

POP-STARS ARE OUTDATED! A REVIEW OF HARARI AND ŽIŽEK'S DEBATE ON TRUSTING NATURE

David Antolínez Uribe

ABSTRACT: this paper offers a review of the debate between Harari and Žižek about trusting nature with two aims: first, to demonstrate the chasm between theories embedded in modern philosophy and contemporary ecology; and second, to question the utility of public events in which mainstream intellectuals act as guiding voices. After posing the problem, there will be a general summary of Harari and Žižek's arguments, then those will be discussed in contrast with diverse authors concerned with ecology. Finally, there will be a general reflection about the place of mainstream philosophy and some forms of scientific expertise in the chaotic state-of-affairs caused by climate change. The article concludes that high-reputed intellectuals cannot help to be out of touch with current matters-of-concerns, therefore leaving their role in public deliberation rather futile.

KEYWORDS: Deep ecology; Scientific experts; Mainstream philosophy; Public deliberation.

INTRODUCTION

If you listen to pop music, you probably have noticed that many artist – from Daft Punk to Dua Lipa – are working in a massive comeback of the 80s synth-pop sound. But if you are looking for fresh sounds, maybe you should explore the hybrids realms of lo-fi hip hop in Soundcloud or the wide catalog of indie-rock in Bandcamp. Of course, this is nothing new, since all pop music must stick to familiar templates and common formulas to gather and please their target

audience.¹ While avant-garde music might be a bit terrifying sometimes, it seems that pop music cannot help being conservative.

Curiously, pop philosophy behaves in the same way. Take any title from the best-seller list and you shall find endless references to classic authors and themes. For instance, Steven Pinker's *Enlightenment Now*² opens up with a quote from Spinoza before jumping into other thinkers famed for praising reason as the supreme value of humankind. The book has some references of Thomas Nagel, Jerry Fodor, and César Hidalgo, who might be considered updated – but being alive is not the same as being tuned with current matters-of-concern. Instead of daydreaming about reason, many readers would benefit from the collected essays by Peter Weibel³ about non-institutional politics and online protests. Unfortunately, *Global Activism* is no best-seller. One might argue that divulgation books must employ familiar subjects to reach a wider audience, while high-profile academic literature ought to remain technical to achieve a deeper grasp on very difficult topics. Yet, what predicament resonates further with the contemporary world: the alleged supremacy of reason or the actual effectivity of performative democracy? Which book is more necessary to read today?

Let's not imply that discussions are only worthy if they are up-to-date. Old-fashion ideas are not necessarily less true than brand-new theories. But what is questionable is that famous intellectuals are regarded as guiding voices of the general public, since they are not specially synchronized with the issues that concern the contemporary population. Pop philosophers have greater visibility than other scholars working in the most urgent themes. So, why should we distrust such higher intelligences to make sense of today's world? The answer can be divided into two parts – one political and other epistemological.⁴ First, since the ancient Greece, the role of experts in political deliberation resulted in the reduction of the participation of the alleged less-educated citizens. Second, literary erudition and public credibility are high values in Academia, but they do not provide any guarantee about the rightness of any claim. Plea for authority is

¹ Simon Frith, *Taking Popular Music Seriously*, London, Routledge, 2007.

² Steven Pinker, *Enlightenment Now*, New York, Viking Penguin House, 2018.

³ Peter Weibel (ed.), *Global Activism*, Cambridge, MIT Press, 2015.

⁴ This distinction is not total, since one realm constantly overlaps the other. Also, 'epistemology' is not the best word for describing the production of knowledge – 'epistemodicy' is more accurate. See Michel Serres, *The Natural Contract*, Ann Arbor, University of Michigan Press, 1995.

still considered a logic fallacy. It could be suggested, provocatively, that avant-garde collective research retain a significant advantage over mainstream dogmatic philosophy, since the former is more attuned with ongoing matters-of-concern than the former.

In this paper I will explore the disconnection between scientific experts and contemporary debates. However, my goal is not to criticize pop philosophers for not being more avant-garde theorists – as if this would render unproblematic their role. Instead, I shall argue that pop philosophers need to be outdated in order to become experts in the first place. The moment a prominent intellectual tries to synchronize himself with the novel perspectives of contemporary research, he risks losing his rhetoric privileges. Therefore, despite the good intentions of mainstream philosophers, they will inexorably fail to shed new lights over the matters-of-concerns of today. To state my case, I will analyze the debate between Yuval Harari and Slavoj Žižek *Should We Trust Nature More than Ourselves?* The event took place at the HowTheLightGetsIn Festival 2022 and allowed the two highly reputed authors to argue about our conception of nature, the morality involved in it, and its political challenges. First, I will give an overview of both authors' statements. Second, I will select some particular claims which can be traced to classical philosophical sources and then I shall contrast them with some contemporary views. Third, I hope to demonstrate that the disparity between those theoretical frameworks leads to a flawed outcome. By the end of the debate, the audience did not gain novel insights on the issue of climate change, while Harari and Žižek just reinforced their status.

Again, the problem is not whether old theories about nature are worse than new ones. Rather, what is questioned is the very nature of public events where experts offer guidance for the audience regarding contemporary controversial topics. Ideally, the general public should assimilate the speech of experts only if it indicates better ways to approach current issues. But if the pop philosophers really want to become facilitators of public deliberation, they must relinquish the usual position of expertise and face the immense challenge to create bridges between highly technical research and the general public. The matters-of-concern of the 21st century demand for a better integration between science and society but it seems that the experts are at a crossroads: remain conservatives to keep their privilege or transform themselves for the sake of democracy.

HARARI AND ŽIŽEK'S DEBATE

The moderator, Güneş Taylor, started exposing two antithetic stances. On the one hand, the belief that nature is inherently good, while human interventions are negative. Therefore, humans should abstain to act against the course of nature, since “nature knows best”. On the other hand, nature also includes diseases and threats that can only be mitigated through human interventions. Skeptics of nature’s wisdom might ask “is our attachment to nature undermining the belief in ourselves?”. The underlying theme is climate change – an urging situation demanding us to reassess our relation with nature. One would expect that the discussion revolved over topics like innovative technology or political decisions about global warming. However, the debate revolved around ethics, the laws of history and the desire of humankind to improvement. I shall follow the sequence of the three main topics of the debate: faith, justice, and moderation.

The first question was: “should we have more faith in the human and less faith in nature?” Harari answered “nature doesn’t care about us in particular, [since] it goes on regardless of humans”. He rejected the dichotomy nature/human, claiming that “anything which is possible is by definition also natural”. Unfortunately, instead of developing further this idea, the Hebrew historian moved to the realm of ethics with a peculiar example about the difference between the laws of nature and the laws of humans: “the State says that speed limit is 90 mph, and it can punish you if you surpass such limit, but it is actually impossible to break the laws of nature”. Since anything possible belongs within the laws of nature, the question should not be whether something is natural or not but if it causes suffering. Žižek agreed and commented that, despite our rational understanding of nature’s neutrality, we unconsciously feel that there is inherent meaning in it: “humans usually associate with nature a more or less regular pattern or rhythm, [and] we disturb it with our hubris and excessive exploitation”. The Slovenian sociologist declared his suspicion towards this perspective and reflected on the new climate regime. In a subtle tone, he speculated “what if there will be no new pattern [after the crisis] but, as it happens in nature, for a long time we will live in a much more radically chaotic universe”.

Then Harari replied “you can’t get morality and ethics out of the laws of nature”. Nature by itself is not the issue, but the way is used as a tool for political debate. In other words, naturalistic fallacies are not arguments about the reality

of nature, but “mythologies” which legitimize or condemn human behaviors. Again, ethical debates should not be about obeying laws (from God, Nature or the State), but about preventing suffering. Biting the bait, so to speak, Žižek observed that the ideal of goodness can actually become noxious. For instance, Buddhism – committed to diminish pain – provided strategies to optimize violence such as the detachment between actor and action and anti-realistic metaphysics in which suffering bodies are just a dance of appearances. Žižek warned about “those who preach too much good”, since ideologies can “make good people do bad things”.

The second question was: “should we treat the Earth as a resource for commodities that benefit humans?” Neither the moderator nor the debaters employed explicitly the term ‘justice’, but the undertone implied it. Taylor expected Harari and Žižek to provide any justification for or against the exploitation of the Earth, but they were still entangled in the previous point. She even had to steer the conversation towards the topic twice. Harari answered laconically: “we can use it, but carefully”. He stated that we do not understand nature nor humans properly, due to their immense complexity. Therefore, we should avoid the temptation of radicalism and we ought to aim for moderation as an antidote for our ignorance. The Hebrew historian even joked about how uncommon are the dilemmas of moral philosophers like the trolley mental experiment: “whenever we face a binary situation, we always have to step-back and look for alternatives”. The same applies for the question about Earth resources: a middle ground in our exploitation practices must be found. That is, achieve some balance between the benefits some people might have from certain resources, even though it would imply some harm to other beings.

For Žižek moderation is not always present in our relationship with nature nor with ourselves. For instance, the overpowering effects of evil and love make us lose balance in our personal lives and, since this is somehow inevitable, we should accept that moderation is an ideal we can only strive for. Then the Slovenian sociologist advanced a critique of the deep ecological movement – which are assumed to be the main opponents of extractivism. Žižek denounced a veiled anthropocentrism behind the dictum “we must learn modesty, since we are only one among other living species”. For him, there is a patronizing attitude in the humans who grants rights to animals and plants. Žižek mocks such

activism, since “rivers, mountains, whatever, they don’t know they have rights, because they don’t know anything”. Humans projecting their ego into inert objects is a sign of both anthropocentrism and anthropomorphism. Beneath this ecological program lies the conviction that only humans are the real universal beings who should be responsible for everything else. In this sense, “ecologists want to be the police of nature”.

The final questions were: “do other organisms exhibit moderation? is moderation built into nature?” Taylor teased that maybe humans should not strive for moderation, since it is not a particular feature of nature itself, but Harari rejected this idea. Nature is quite heterogeneous, with enough room for chaotic systems and balanced ones. Humans also can achieve homeostasis or expand beyond their limits. In the latter case, Harari commented “we are on the verge of creating the first inorganic life forms”, an event that will strengthen the feeling that humans can surpass nature. For millennia, life has been reduced to organic biochemistry, regardless of its diversity. Nowadays, thanks to genetic engineering and artificial intelligence, we are one step closer to inorganic life forms. To illustrate the importance of this inflexion, the Hebrew historian drew a rather curious example. Yesteryear, political regimes could not alter basic human biology – a final substrate of humankind: “Stalin dreamt with creating a new human, but he only had social engineering. So in the end, when the Soviet Union collapsed, you still had human beings like they were in 1917 and then we start again”. The real redefinition of humanity will come through genetic engineering and artificial intelligence. In this scenario, where moderation shines for his absence, humankind and nature are both threatened by technology.

Žižek agreed that “we live effectively in a unique era where, if this progress in biogenetics and brain sciences go on, not only we will enter into a post-human era, but also into a post-natural era”. Evoking Heidegger, the Slovenian sociologist claimed that in our spontaneous experience, we perceive nature as the *Kehre* of the Earth: a dynamic, yet constant, background which renders intelligible our personal lives. Notice that Žižek seems to endorse the worldview of nature as stable patterns he first rejected. Ultimately, what frightens Žižek is that “once we have life 2.0, this will retroactively change also what the first life is”. If research keeps moving towards the technological singularity, our own understanding of ethics, freedom, and privacy will be utterly transformed. The Slovenian

sociologist clarified he does not support the proposal of some “liberal conservatives” who want to impose a limit to science to preserve the purity of life. The future ahead of us is sinister but we cannot return to the tenet “nature knows best”. Žižek concluded by alluding to Harari’s books, indicating that it has relevant insights about these threats.

In the coda, Harari said he did not have the answers to those alarming questions. Acknowledging our limited understanding of humankind and the principle of moderation, the Hebrew historian warned about the risk of downgrading some features of humanity in our effort to upgrade other qualities. Most likely, discipline and intelligence will go through hypertrophy, while compassion and spirituality will be undermined. Harari finished the debate stating: “when we try to change our internal ecosystem, several unintended consequences will be beyond us, especially because we do not understand the human mind. It’s extremely dangerous to start manipulating something so precious”.

CLASSICAL VIEWS AGAINST CONTEMPORARY PERSPECTIVES

The debate was supposed to be about nature, but the questions “are humans part of nature?” and “is better radicalism or moderation?” served as pretexts for Harari and Žižek to reproduce their already known thesis. When discussing Buddhism, Žižek evoked *The Sublime object of Ideology*⁵, while Harari summarized his *Homo Deus*⁶ in his speculation on technological singularity. Indeed, those books are quite enlightening, but are they relevant guides for the climate crisis? The debaters are flawed because the arsenal of ideas used to address this peremptory problem. Classic thinkers are not the best weapons in times of the Anthropocene. If desperate times call for desperate measures, we might say that novel problems call for novel perspectives. Thus, I will deploy a counter-arsenal of authors more attuned with contemporary ecology.

I preliminary selected twenty statements, following the classic method of discourse analysis. Throughout the debate, Harari declined any distinction between human and nature, yet his claims are rooted in a dualist perspective that separates the outside world (physics, biochemistry, etc.) from the inside world

⁵ Slavoj Žižek, *The Sublime Object of Ideology*, London, Verso Books, 1989.

⁶ Yuval N. Harari, *Homo Deus*, London, Vintage, 2017.

(psychology, spirituality, etc.). This is not merely a *façon de parler*, since it entails heavy compromises with Cartesianism. For his part, Žižek declined the belief that nature consists of regular patterns disturbed by technological action, but later on he accepted it under Heidegger's concept of *Kehre* of the Earth. The Slovenian sociologist evokes German phenomenology, a philosophical school rooted in idealism and romanticism. As it will soon be clear, contemporary ecology is at odds with both dualism and naturalism. After these remarks, I shortened the list of statements and arranged them into five groups: (1) a definition of nature; (2) distorted beliefs about nature; (3) disorders in nature; (4) anthropocentrism in ecology; (5) technological alterations of humanity. Instead of an exhaustive discussion, I shall offer a schematic overview of some alternative authors working on those issues.

A DEFINITION OF NATURE

The first problematic statement is the *definition of nature* given at the outset: “anything which is possible is natural [...], everything is natural”. Despite this totalizing conception, the pop philosophers remain in the dualist paradigm that opposes mind/body and nature/culture, which implies that nature do not extent to everything or that it has a different ontological status from other entities. But as Descola⁷ has shown, the idea of a univocal and autonomous Nature (with capital ‘N’) was crafted in the fifteenth century, when monotheism reached the new world. The main idea was that a single God created the whole universe, including the apparently soul-carrying indigenous people of America. Europeans admitted some levels of social variances, but granted equal autonomy to Culture (with a capital ‘C’) to preserve the uniqueness of Nature. Eventually, what started as a debate over the supposed homogeneity of “human nature” became an ontological worldview. Nonetheless, Latour⁸ indicated that after 1989 such worldview shifted due to the climate crisis. Humanity has abandoned the Baconian ideal of mastery of nature, since Earth dominates us back. Furthermore, Latour denies any split between nature and culture, since all existing entities are simultaneously material, social and semiotic. There was never a unified Nature opposed to a unified Culture, nor a unified Nature surrounded

⁷ Phillipe Descola, *Beyond Nature and Culture*, Chicago, University of Chicago Press, 2013.

⁸ Bruno Latour, *We Have Never Been Modern*, Cambridge, Harvard University Press, 1993.

by several cultures, just because the world was never a Unit but an ever-changing plethora of phenomena. Following those ideas, Bryant⁹ has advocated for a flat ontology that makes justice to the depths of humans and nonhumans: a cosmos filled with unnamed monsters, withdrawn objects, vital forces, digital identities, deadly microbes, hybrids of flesh and machine, intersecting waves and atomic particles. Hopefully, by the end of this article, it will become clear the necessity to forsake the very notion of ‘Nature’ to achieve a wider comprehension of the universe.

DISTORTED BELIEFS ABOUT NATURE

Harari claimed: “you can’t get morality and ethics out of the laws of nature [...]. Nature is often a star in political debates, but this is just mythological stories”. Here are three issues. First, “Nature” is a problematic notion due to its false autonomy. Second, that statement serves as a rhetorical device for Harari to displace the debate from ecology to ethics. Third, the linkage of natural and moral orders, known as the ‘naturalistic fallacy’, is a persistent tendency of human reasoning which constantly reframes the question of how society shapes itself mirroring the cycles of nature and vice versa. Unwittingly, Harari is echoing John Stuart Mill, who condemned the naturalistic fallacy and defended utilitarian ethics. The problem with this posture is that ecology disappears from the discussion under the illusion that human morality is self-contained. To further comment on the relation between ecology and morality, I shall refer to Lorraine Daston’s *Against Nature*¹⁰.

Across diverse contexts, humans have used natural orders to legitimize moral views – whether in emancipatory or repressive fashion. Social arrangements are naturalized the same way natural facts are politicized. The terms “norm” and “laws” used both in science and politics reveal the entanglement between description and prescription. The naturalistic fallacy is a recurrent feature of human behavior, caused by the way our senses condition our reasoning: the need of visual patterns and symmetries to construct representations for intangible entities. But since nature is so abundant, different societies have found multiple analogies to support a vast variety of moral orders. Society might be modelled

⁹ Levi Bryant, *The Democracy of Objects*, Ann Arbor, University of Michigan Press, 2011.

¹⁰ Lorraine Daston, *Against Nature*, Cambridge, MIT Press, 2019.

after the beehive or a baboon herd, if one were to advocate for matriarchy or patriarchy. Thus, the naturalistic fallacy is never univocal. What seems to be inevitable, argues Daston, is the human need to extract the idea of social order from the natural world. The human mind is quite inept to handle chaos, even if the actual state of nature indicates randomness. Therefore, different societies will conceive the cosmos according to diverse notions of nature. The rejection of the naturalistic fallacy is doomed, since it plays a central role in how human and nonhuman collectives relate to each other.

From the plenty conceptions of nature Daston distinguishes three: nature as the particular essence of a thing, as interrelated local ecosystems, and as a set of universal laws. The first one is akin with the Aristotelian theory of substance, which insists heavily on the permanent traits of a kind who is able to give birth to offspring. The second one is derived from the practices of ancient travelers who registered the diversity of natural landscapes and human customs. The third one is a mixture between theological concerns, awe aroused by advanced technologies, and totalizing theories such as Newton's celestial mechanics. However, all those conceptions are flawed insofar nature itself contains several anomalies and exceptions. For instance, grafting and hybridization have demonstrated that the universe is not split into unmixable parcels. Since ancient times, monsters who transgress our mental categories have been regarded dangerous. The third conception of nature – endorsed by Harari – was prominent until the mid-20th century, when the life sciences shifted towards an ecological perspective cognate with the notion of interlocked local environments. This reframed the question of how humans relate to nonhumans in the midst of environmental irregularities. Thus, the main question of ecology is whether climate change is the consequence of human actions or not.

DISORDERS IN NATURE

Harari stated “you can never violate the laws of nature”, while Žižek said “[after the crisis] there will be no new pattern, but a much more radically chaotic universe”. For the Hebrew historian nature is rather immutable, whereas for the Slovenian sociologist it is a fragile system about to break. Beneath those ideas is hidden the fear that the new climate regime disrupts the order of the world, rendering it unintelligible and throwing us into a sort of Hobbesian *bellum omnium*

contra omnes. But since the cosmos is filled with a myriad of dissimilar entities, it is possible to find multiple suitable modes of existence within it. Latour¹¹ showed that life sciences cannot endorse the fixed notion of “laws of nature”, since they must consider the ruthless intrusion of uncountable agents each one affecting his neighbor in the engendering concerns that keeps the Earth habitable. Chaos has been the rule for ecology not the exception. If our conception of nature is transformed, the same must happen with our comprehension of science. Science and Technology Studies have long shaken the view of research as a purified action that unveils the secrets of timeless natural phenomena. Thanks to *in situ* laboratory studies, it became clearer that scientific communities manufacture their own objects and reshape the world in the process¹². Thus, the laws of nature are not the starting point, but rather the final conquest after several efforts to assemble an operative network out of disparate ingredients. In other words, stability is not the surpass of contingency, but its refinement.

When this tenet of constructivism is taken to its final consequences, the result is that experimental activities can alter previous state-of-affairs so deeply that our political and metaphysical assumptions are challenged. This was illustrated in the classic *Leviathan and the Air-Pump*¹³. When Robert Boyle produced an artificial vacuum with his air-pump, he defied the philosophical system Thomas Hobbes had carefully drawn to legitimize Westalphan sovereignty. On one hand, Hobbes invoked traditional scholastic arguments, mathematical demonstrations, and a particular demarcation between religion and natural philosophy to defend his plenist notion of matter; namely, the conception of bodies consisting only of extended substance with no emptiness. On the other hand, Boyle regarded those entelechies as invalid criteria and fabricated a program based on explanatory resources such as the replication of experimental trials and the observations of reputed witnesses to establish the vacuum as a matter-of-fact. Even though the main focus of Shapin and Schaffer is the clash of two distinct rationalities over a unique experiment, the ontological connotations of this debate demonstrated that the void indeed exists, so the previous cosmology ought to be rearranged. Despite the political worries of Hobbes or the tribulations of the Royal Society, it was

¹¹ Bruno Latour, *After Lockdown*, London, Polity Press, 2021.

¹² Karin Knorr-Cetina, *The Manufacture of Knowledge*, Oxford, Pergamon Press, 1981.

¹³ Steve Shapin & Simon Schaffer, *Leviathan and the Air-pump*, New Jersey, Princeton University Press, 1985.

undeniable that candles were blown out and mice were asphyxiated inside the air-pump. In sum, science is not seeking to unveil the order of cosmos, but to shuffle objects to create new orders within nature.

Postmodern interpretations of science – Kuhn and Foucault – asserted that science do not produce accumulative knowledge. According to them, social factors influence the way researchers approach a rather inaccessible natural world. Harari and Žižek seem to align with this view, indebted to the Kantian idea of the unknowable noumenon. Yet, supporters of constructivism have inverted this perspective by stressing the ontological multiplicity instead of the epistemological variability. Thus, knowledge produced by science is not diverse due to our unescapable human perspective rifted from the world. Instead, nature is constantly changing and experimental sciences are partially responsible for this vertiginous flux. As Hacking¹⁴ commented, even after the profound seism caused by postmodern accounts of science, it is remarkable the degree of stability achieved by scientific communities inside the laboratories. This happens through a co-production of theories, apparatus, models, methods and data, which are not comparable to the “outside world”, but rather a self-vindicating set of phenomena that seldom occur in a pure state. Hacking insists on the connotation of the term “discipline” applied to scientific communities, not only regarding the standardization of technical language or the uniformity of procedures, but also highlighting the way objects crafted in the laboratory and natural phenomena constantly tailor each other.

ANTHROPOCENTRISM IN ECOLOGY

This last sentence about entities tailoring each other gives way to the next theme: *anthropocentrism in ecology*. When environmentalists propose to grant rights to nonhumans, they seek the acknowledgement of natural entities as political agents. Žižek opposed this idea: “I found hidden in their argumentation an extreme anthropocentrism [...], they speak about the rights of rivers and beautiful mountains [...], but rivers, mountains whatever, they don't know they have rights because they don't know anything. Beneath this false modesty, [is the notion that]

¹⁴ Ian Hacking, 'The Self-Vindication of the Laboratory Sciences', in A. Pickering (ed.), *Science as Practice and Culture*, Chicago, University of Chicago Press, 1992, pp.29-64.

we humans are the universal beings, the ones who should be responsible for everything?”. To put it bluntly, the Slovenian sociologist doubts the alleged subjectivity of nature. Could it be that paternalism has extended to ecology? Should the inanimate objects be considered in political decisions or is this merely an omen of human narcissism? Still, this critique is by no means new. Three decades ago, when actor-network theory appeared, several sociologists reacted against its discourse of nonhuman agents. This has carried a long list of denounces: a mechanistic view of human social interactions¹⁵, the return of hylozoism¹⁶, and a subtle alibi for colonialism¹⁷. This might be one of the most elusive and misunderstood points in philosophy of ecology.

Basically, deep ecology conceives natural entities as subjects – although ‘subjectivity’ is a concept just as ambiguous as “nature”. Note that “deep” ecology is not only the militancy promoted by Arne Næss, but an extended network of arguments with different degrees of “radicalism”. But what does it mean to treat nonhumans as legal subjects? “Intentionality”, “dignity”, and even “life” are words that come to mind, but the association between that set of attributes and humanity is precisely what is at stake. Those willing to split that link will inexorably be charged with anthropocentrism by those aiming to preserve it. Curiously, various philosophers of ecology have shown that the modern perspective is where the heaviest anthropocentrism resides. There is not a univocal way to relate to nonhumans, but it can be discerned at least three modalities centered in their legal rights, agency and consciousness. Let's do a general review of each.

Legal representation: the proposal to grant rights to natural entities has been in the core of the ecological movement since its beginning. One remote precedent can be found in the “Tree that owns itself”. More contemporary examples would be the Okjökull glacier in Iceland or the Embassy of the North Sea in the Netherlands. These projects follow the basic tenet of deep ecology: stop regarding natural entities as ‘resources’ disposed to satisfy human needs and see them as

¹⁵ Harry Collins & Steven Yearley, ‘Epistemological Chicken’, in A. Pickering (ed.), *Science as Practice and Culture*, Chicago, University of Chicago Press, 1992, pp. 301-326.

¹⁶ Simon Schaffer, ‘The Eighteenth Brumaire of Bruno Latour’, *Studies in history and philosophy of science*, vol. 22, no.1, 1991, pp.175–192.

¹⁷ Zoe Todd, ‘An Indigenous Feminist's Take on the Ontological Turn: ‘Ontology’ is just another Word for Colonialism’, *Journal of Historical Sociology*, vol. 29, no.1, 2016, pp.4-22.

subjects insofar they have intrinsic value. As Keulartz¹⁸ has argued, this first conception is questionable since current techno-scientific development is not yet able to design ecosystems both adapted to human needs and committed to preserve biodiversity. That is, the quest for resources is still valid. However, unlike other philosophers of ecology, Kartz¹⁹ distinguishes between natural and technological artifacts: the latter being instruments designed by humans, while the former retain autonomy thanks to their natural origin. This dichotomy natural/technical aims to replace the former division between living and nonliving entities, since ecosystems might be composed of both animate and inanimate matter while remaining independent and valuable. Ultimately, the political representation of nonhumans should not be regarded only as the achievement of legal status, but as the configuration of environmental ethics that consider the needs and benefits of both human society and natural entities in the exchange of needs and resources.

Agency: nonhumans can modify the state-of-affairs in which humans are immersed, thus they must be regarded as actants. After receiving dismissals from natural scientists who feared the politization of science, actor-network theory was attacked from traditional sociologists who opposed to the idea of inanimate objects with agency. This was clearly shown in the critique of Collins and Yearly²⁰, who denounced: 1) the displacement from the stance of social realism; 2) the lack of demarcation between science and other cultural activities; 3) the absence of a method to determine whether objects have potencies or not; and 4) the relegation of the human beings from their pivotal role for the sake of technology. From this perspective, ironically, the problem with this proto-philosophy of ecology is that it is not anthropocentric enough. For their part, Callon and Latour²¹ replied that the problem with traditional sociology was its tautological use of the “social” as a supra-structure arranging human interactions apart from the “missing masses” of artifacts that composes the world. Just as with

¹⁸ Jozef Keulartz, 'The Emergence of Enlightened Anthropocentrism in Ecological Restoration', *Nature and Culture*, vol.7, no.1, 2012, pp.48-71.

¹⁹ Eric Katz, 'Against the Inevitability of Anthropocentrism', in E. Katz, A. Light & D. Rothenberg (eds.), *Beneath the Surface*, Cambridge, MIT Press, 2000, pp.17-42.

²⁰ Collins & Yearley, 'Epistemological Chicken'.

²¹ Michel Callon & Bruno Latour, 'Don't Throw the Baby Out with the Bath School!', in A. Pickering (ed.), *Science as Practice and Culture*, Chicago, University of Chicago Press, 1992, pp. 343-368.

“nature”, “society” was used as an *a priori* ontological category to dispatch agencies and properties beforehand. Actor-network theory aims for an explanation of how nature and society are coproduced by the means of hybridization, instead of a mere “social explanation” of how an inanimate object seems to work. That is why actor-network theory is so relevant for contemporary ecology. Callon and Latour indicated that the first step is not to distribute fixed agencies among entities, but to observe their production through countless exchanges that render the division nature/society obsolete. Latour²² even claimed that avoiding the tautological definition of social forces and the premature equating of humanity with intentionality was the only real way to avoid an anthropocentric perspective. Also, the French philosopher appeals to common-sense pragmatism by saying that the only question to determine the agency of any entity was if its actions made any alteration in the course of some other object. In a classic example, he asks if it makes a difference to use a hammer to hit a nail instead of bare hands. The inevitable outcome is to grant the hammer acting capacities.

Consciousness: to extend subjectivity to natural entities alludes to the issue of consciousness – an arcane issue yet to be decoded for humans themselves. Given that nonhumans have agency and should participate in political discussions, does it necessarily follow that they are conscious? Such is the main objection of Žižek, since legal representation cannot be defended by inanimate things themselves unless the human being takes action. To defend the hypothesis of the consciousness of nonhumans, deep ecology has summoned two unexpected allies: panpsychism and Alfred Whitehead. Du Toit²³ indicates that consciousness needs a body from which it can emerge, and in the ecological level this could be traced to the overlapping interactions of humans and nonhumans. Gaia, the macro-agent of Earth, condense the geosphere, lithosphere, hydrosphere, atmosphere, biosphere and stratosphere as parts of a living organism. From the perspective of panpsychism, it could be stated that this synergic entity has certain degrees of awareness. To support this argument, it is needed to turn from the notion of entity as well-defined material objects to a rather dislocated conception of swiftly things

²² Bruno Latour, *Reassembling the Social*, Oxford, Oxford University Press, 2005.

²³ Leemon McHenry, ‘Whitehead's Panpsychism and Deep Ecology’, in D. Wheeler & D. Connor (eds.), *Conceiving an Alternative*, Anoka, Process Century, 2019, pp.229-251.

–this is where Whitehead comes in. As McHenry²⁴ explains, for Whitehead each object should be better understood as an occasion of sentient experience. The world is not a unity, as the celestial mechanics suggested, but an adamant crossing of particular trajectories. Whitehead's metaphysics rejects homogeneous abstractions and endorse the pervasive concreteness of nonhumans: butterflies, rockets, math equations, lethal diseases and stardust, each with its own way to register reality. This leaves Whitehead side to side with panpsychism in its effort to transcend the reduced point of view of humanity, as well it highlights the interest of comprehend the subjectivity of nonhumans.

This triple consideration of nonhumans' rights, agencies and consciousness enlighten how they can be conceived as subjects. This is not necessarily a patronizing attitude, but a philosophical challenge that could lead to new modes of thought and relation – very much needed given the urgency of today's state-of-affairs. Yet the principal complain against ecology remains: is animism just an intellectual device to better cope with climate change or is it an actual description of nonhumans? One might continue endlessly to answer this question, but the main point of this article was met: neither Harari nor Žižek are thinking about the subjectivity of nature in the most adequate categories.

TECHNOLOGICAL ALTERATIONS OF HUMANITY

From the Nietzschean fantasy of the *Übermensch* to the advent of technological singularity, it seems that the human being as we know it is about to expire. The last part of the debate deviated into the domains of post-humanism, a topic in which both Harari and Žižek were more fluent. Still, there were a couple of statements at odds with the rest of the arguments previously developed. First, Harari claimed “If you think about previous religions and regimes, no matter what they did, in the end you could always go back to the human body, to basic human biology [...]. Now for the first time in history, political regimes have the potential to really shift the evolution of life”. What is problematic is not the sensationalism of the last sentence, but the idea that cultural arrangements of subjectivity are vain – as if social engineering were unable to reach the core of human essence. Among those lines, Žižek ventured that “we live effectively in an

²⁴ Cornel Du Toit, 'Panpsychism, panconsciousness and the non-human turn: Rethinking being as conscious matter', *HTS Theological Studies*, vol.72, no.4, 2016, pp.1-11.

absolutely unique era where not only we will enter into a post-human era, but also into a post-natural era”. Anyone familiar with the theory of biopolitics of Foucault would wonder why these two renown intellectuals try to establish a clear divide between social and natural or between natural and post-natural. Philosophy of ecology has stressed that it is delusional to advocate for a pure humanity. So, to finish this section, I shall propose a spectrum of how humanity is constantly disputed through collective arrangements with nonhumans.

On a first level, humanity is the ending result of humanism – understood less as a celebration of men and more as a set of domestication practices. The ideal of humanity has always been invoked to purge man from their residual bestiality. The homo sapiens, characterized by biological indeterminacy, mammalian unpreparedness and moral ambivalence, needs to be educated in order to become human. The taming of caves, plants, pets and men themselves are correlated, but Sloterdijk²⁵ has argued that humanism itself started with the cult of the literate. The division between leaders and followers began with the restricted access to authorized texts. After millennia of efforts of this pedagogical project it seems that humanism have failed, since the most literate men of the twentieth century have shown to be the most barbaric as well. This coincided with the end of the print regime, replaced by mass media communication (radio, television and internet). For the German philosopher, this post-literary socialization process marks the end of humanism and humanity, so we do not have to go as far as genetic engineering. This domestication through texts is an anthropotechnology centered in written language. These practices sometimes are directed towards the minimization of certain features of men, but they can also aim for their maximization. Post-humanism and trans-humanism would be merely new words for those humanists seeking to tame and exploit people.

Passing to a second level, beyond their relation with texts, humans also ally with nonhuman of diverse sizes and sophistication. Law²⁶ explains that the difference between humans and nonhumans are not of sociological kind, but an issue about the scale of the associations mediating between them. Humans,

²⁵ Peter Sloterdijk, 'Rules for the Human Zoo: a response to the Letter on Humanism', *Environment and Planning D: Society and Space*, no.27, 2009, pp.12-28.

²⁶ John Law, 'Notes on the Theory of the Actor-Network: Ordering, Strategy, and Heterogeneity', *Systems Practice*, vol.5, no.4, 1992, pp.379-393.

therefore, are not initial forms casted into random links with matter, but actants who define themselves through the deploy of heterogeneous relations. Each actor is also a network gaining resistance due the hybridization of material and symbolic resources, embedded in social relations but also embodied in physical entities that can guarantee their prevalence. Thus, the dividing line between human and nonhumans is constantly re-negotiated. As we have seen, this key thesis from actor-network theory entails two consequences. First, since humanity is not inherent to homo sapiens, the usual qualities related to it (dignity, intentionality, legal representation, etc.) could be granted as well to nonhumans. Second, humanity is never an accomplished state, since it would always be possible to explore further associations with novel technologies. Even more, as Fukushima²⁷ has clearly shown with his analysis of biotechnologies in sports and memory enhancement, each local context has particular criteria to stablish which associations are permitted. This means that what counts as human in certain milieu might not apply to others. Not even after a detailed process of domestication, the definition of humanity will never be univocal. If humanism is a dream yet to come, then why should we be so afraid of the next steps?

Finally, in a third level, the most radical challenge to the idea of humanity comes from the *Manifesto Cyborg*²⁸. The image of the cyborg, transgressive mixture of flesh and steel, conjures a novel perspective on health, work, gender and information that opens up other way of making politics inspired by an ontology based on hybridization. In these lines, contemporary science challenges all previous boundaries between humans and animals, or between humans and machines. On one side, traits such as language, tool use, social behavior and mental events have been found in plenty of nonhuman animals. On the other side, modern machines are highly autonomous, ubiquitous and intangible. Quite schematically, the subjectivity of the cyborg – already alive in contemporary human beings – could be pinned down to four general traits: 1) the lack of seduction for organic wholeness; 2) the rejection of any origin story; 3) the confusion of boundaries; and 4) unexpected sources of pleasure. Haraway states that, paradoxically, the recognition of the historicity of gender, race and class did

²⁷ Masato Fukushima, 'Blade Runner and Memory Devices: Reconsidering the Interrelations between the Body, Technology, and Enhancement', *East Asian Science, Technology and Society*, vol.10, 2016, pp.73-91.

²⁸ Donna Haraway, *Simians, Cyborgs, and Women*, New York, Routledge, 1991.

not provide any basis for a collective unity. There is no political myth that embraces an 'us' without relying in the logics of appropriation, incorporation, and taxonomic identification. The longing for unity is homologous with the nostalgia of old-fashion imperialism. Then, after avoiding such temptations, the cyborg must disembarass itself from any origin story. That is, to reject any alleged innocence related to a pre-oedipal state when the human being is represented as a pure entity free from any social power. The crucial idea is that the cyborg has never been human, so it does not aim for regain something that was chimeral in the first place.

OLD-FASHION EXPERTISE AND SCIENTIFIC DIVULGATION

Let's return to the problematic role of expertise in public deliberation. Whereas in science or philosophy, experts can be advisors for the powerful. For example, Archimedes' work on engineering were crucial for Hiero tyrant of Syracuse and Machiavelli's essays were read by many monarchs of Western Europe. But public intellectuals can also guide the masses, like for instance the Communist Manifesto or the campaigns against religion advanced by Richard Dawkins. In terms of efficacy, does the HowTheLightGetsIn Festival serve as counsel for the masters or the slaves? Some might regard the debate between Harari and Žižek as a motive of celebration, since it breaks the stereotype of the scholar locked in his ivory tower. Despite that achievement, I have shown how the exchange of ideas between the Hebrew historian and the Slovenian sociologist was flawed due their outdated arsenal of conceptual tools to think the urgency of ecology. Not only we should regret this result, but also we must avoid repeating it by questioning the very nature of mainstream philosophy guiding the general public. Social sciences and humanities are not harmless, for they describe and prescribe human behavior in a plethora of scenarios. But if famed intellectual appeal to old-fashion philosophies, there is a great risk of a reactionary understanding of sciences and politics.

I do not intent to denounce political conservatism, since that would miss the point. I started this article claiming that, just like pop artists, mainstream philosophers cannot help being conventional. Both Harari and Žižek are incarnating a role of expertise that has long expired. According to Bauman²⁹ in

²⁹ Zygmunt Bauman, *Intimations of Postmodernity*, London, Routledge, 1992.

the early stages of modernity, intellectuals of many kinds served the emerging states by crafting a cultural ideology based on a pedagogical project towards humanization – the same project referred by Sloterdijk. This implied that academic experts developed a role of legislation based on their erudition, since they determined the better ways to shape the untamed human nature through social conventions. Once the educational frenzy passed and the national states had proven their legitimacy through alliances with free-market instead of culture, intellectuals were no longer required. So, Bauman continues, under the climate of relativism typical of post-modernity, the remainder experts assumed a role of interpreter or translator. No longer shall they dictate good over evil, but rather create bridges between different domains of knowledge. Once such mediation is completed, the expert can return to his respective field – without any interference in the decisions of the powerful nor the behavior of the masses. Two millennia ago, Hiero regarded Archimedes as his most valuable war adviser. Almost a century ago, Franklin Roosevelt was less concerned with the technical knowledge of Robert Oppenheimer, since the General Leslie Groves – the official director of the Manhattan Project – was in charge to explain whether the atomic bomb could become a military advantage. In sum, for Bauman, early scientific experts were the right hand of the political leaders, while contemporary intellectuals are mere consultants in the micro-spheres of a culture driven by capitalism.

Only within this frame is that the charges of reactionary thinking imputed to Harari and Žižek can make sense. As the debate showed, the pop intellectuals could be counted as pale modern philosophers: they lack the enthusiasm of reason as the torch of humankind, but emphatically dictate other values such as moderation in our exploitation practices and caution regarding technological advances. They want to keep on legislating, no matter if they are quite distant from the subject to discuss – climate crisis. Ironically, their respective *oeuvres* reject the absolute idealism of modern philosophy and show great distrust of grand narratives. But this is not enough to enlist them between the postmodern philosophers, nor the experts who humbly fulfill the role of interpreter. It is useless to be suspicious about the Enlightenment project and embrace contingency as an axiom if the performance in these kind of public events is still endorsed in outdated roles of expertise. Not only Harari and Žižek refuse to actually discuss nature and technology by diverging the debate over ethics and humanism, they

also show great disconnection with the current matters-of-concern that worry the general public. The counter-arsenal of contemporary thinkers I deployed in the previous section show greater synchronization with those subjects – which means that even old-fashion expertise can be disputed.

It could be argued that, for the purposes of the *HowTheLightGetsIn* Festival, a symposium composed by Sloterdijk, Descola, Haraway and company would be far too technical to the wide audience. But this is only the reiteration that scientific – or philosophical – divulgation ought to be simple, while academic literature is the only allowed place to problematize the discussed topics. This seemingly harmless argument is what render mainstream philosophy conservative almost automatically. As Latour³⁰ graciously commented, scientists are so used to their rhetoric privileges that they can hardly imagine another alliance with the general public beyond divulgation. Divulgation is, quite literally, the vulgarization of the well-established results of non-recent research. The despotism inherited from Enlightenment suggests that technical terminology, conceptual challenges and scientific controversies are too much to handle for the laymen. As if it were impossible to be truly pedagogical; that is, create common language that allows a greater deliberation over the urgent matters-of-concern. Ecological crisis demands cutting-edge research with active involvement from the states, the industries, the media and, of course, the public. Even more, the new climate regime changes so deeply the rules of the game that the traditional educative relation is inverted. Climate scientists and philosophers of ecology would benefit from learning about the way indigenous people have endured through many catastrophes that could be labeled as “the ends of the world”, as Danowski and Viveiros de Castro³¹ have persuasively argued. Ethnomethodology knew from the start that the social scientist is not a teacher for his study subjects. Cultural anthropology had to learn the hard way that the populace is neither gullible nor clueless³². Maybe it is time that the rest of social theory, philosophy and the “hard” sciences catch up. No more experts guiding the masses, please! We are tired of the same old song!

³⁰ Bruno Latour, 'La Recherche, un grand journal politique?', in B. Latour (comp.), *Chroniques d'un amateur de sciences*, Paris, École des mines de paris presses, 2006, pp.5-9.

³¹ Déborah Danowski & Eduardo Viveiros de Castro, *The Ends of the World*, Cambridge, Polity Press, 2016.

³² Nigel Barley, *The Innocent Anthropologist*, New York, Vanguard Press, 1983.

Mg Human Sciences
Universidad de la República (Uruguay)
Independent researcher
<https://orcid.org/0000-0002-2335-7681>
d.antolinez.uribe@gmail.com

REFERENCES

- Barley, N. (1983). *The Innocent Anthropologist. Notes from a Mud Hut*. New York: Vanguard Press.
- Bauman, Z. (1992). *Intimations of Postmodernity*. London: Routledge.
- Bryant, L. (2011). *The Democracy of Objects*. Ann Arbor: University of Michigan Press.
- Callon, M. & Latour, B. (1992). Don't Throw the Baby Out with the Bath School! (343-368). In A. Pickering (ed.) *Science as Practice and Culture*. Chicago: University of Chicago Press.
- Collins, H. & Yearly, S. (1992). Epistemological Chicken (301-326). In A. Pickering (ed.) *Science as Practice and Culture*. Chicago: University of Chicago Press.
- Danowski, D. & Viveiros de Castro, E. (2016). *The Ends of the World*. Cambridge: Polity Press.
- Daston, L. (2019). *Against Nature*. Cambridge: MIT Press.
- Descola, P. (2013). *Beyond Nature and Culture*. Chicago: University of Chicago Press.
- Du Toit, C., (2016). Panpsychism, panconsciousness and the non-human turn: Rethinking being as conscious matter. *HTS Theological Studies*, 72(4), 234-26.
- Frith, S. (2007). *Taking Popular Music Seriously*. London: Routledge.
- Fukushima, M. (2016). Blade Runner and Memory Devices: Reconsidering the Interrelations between the Body, Technology, and Enhancement. *East Asian Science, Technology and Society*, 10, 73-91.
- Hacking, I. (1992). The Self-Vindication of the Laboratory Sciences (29-64). In A. Pickering (ed.) *Science as Practice and Culture*. Chicago: University of Chicago Press.
- Harari, Y. (2017). *Homo Deus: A Brief History of Tomorrow*. London: Vintage.
- Haraway, D. (1991). *Simians, Cyborgs, and Women. The Reinvention of Nature*. New York: Routledge.

- Katz, E. (2000). Against the Inevitability of Anthropocentrism (17-42). In E. Katz, A. Light & D. Rothenberg (eds.) *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology*. Cambridge: MIT Press.
- Keulartz, J. (2012). The Emergence of Enlightened Anthropocentrism in Ecological Restoration. *Nature and Culture*, 7(1), 48-71.
- Knorr-Cetina, K. (1981). *The Manufacture of Knowledge. An Essay of the Constructivist and Contextual Nature of Science*. Oxford: Pergamon Press.
- Latour, B. (1993). *We Have Never Been Modern*. Cambridge: Harvard University Press.
- Latour, B. (2005). *Reassembling the Social. An Introduction to Actor-Network Theory*. Oxford: Oxford University Press.
- Latour, B. (2006). La Recherche, un grand journal politique? (5-9). In B. Latour (comp.) *Chroniques d'un amateur de sciences*. Paris: École des mines de paris presses.
- Latour, B. (2021). *After Lockdown. A Metamorphosis*. London: Polity Press.
- Law, J. (1992). Notes on the Theory of the Actor-Network: Ordering, Strategy, and Heterogeneity. *Systems Practice*, 5(4), 379-393.
- McHenry, L. (2019). Whitehead's Panpsychism and Deep Ecology (229-251). In D. Wheeler & D. Connor (eds.) *Conceiving an Alternative: Philosophical Resources for an Ecological Civilization*. Anoka: Process Century.
- Pinker, S. (2018). *Enlightenment Now. The Case for Reason, Science, Humanism, and Progress*. New York: Viking Penguin House.
- Schaffer, S. (1991). The Eighteenth Brumaire of Bruno Latour. *Studies in history and philosophy of science*, 22(1), 175-192.
- Serres, M. (1995). *The Natural Contract*. Ann Arbor: University of Michigan Press.
- Shapin, S. & Schaffer, S. (1985). *Leviathan and the Air-pump. Hobbes, Boyle, and the Experimental Life*. New Jersey: Princeton University Press.
- Sloterdijk, P. (2009). Rules for the Human Zoo: a response to the Letter on Humanism. *Environment and Planning D: Society and Space*, 27, 12-28.
- Todd, Z. (2016). An Indigenous Feminist's Take on the Ontological Turn: 'Ontology' is just another Word for Colonialism. *Journal of Historical Sociology*, 29(1), 4-22.
- Weibel, P. (ed.) (2015). *Global Activism. Art and Conflict in the 21st Century*. Cambridge: MIT Press.
- Žižek, S. (1989). *The Sublime Object of Ideology*. London: Verso Books.
- Barley, N. (1983). *The Innocent Anthropologist. Notes from a Mud Hut*. New York: Vanguard Press.