over Vedic astrology – one surely is just as accurate as the other.

Now let's reassess just the kind of silly situation we're finding ourselves in each time we demand that the machine for producing and transmitting stable combinations of behavior should bear true responsibility for the defective functioning of its parts. This is analogous to blaming a broken clock for its imperfection, punishing that clock, and teaching your wisdom to this clock as if it were capable of something beyond what is allowed by its design. We do not mention the hippocampus when blaming ourselves for being unable to navigate space. When we condemn ourselves or someone else for an impulsive act, we do not mean to imply that someone's amygdala is dysfunctional. When assessing behavior legally or philosophically, we do not

and pleasure, balance, muscle tone, attention, and speech. The corpus callosum connects the right and left hemispheres of the brain, ensuring the exchange of motor, sensory, and cognitive signals. The olfactory bulb analyzes olfactory signals. Through a set of neural circuits, these signals are compared with memories of other known smells.

The central nervous system consists of the cerebral cortex, cerebellum, diencephalon, mesencephalon, medulla oblongata, and spinal cord. In the peripheral nervous system, we distinguish the autonomic nervous system and the somatic nervous system. The autonomic system is divided into the sympathetic, responsible for stress and excitement, and the parasympathetic, responsible for stabilizing the body, sleep, and recovery. The autonomic system regulates our circulation, respiration, digestion, growth, metabolism, reproduction, and orgasm. The somatic nervous system is responsible for movement and sensation of external datum, as it is attached to our muscles, skin, auditory and visual organs, and so on.

Human behavior is significantly influenced by hormones and neurotransmitters (molecules located just behind the neuron membrane in the area where the neuron's axon connects with the target cell), among which the following are highlighted: amino acids – GABA, glycine, glutamate, thyroxine, acetylcholine, and aspartate; monoamines (including catecholamines) – adrenaline, noradrenaline (also known as epinephrine and norepinephrine), melatonin, and dopamine; other monoamines – serotonin, histamine, and phenylethylamine; peptides (chains of amino acids) – endorphins and other opioids, oxytocin, vasopressin, prolactin, insulin; steroids – estradiol, testosterone, estrogen, cortisol, and progesterone; eicosanoids – prostaglandins, thromboxanes; gases – ethylene and nitrogen oxide (II). The main difference between hormones and neurotransmitters is the range of their effect relative to the producing cell – neurotransmitters have

Nihilism of Nature

There's a sharp need to clarify what mutual aid has to do with survival, as this word is always overloaded with excessive meaning. Mutual aid is understood as some voluntary and conscious self-sacrifice for the common good – that is, as something that is never to be found in nature at all. For everything useful in an animal's life, there is usually a system of rewards. Specifically, our brain rewards us for every instance of cooperation (reciprocal altruism) by activating the corresponding areas – the cingulate nucleus, the caudate nucleus, the orbitofrontal cortex, and the anterior cingulate cortex[1]. The phrase "survival of the fittest" should also be always corrected so that it implies survival of "the most adaptable" – and even that, we must add, is not always fair, as no one is ever immune, for example, to large-scale disasters like droughts. Adaptability doesn't know any clear strategies, it doesn't have any universally recognizable criteria. Our distant mammalian ancestors have outlived the dinosaurs not because they were stronger, scarier, or larger than them. Mutual Aid is just one aspect of animal group life that we highlight to explain the origin of morality. The "group life" itself naturally encompasses both altruism and mutual competition, and it does not matter which of these aspects is most visible to the naked eye. Group life implies competition and mutual aid, without having them as discrete, defined concepts – as is the case with everything in nature.

[1] Rilling J, Gutman d, ZEH T, Pagnoni G, Berns G, Kilts C. (2002) neural basis for social cooperation. Neuron. Jul 18;35(2), 395-4 https://doi.org/10.1016/S0896-6273(02)00755-9

Despite the fact that the inbuilt survival mechanisms sometimes insure that we commit horrible things, evolution has also left us a mechanism for caring for the offspring, which allows us to survive to maturity; a mechanism for cooperation, which gives us collective advantages; a mechanism for empathy, highly beneficial for social learning, and so on. In humans positive aspects of natural behavior are further amplified through culture. Domestic animals, through the constant selection for the cutest and most obedient among them, much like flowers, parasitize on our need for positive emotions. This need, and the influence of these emotions, prevent us from neglecting those who are weaker than us. By seeing ourselves in others through empathy, we involuntarily transfer our sensory abilities, and then our emotional-cognitive ones, onto another body; when we fervently hug someone, we hug ourselves. In every living body that is not hostile to us, we see an opportunity for mutual satisfaction of the need for love and comfort.

It is only once we achieve the proper comfort that our instincts for play, exploration, and interaction can be awaken, thus making the un-stressful learning process possible at all. It is not acceptable for a scientist to explain human behavior solely by basing it on a pure desire to satisfy vital needs and thus neglecting the factors that ensure us not just with life but with a comfortable and pleasant life. To simply survive and live like an amoeba, we do not need most of our biological mechanisms at all. The issue is that we now have them. The issue is that now we are bound to live in precise accordance with the prosocial mechanisms that we have. We live only in so far as empathy, care, friendship, mutual aid, and cooperation are actually utilized – this includes all internal and external impulses towards prosocial behavior, since they are all biologically necessitated and evolutionarily significant. Free prosocial behavior is the natural norm of human behavior – not the product of

tions. From the brainstem and hypothalamus upwards to the cerebral cortex, the reticular activating system branches out, distributing glutamate, which provides us with a state of consciousness.

Basal ganglia are a group of brain structures responsible for emotions, voluntary movements, procedural learning, Pavlovian learning, and habit-based behavior in general. The basal ganglia consist of 6 structures described below. The globus pallidus is a channel for transmitting information from the cerebral cortex, receiving signals related to movement, decision-making, and motivation. The globus pallidus, as part of the reward system, contributes to procedural and associative learning (defective in people with OCD). The substantia nigra receives signals from the globus pallidus and the striatum and sends information about movement back to the cerebral cortex through the thalamus. The signals from the substantia nigra directly stop excessive muscle contractions to ensure smooth and intentional movements. The nucleus accumbens controls cognitive processing of motivations, aversion, fear, pleasure, positive reinforcement, placebo effect, and the formation of addictions. After a satisfying behavior, dopamine is released in the neurons of the accumbens nucleus, which promotes the brain's habituation to this behavior. The accumbens shell promotes the transmission of information from the frontal cortex to the pallidum, regulates movements and initiates learning. The substantia nigra activates movements by sending signals to the caudate nucleus and the accumbens shell. The subthalamic nucleus weakens the motor signals and slows down thinking to ensure enough time is spent on making the right choice.

The cerebellum (little brain) contains 70 billion neurons (five times more than the cerebral cortex). This part of the human brain eliminates errors in movements, coordinates the movements, and helps make them more precise, thereby helping establish neural patterns for complex movements. The cerebellum also regulates emotional reactions of fear

sion activate the amygdala in response to stimuli that cause sadness, rather than fear.

The hippocampus also uses long-term potentiation, it is responsible for spatial memory and generally for the transition of short-term memory to long-term (it is damaged in Alzheimer's disease and other forms of dementia). The hippocampus communicates with the neocortex through the base of the hippocampus and through the entorhinal cortex. The dentate gyrus produces new neurons, and, under the guidance of the entorhinal cortex, properly connects them with other neurons in the brain, creating connections that we conventionally call memory. The hypothalamus regulates the autonomic nervous system, connects the central nervous system with the endocrine system – it controls the pituitary gland, which, in turn, produces hormones, controls body temperature, regulates thirst and hunger, sexual behavior, sleep, heart rhythm, and ensures the formation of attachment between mother and child, as well as brings signals from the brainstem to consciousness (transmits them to the cerebral cortex). All this, while its size is about the size of an almond. The thalamus is a central station for processing sensory information before it reaches the cortex, from where feedback is already coming to help better filter this information.

The ventricular system of the brain is a system of cavities filled with cerebrospinal fluid. Generally, the entire brain is drowned in this fluid, and without it, it would be crushed under its own weight. The pituitary gland is a key part of the endocrine system, producing and releasing hormones in response to signals from the hypothalamus. Hormones are distributed through the bloodstream, reach other endocrine glands, and in turn, these glands produce other hormones. The combination of these hormones is interpreted by the hypothalamus when they return to it, again, through the bloodstream. The pituitary gland is closely linked to behavior, responsible for regulating stress, growth, reproductive processes, and other bodily func-

any specific culture, religion, idea, or law coercing the individuals to normative behavior.

4. Anatomy and Culture as Means of Survival

responsible for the formation of emotions, learning successful behavioral patterns (those that bring positive emotions), and emotional experiences of pain. The meningeal layers are three coverings that envelop and protect the brain: the dura mater, arachnoid mater, and pia mater. Inside the brainstem we find three structures. The midbrain regulates temperature, pain sensitivity, attention, vision, hearing, sleep/wake cycles, and reproductive behavior, containing the substantia nigra, which is a cluster of dopamine-producing cells responsible for muscle tone (in Parkinson's disease, these cells die off). The pons contains neural pathways conducting signals to the cerebellum and medulla oblongata, as well as sensory signals heading towards the thalamus. The medulla oblongata controls blood circulation and breathing rhythm. From the brainstem, cranial nerves branch out. There are a total of 12 pairs of cranial nerves, responsible for the movement of the eyes, vision, smell, hearing, movement of the neck, head, face muscles, movement of the tongue, and so on.

The limbic system is a group of brain structures in humans primarily responsible for emotions, motivation, learning, and memory. It includes the olfactory bulb, hippocampus, amygdala, hypothalamus, basal ganglia, and cingulate gyrus. The entorhinal cortex connects the cerebral cortex with the hippocampus – it sends visual and auditory signals to it to transform them into memory. Our brain represents space as being on a grid of hexagons, in each of which certain grid neurons are activated. These neurons are located here, in the entorhinal cortex. The amygdala is responsible for the production of episodic memory, the remembering of emotionally charged events. It connects emotions of fear, anxiety, and aggression with memories of specific people and places, that is, it ensures the avoidance of environmental factors posing a threat to the organism's existence. Stimulating the amygdala produces emotions of anger, fear, and anxiety in a person. Damaging the amygdala leads to hypersexuality and risk neglect. People with depres-

the rest of the frontal cortex, which passes it to the premotor cortex, then to the SMA and, a few steps later, on to your muscles" <...>"PFC was making its decision up to ten seconds before subjects felt they were consciously deciding"[3].

The occipital lobe decodes visual signals received from the retina via the thalamus. Neurons in the primary visual cortex detect high-contrast edges, their orientation, and movement. This information is either transmitted upwards to the parietal lobe to determine the response to movement or downwards to the temporal lobe for object recognition. The parietal lobe utilizes sensory information to focus attention on important things in the environment, paints a picture of the surrounding environment, interprets touch, and tracks the relative position of the body and limbs. The neural pathways of the inferior parietal lobe make mathematical reasoning, language understanding, and tool use possible, while the neural pathways of the superior parietal lobe coordinate information from the occipital lobe with tactile sensations, making object identification through touch possible. The preoccipital gyri are involved in imagination, self-awareness, and contemplating memories of past events. Somatosensory cortex, like the motor cortex, forms a map of the body in accordance with the so-called homunculus, that is, the brain's sensory representation of the body it controls and from which it receives the respective sensory signals (looks quite amusing).

The temporal lobe is responsible for emotions and language understanding. It plays a key role in recognizing objects, places, and people. The primary auditory cortex within it interprets sounds and determines their sources, allowing for conscious perception of sounds, while the Wernicke's area is involved in the acquisition and understanding of spoken and written language. The cingulate cortex is part of the limbic system and is

[3] Sapolsky, R. Determined: a science of life without free will. New York: Penguin Press, 2023.

Towards the Study of the Spirit

There are things which the common sense interprets unacceptably – freedom as a right, worldview as a metaphysical necessity, reason as the shepherd of nature (or even its enemy), and value as something fundamentally different from the pursuit of pleasure. We effectively live among dogmatic cowards who are terrified of their own shadow and therefore prevent everyone else from enjoying their naturally pleasure seeking lives. For as long as their miserable traditions will continue to apply the fig leaf to shamefully cover the gap between the object of their actual desire and their inability to openly articulate, accept and satisfy this desire, we will continue to observe a pathological reproduction of archetypes that bind our mouths through the stigmatization of healthy behavior and the actualization of meaningless taboos from thousands of years ago. It seems that a reasonable person today should be of the opinion that a chief-like authority, obedience, patriarchal family, slut-shaming and sexism, belief in gods and spirits, tribalism, childish resentment, nationalism, abominable stupidity and xenophobia are all eternal values bestowed upon us by god, and that they have nothing to do with evolution, politics, slavery, conquests, envy, poverty, and wealth, and that they certainly do not lead to tyranny, lies, willful omissions, corruption, repression, torture, sexual violence, murder, and genocide.

So far, we have studied the external aspect of free moral behavior. Indeed, to a lesser extent for freedom and to a greater extent for morality, everywhere we have tried to find

the means of purely empirical confirmation and measurement, but we have completely excluded the field of value orientation – arguably all that is considered usually to be the only basis on which people behave morally when no one is forcing them to do so (as if any animal, not so dependent on culture, commits nothing but eternal outrage and violence). Now let's enquire into what is happening inside a human body, and what makes it move. I will first list all of the things that I am not going do, and which I do not recommend anyone should do. Then I will attempt to provide a description of a human being that will reflect all of the essential characteristics related to behavior.

It is not entirely clear to what extent this thing that we call consciousness is able to be active – does it construct all of our immanent experience, or does it periodically interfere with it; is it historical to the extent that once organized in childhood, it squeezes all future data into a fixed categorical network, or is it flexible enough to rewrite the entire personality at the first serious external demand? It is, in fact, impossible to clarify these matters scientifically. In any case, while tracing thought and behavior to their physical source of origin, we have to admit that consciousness is merely a word that we invariably use to name the arbitrarily selected sets of functions of a living organic body. From a functional point of view, consciousness itself is, if you will, a custom that provides members of society with verbal tools for constituting guilt; a practice that magically endows its performers with responsibility; a one-man theatre show; a ritual that lasts a lifetime. Logically speaking, consciousness is a mere fallacy of self-reference: there is no "you" who has a body – you are the body; much like there is no such thing as possession itself – only the object that is being possessed and the body that possesses it (whatever we agree that it means).

The unconscious (in the sense that leaves room for its own kind of intelligence), as it is presented in the works of Jung and Lacan, has more in common with linguistic traditions than

established empirically. That is to say that if you destroy the region of the brain in question, you would observe either degradation or complete elimination of a relevant function, much like one wouldn't see without an eye.

The frontal cortex is responsible for decision-making, the solving of motor tasks, judgment, abstract thinking, maintaining social tact, attention, and selecting useful information. It is divided into the following regions, each with its corresponding function: the orbitofrontal cortex helps understand the consequences of complex behaviors and regulate behavior according to the desired outcome; the premotor cortex coordinates complex intentional actions, such as extending a hand or maintaining posture; the middle frontal gyrus coordinates purposeful behavior with responses to external events, coordinates information from the orbitofrontal cortex with sensory information from the rest of the cerebral cortex; the inferior frontal gyrus is responsible for inhibiting reactions and halting behavior in accordance with a signal; the prefrontal cortex makes complex and socially weighted decisions, filters out irrelevant sensations, focuses attention on the task, contextualizes decisions regarding memory of past events and predictions about the consequences of our behavior; the motor cortex guides movements by controlling muscle contractions and is in constant communication with the basal ganglia, cerebellum, and areas of the cerebral cortex to ensure that movements are intentional, to provide them with accuracy and connection with sensory perception; the so-called Broca's area produces and coordinates speech.

If one tries to precisely locate the process of decision-making in the brain, it is found to occur in the prefrontal cortex. By correlating the data from fMRI with the perceived conscious operation of making a decision, such as pressing a button, we can even prove that for the purpose of decision-making our brain does not require any consciousness at all – "once having decided, the PFC passes the decision on to

cells, to dendrites, and each individual neuron constitutes a complex system of many thousands of junctions (synapses). Thus, for example, the upper motor neurons of the brain communicate with the lower motor neurons of the spinal cord through long chains of axons, facilitating limb movement. The human brain can be divided into many parts according to their functions, however, it should be noted that the brain has plasticity, it is subject to change under the influence of experience, and in the event of damage or complete destruction of one of its parts, other adjacent parts may sometimes take over its role. The brain can change under the influence of experience, increasing or decreasing the number of axons and dendrites, or regulating, for example, the amount of neurotransmitter molecules released into the synapses. We understand that for an incomparably larger part of history, our ancestors lived in extreme conditions that we, at least for ethical reasons, will not recreate (one hopes). In a sense, we are studying not the brain as such, but merely its way of adapting to the demands of today, and therefore, to say that it lacks something means no more than pointing out the absence of certain external stimuli for the development or application of the ability in question. However, some things are indeed stable enough for us to describe them.

The following information and classification sequence were derived from a concise description of the components of a 3D brain model presented on the website www.brainfacts.org[2]. These descriptions were compared and coherented with general information about the brain. The authors of the original descriptions are: Levi Gadye, Alexis Wnuk, and Jane Roskams. The main idea behind providing such an extensive summary is to let the reader consider the weight of the fact that every single function of every single region that I will mention was

[2] 3D Brain / [Electronic resource] // BRAINFACTS. ORG, 2017. URL: https://www.brainfacts.org/3d-brain#intro=true (access date: 03/23/2025)

with its biological bodily hosts, which is why Freud's theory of drives and other such attempts to endow stupidly straightforward bodily processes with an uncanny subjectivity of their own all remain painfully mythological. Body is not a subject. From merely identifying neurosis or complexes within the unconscious we should not move to demonize and mystify the body itself. Otherwise, what is the difference between the troubles associated with the unconscious reproduction of a trauma (de facto reproduction of a set of behaviors and thoughts) and, for example, physical disability? If the root of the problem can be found within the body, then there is no need to shamanize over the personality, and vice versa. There is a much greater chance of really helping someone when we establish the actual origin of a particular dysfunction, rather than introducing another pseudo-scientific and pseudo-culturological theory of drives, wills, or passions for the lack of better explanation.

The Concept of Passion

Philosophers reveal their scientific illiteracy every time they try to evade the topic of the natural functions of the body. They declare: "What is the point of studying our bodies? A body is merely a set of chemical elements. The body is only there to interfere with our quiet contemplations in search of the principles on which the world is built. Its shameful desires should be of interest to us only in so far as they reveal the ways in which Reason could take its victory over them once and for all." As if one could pull oneself out of a swamp by one's hair! Rationalism involves a lot of biases towards certain phenomena. I say that the philosophical doctrine of passions is a mockery of truth, unworthy of the complex interweaving of conditions and causes that we discover within the interpenetrating functioning of the human nervous system, the various parts of the brain, and other organs of the body. It naturally arises whenever we assign too great a role to thinking in the theory of behavior. The word 'passion', when it comes to philosophy, is usually a nonsensical harmful misunderstanding of how we function. If the entire natural activity of the organism is understood strictly in contrast with just one pathetic cognitive device called Reason; if all bodily functions are characterized as a chaotic movement of the passions in opposition to Reason, then the entire body is thus demonized and rendered meaningless, along with all of its natural needs and functions, its very vitality and the entire history of its origin. In terms of content, "passion" is only meaningful when understood as a specific state that accompanies the very specific sort of physiological arousal.

istence. To understand what governs human behavior specifically, we need to make two efforts: first – abandon the persistent idea of our special advantage over other animals, in order to see humans as nothing more than members of the species that adapt to the environment through natural selection and transmission of cultural traditions based on imitating evolutionarily advantageous behavior; second – explain the structure of the mechanisms we have for adapting to the environment. Strictly speaking, even the synthesis of some protein on the ribosomes, when the RNA that codes the protein leaves the nucleus of the cell and enters its cytoplasm, can already be understood as an adaptation mechanism. The sequence of acids that is encoded by the gene has only one single purpose – to each time initiate the synthesis of substances in such a way so that the gene, as a result, creates its own copy (if that ultimately doesn't happen, this gene goes extinct). In turn, the cell, gradually acquiring the ability to try various different behavioral options, does everything to ensure that the process of gene reproduction is never interrupted. This process underlines and governs the entire diversity of how cells communicate with one another, whether they live individually or whether they branch out and differentiate into cells of different tissues, thus forming a single complex organism. Any organism is, in one way or another, required to adequately respond to the challenges of the environment – for that relevant mechanisms must be in place. So now, we'll finally discuss perception and information processing. Since the bigger animals, unlike plants, have a clearly defined information processing and decision-making center located in the brain and its adjacent systems, we will now focus on describing this very center.

Information in the brain is received, processed, stored, and transmitted by neurons – specially designed electro-excitable nerve cells that communicate with each other through axons and dendrites. There are approximately 90 billion neurons in the human brain. Their axons attach to each other, to other

a driving force of survival, struggle, progress, and sophistication; it is the strongest motivator for the body to act. In addition to adrenaline, the main stimulant substance released by the human body in response to stress is cortisol. The function of stress itself is to activate the mode of intensified expenditure of accumulated energy in any situation where this energy is urgently needed.

Due to the ever-increasing complexity of relationships in human culture, the emotions that people are capable of experiencing and demonstrating can be quantified in dozens, even hundreds, and yet, most often they are classified into emotions of happiness, fear, anger, disgust, sadness, surprise, and fatigue, or into the emotions of ecstasy, admiration, terror, amazement, grief, loathing, rage, and vigilance (Plutchik's wheel). It is not easy to separate emotional abilities from the cognitive ones, so when we need to solve emotional tasks, we use concepts like emotional intelligence and emotional skills. If we were to reduce all human emotions to a finite set of the basic ones common to all mammals, then we are left with 7 systems[1]: RAGE (a response to stress, corresponding to the "fight" option within the "fight or flight" dichotomy), FEAR (a response to stress corresponding to the "flight" option), LUST (reproductive behavior), CARE (prosocial and parental behavior), PLAY (a function of social learning), as well as SEEKING (exploratory behavior, orientation in the environment) and PANIC (same as fear, but without the possibility of avoiding a threat or hiding from the irritant). Any human emotion is, in one way or another, an expression of one or several of these 7 vital reactions, in various combinations and degrees of intensity.

Behavior is the movement of a living organism, potentially directed towards performing the functions that ensure its ex-

[1] Panksepp, J. (2011) The basic emotional circuits of mammalian brains: do animals have affective lives Neuroscience & Biobehavioral Reviews. 35 (9): 17911804. doi.org/10.1016/j.neubiorev.2011.08.003.

Understanding reason and culture as something which undoubtedly arises from feelings, perceptions, and instincts, David Hume still have given them all the credit in matters of comfortable coexistence between humans. In his view, justice is not a normal psychological environment for human societies, but rather something that has to be hammered into people's heads through violence, making the pursuit of selfish interests into their most remote intention. If we, says Hume, were to "follow the natural course of our passions and inclinations, we should perform but few actions for the advantage of others, from disinterested views; because we are naturally very limited in our kindness and affection"[1]. I have previously shown that such a view of human nature is quite inaccurate. People will always experience moral repulsion towards the things to which nature didn't leave within us any inclination. The body as a whole, by definition, is much smarter and more far-sighted than any possible invention of any single part of its thinking organ (the brain). The human organism is a system that regulates itself. All parts and organs of this system are in a constant dialogue with one another – this process is so complex, each of its smallest details are so deeply rooted in the history of this organism's ancestor's resistance to the environment, that it is, in fact, impossible to understand it completely. The human body, invariably taking an unimaginable number of factors into account to simply exist, surpasses everything that culture has ever created. Evolution, with its blind mechanisms of filtering out failed specimens, will always outsmart every single intelligence, for it has had 3.7 billion years for a head start.

It seems that the "irrational" side of behavior is strictly differentiated from the rigidly rational one, simply so that it'd be easier to describe various relationships between subjects.

[1] Hume, David. *A Treatise of Human Nature*. Edited by L. A. Selby-Bigge, revised by P. H. Nidditch. Oxford: Clarendon Press, 1978

Among other things, there are innate biological causes of behavior, gradually learned (acquired) reactions, external emotional influences that motivate us to act impulsively, so to speak; there is also explicit lying, in accordance with which we behave not so very rationally; and on top of that there are sophisticated self-deceptions that satisfy some rational delusion of ours. But why delve into the actual state of affairs and make these boring distinctions when one can simply label all of this diversity "human nature," "passions," "drives," and so on? Especially when there is a strong desire to confidently make universal statements about people. These concepts make sense only in so far as you believe that there is such an indispensably important, ethically required and bodily independent thing as Reason. Fortunately for all who care to know themselves, the "passions," much like the reason itself, are nowhere to be found in nature, and while doing actual research on behavior, one always has to deal with nothing less than specific objects and occurrences.

Biological Model

Let's list some of the most general information about people and their behavior. A human is a living bipedal mammalian organism (a species of primate belonging to the family of hominids). It is distinguished by highly developed cognitive abilities for problem-solving, planning, complex multi-level categorizations (variability of perception), imagination, and memory. Among the essential needs that evolution has made necessary for these organisms are the following: the need for oxygen (breathing), the need for food and water (sustenance), the need for sleep (energy replenishment), and the need for social contact with their peers (I wish I could use the word communion here, but *for now* let's just call it socialization). Among the human sensory abilities, we can highlight thirst, hunger, sight, hearing, touch, smell, taste, fatigue, suffocation, arousal, thermoception, balance, and nausea. To this, we can arguably add the perception of time and space, as well as the empathetic perception of all these sensations not only in other members of the species but also in many other animals.

Since 80% of the human brain consists of neocortex, that is of the most recently developed structure, which gives us such a strong cognitive advantage, we do not have instincts in the conventional ethological sense of the word – what can be identified, however, are only the significant behavioral tendencies, all aimed at survival: social and prosocial behavior, sexual behavior, parental behavior, group behavior, imitation, aggressive behavior, hunting, self-preservation, and play/exploratory behavior. Stress can easily be considered the broadest category in the analysis of behavior. Stress has always been