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The Union of Scientifically Enlightened Citizens*

SUMMARY

The article investigates the possible outcomes of assuming that there is no “scientific knowledge” – the self-contained univocal faculty derivable from the natural world order by scientific institutions and therefore immune to external nonscientific (political, economic, ethical, or societal) influences. If speculative attempts to establish and/or (re)construct *scientific knowledge* are counter-productive, we must consider replacing “scientific knowledge” with a sort of *posthumanist scientific erudition*. Therefore, the author suggests that scientific activity should be pursued, not by collecting novel methodological and disciplinary capacities, but by “rebooting” the “inquiry mode”: a practical flexibility to mediate socio-political issues, the technological sphere and biological (in a broad sense) makeup.

SANTRAUKA

Straipsnyje analizuojama, kokių pasekmių galėtume tikėtis atsisakę idėjos, jog egzistuoja mokslinis žinojimas kaip savarankiškas universalus patyrimo būdas, kurį mokslo institucijos, jį susiedamos su prigimtinę pasaulio tvarka, yra pajėgios apsaugoti nuo išorinių nemokslinių (politinių, ekonominių, etinių ar socialinių) faktorių. Jei spekuliatyviniai bandymai įsteigti ir/arba sukonstruoti mokslinį žinojimą yra kontraproduktyvūs, turime apsvarstyti galimybę konvertuoti „mokslinio žinojimo“ sąvoką į tam tikrą posthumanistišką mokslinį patyrimą. Mano nuomone, deramai suprasti mokslinę veiklą galime ne koncentruodamiesi į metodologinius mokslinių disciplinų pajėgumus, bet „perkraudami“ patį „tyrimo režimą“: tuomet mokslinis patyrimas virsta praktiniu įgūdžiu medijuoti socialines ir politines problemas, skaitmenizuotą technologinę erdvę ir biologijos (plačiąja prasme) sferą.

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RAKTAŽODŽIAI: mokslinis žinojimas, posthumanizmas, F. Nietzsche, ES mokslo politika, mokslo vertybės.
KEY WORDS: scientific knowledge, posthumanism, F. Nietzsche, EU science policy, scientific values.

INTRODUCTION

HORIZON 2020 – the €80 billion EU framework programme for research and innovation – targets various societal challenges, such as health, demographic issues, clean energy and transport, climate change, security and freedom, sustainable bioeconomy, etc. But scientific literacy is not among them. The EU invests €1.309 billion¹ in “inclusive, innovative and reflective societies” in the hope of tackling unemployment, inequality and ignorance, yet the solutions for these issues are being projected from an unshakable belief that EU citizens will eventually demonstrate both resolve and sobriety to comply with scientifically elaborated policy options.

H2020 programme’s section *Science with and for Society*² with a fund of €462 million specifically addresses “effective cooperation between science and society” and is assumed to promote a scientific worldview among laymen for the benefit of all. Yet again it recklessly presupposes that the efficacy of the collaboration rests upon society’s capability to absorb and maintain *scientific knowledge*. However, the seemingly exhaustive H2020 platform for science-society cooperation ignores precisely the frailty of the assumed “sci-

entific knowledge”, hence failing to grasp the scientific worldview’s genesis, dynamics, purpose and normative accountability. Altogether it corrupts the emergence and content of so-called scientific values, or, put differently, misinterprets the functioning principles of “knowledge-based societies”.

Indeed, the encouragement to reflect the connection of science and society in a broader cultural medium emphasises both the demand and the lack of scrupulous analysis of the science-society-politics axis. But the actual challenge here is, I dare to say, an assumption that there is no “scientific knowledge” – the self-contained univocal faculty derivable from the natural world order by scientific institutions and therefore immune to external nonscientific – political, economic, ethical, or societal – influences. The proper first step in meeting this challenge would be to admit that here we are dealing not with a certain type of objective knowledge, but with complex multi-layered capacities, relatively determinable only within supposedly “external” conditions, and therefore theoretically inconsistent, practically volatile and historically indefinite. Quite a Nietzschean implication.

SOCIO-PHILOSOPHICAL CHALLENGES

The novel philosophical framework announces the beginning of the new – posthumanist – era of scientific worldview, capable of regenerating previously fractured realms of the Natural and the Cultural, Society and Na-

ture. The posthumanist approach towards scientific understanding urges sanctioning and refining an agenda which encapsulates scientific research or practice within an interactive life-world formation.

This particular task is based on a premise that speculative attempts to establish and/or (re)construct “scientific knowledge” are counter-productive, for they focus on scientific “interpretations” rather than on *innovative capabilities* of human activity. Consequently, an epistemologically projected problem-solving mode of social challenges (e.g. “what is the best explanation of mechanisms purportedly causing certain social issues?”) could be transposed into a *para-political* (roughly ontological) *mode* (e.g. “*what questions to address scientifically?; to whom to delegate decision-making and in what capacity?; to what extent and in what sense demand certain solutions?; how to define and implement wellbeing, common good?; etc.*”), replacing the very idea of *scientific knowledge* with a sort of *posthumanist scientific erudition, or “expertise”*.

If the presumption of political philosophy of science is tangible, one of the fundamental purposes of this avant-garde philosophy is an adequate assimilation with ongoing cohesion of post-industrial societies’ intellectual and behavioural setup and the cutting-edge scientific practices, which themselves currently undergo crucial transformations.

Accordingly, the avant-garde posthumanism challenges the definition of *human*. If human beings’ physical, emotional and cognitive capacities are shaped by DNA, so virtually are the building blocks – teamwork, empathy, rivalry, rule-following – of socio-cultural phenomena, e.g. science policy. Consequently, avant-garde philosophy of science accredits a certain type of *biophilosophy*. Paradoxically, the eventual symbioses of AI-human and body-technology induce

a *biopolitics* that not merely follows certain biologically determined patterns, but programmes its own *posthumanist* agenda, henceforth expanding and dissociating modern concepts of *human agency, identity, responsibility, virtue, property* etc., while simultaneously re-assembling and rearranging them in a certain posthumanistically cybernetic framework.

Therefore, it challenges the “classical” perceptions of *science*, spiralling around the conditions and functioning of scientific *contra* non-scientific knowledge. We could adopt here an example from the neurosciences: even if *we do not know* what consciousness is (or how it works), we practically, albeit gawkily *actualise* cybernetic framework by producing so-called brain-computer interfaces (BCIs) that decode and convert neural brain activity into external machine control.

Similarly, we *actualise* science (or, more precisely, engage in scientific practices) without *any knowing* of what or how *scientific knowledge* is. For the most part we simply invigorate uncountable techniques of *sciens* and *scindere*, i.e. of splitting, cleaving, dividing and separating. Another paradox is the repetitive emergence of philosophical/ideological images of science as the unifying composition of certainty and truth (*episteme*), even though scientific practice vaguely resembles bio-culturally adapting sets of skills and applications (*techne*).

The apparent discursive tension between bureaucratically constructed scientific *episteme*-ology of “scientific knowledge” and socio-economically developing techno-scientific enterprise hypothetically dissolves in cybernetic, or bio-culturally expanding processes. We

have more than one systematic example helping us to diminish the imaginable shortcomings of theoretically inconclusive and open-ended but practically useful and transparent considerations of human evolution; among them – Grant Ramsey’s and Andreas De Block’s convincing remodelling of the concept of *fitness* in evolutionary theory and cultural studies (Ramsey, De Block 2017), which may also address urgent issues of *bios-techne* interaction; or Kenneth J. Gergen’s reflective pragmatist “future forming orientation to research” (Gergen 2014) – a sort of cyber-philosophy that in contrast to “ocularcentric” epistemic meditations upon the world provokes to actively create, fashion and mould a medium for inquiries answerable only to *praxis*. Future forming research targets any potential subject matter of science as the task and challenge for human improvement. Accordingly, conceptual frameworks of this type are more relevant explorations of an unpredictably fluctuating posthuman techno-world.

In other words, I presume that the adequate reception of scientific activity should be pursued not by collecting novel methodological and disciplinary capacities, but by “rebooting” the “inquiry mode”. The Nietzschean question “why science?” nicely subsumes this “rebooting” research strategy, compartmented into three sections that diversely articulate the same issue. “Why” can be dissected here into “what”, “where” and “how”:

- what is scientific practice, virtually familiar to everyone but still resisting overall definition?

- where does scientific practice operate, if it irreducibly functions in nearly all forms of the contemporary lifeworld?
- how does scientific practice seemingly bind, or oblige the culturally and socially stratified assembly of human beings we call mankind, when no justificatory foundation is manifest?

1. As previously mentioned, the “what” requirements necessarily focus on definitions, or the issues of reliability, translatability and complexity of technoscientific cognition and demarcatory strategies of scientific understanding. Therefore, speculative attempts to establish and (re)construct the basis of scientific understanding irrevocably concentrate on explanatory issues and put aside inventive capacities of human activity.

2. Hence, more promising investigation of the content and values of contemporary scientific practices must transgress academic fields and even impeach traditional alliances of scientific and other social institutions. I discern this necessity as a para-political impetus gives it a sub-mode of the “where” of scientific practice.

Quite obviously, this kind of reboot of inquiry cannot be sanctioned from within. To self-protect from vicious circularity it has to presuppose and require something that is not a part of the same theory, but belongs to “the world”. Presumably, the world, first and foremost, is a medium of interactive, dynamic, ephemeral practices, embodied in discursive as well as material – social, corporeal and technological – configurations, charged with the power to modify, remake and adjust. Naturally, this world

then becomes “posthuman”, “unpredictable”, unstable and indeterminate, just as our understanding of it. To grasp the world means somehow to align with – old and new – power agencies, and to participate in a “fluctuation” process.

3. Sociologically, any kind of understanding is ideological to the extent that it is conditioned by society and culture; psychologically, ideology stabilises human behaviour and satisfies specific human needs of continuity, orientation and security in the world. Philosophically, at least in this case, ideology is something

akin to an unjustifiable justifier, or illegitimate legislator that tacitly binds human activities as well as human agency with nonhuman ones and breeds the *posthuman condition*. Science *qua* practice is inconsistent, incomplete, contradictory and partial. Since intellectually scientific practice procures no firm ground to stand on, it does so ideologically. The decisive question “why science?” then recurs as a human subjection to responsibility, clarity, relevance, self-preservation, awareness, etc. emerged within the worldly order.

POSTHUMAN CONDITION

So how should we boost the relationship between contemporary post-industrial societies of the Western world and cutting-edge scientific practices? A bit more careful reading of the *Science with and for Society* sub-programmes reveals that, so far, the cooperation between science and society mostly has failed. As I’ve noticed before, it shouldn’t surprise us that the cooperative dysfunctions there are relegated to citizens’ socio-political insensitivity towards scientific values instead of acknowledgement that the miscommunication between the stakeholders potentially rests in programmatic futility of so-called “scientific knowledge”. Indeed, “public investment in science requires a vast social and political constituency sharing the values of science”³; ironically, you will find no further references to these values in the subsequent upgrades. My guess is that they evolve simultaneously with sporadically dispersing socio-political is-

sues, barely resembling the quest for truth and happiness.

EU science policy strategists anticipate a virtual emergence of a new ontological reality – *the Union of Scientifically Enlightened Citizens* – composed of concentrically disseminated scientific artefacts, agents and values. They assume that the perception of scientific objects, methods, processes and goals in society is a prerequisite for understanding the developmental mechanisms of society itself; and vice versa – sciences cannot operate independently within certain purposes and phenomena, as their field of research is increasingly conditioned by the dictates of societal needs. Of course, it leaves us with the same questions: what is this imaginary *scientific union*? what protocols of scientific practices might it uphold? and what scientific and political values ought it to construe and protect?

At this point I find Francesca Ferrando’s (2013) analysis of posthumanism

as a comprehensive future-forming attitude immensely satisfying. Ferrando pinpoints the following features: a) post-humanism is a praxis; in the posthuman post-dualistic approach, the “what” is the “how”; b) posthumanism dismantles strict boundaries between human and non-human animals, biological entities and machines, physical and non-physical realms; c) posthumanism adopts relational ontology in Foucauldian technologies of the self, thus expanding the boundaries of ethics and applied philosophy (2013: 29).

But more importantly, posthumanism defends and circulates

- post-exclusivism, or an empirical philosophy of mediation, which demystifies any ontological polarisation (e.g. of physical and non-physical realms);
- post-exceptionalism, that relativises human thought, situating it within specific cultural-historical paradigms and discursive discontinuities;
- post-centralisation, which recognises not one but many specific centres of interest that are mutable, ephemeral and rest on perspectives, which are deemed to be pluralistic, multi-layered, comprehensive and inclusive. (Ferrando 2013: 29–30).

Ferrando concludes:

Humans are perceived as material nodes of becoming; such becomings operate as technologies of existence. The way humans inhabit this planet, what they eat, how they behave, what relations they entertain, creates the network of who and what they are: it is not a disembodied network, but (also) a material one, whose

agency exceeds the political, social, and biological human realms... (2013: 32)

Cary Wolfe (2010: XV) accommodates posthumanism slightly differently:

[Posthumanism] opposes the fantasies of disembodiment and autonomy, inherited from humanism itself. /.../ [I]t comes both before and after humanism: before in the sense that it names the embodiment and embeddedness of the human being in not just its biological but also its technological world, the prosthetic co-evolution of the human animal with the technicity of tools and external archival mechanisms (such as language and culture). But it comes after in the sense that posthumanism names a historical moment in which the decentering of the human by its imbrication in technical, medical, informatic, and economic networks is increasingly impossible to ignore, a historical development that points toward the necessity of new theoretical paradigms...

Put together, if everything said so far we take seriously, the posthumanist “new theoretical paradigms” Wolfe implies should at least have one common denominator: a practical flexibility to mediate socio-political issues, techno-digital sphere and biological (in a broad sense) makeup. What these paradigms most certainly oppose is quasi-religious belief in monolithic *Humanity* capable and willing to follow the scientific path to prosperity. All the red tape of inter-institutional policies and regulations of scientific advancements gives the right impression but sends the wrong message that the lifeworld is admittedly a complex though purposeful and orderly do-

main of human self-improvement. As if the march of progress leaves no one behind, so the issue is not “if” or “why”, but only “when” and “at what pace”; thus the faster certain society intercepts the magic keys of “external archival mechanisms” – the spells of *education, innovation, responsible research, equality, citizen science, open science, participation, inte-*

gration, consolidation – the better chances for its health, happiness and integrity.

Posthumanists as more conscientious readers of history books only remind us that humans do not change, only the measures they have. Therefore, Nietzsche’s insights considering human nature and intellectual capacities are as relevant as ever.

CAUTIONS AND CONCLUSIONS

Now I refer back to *the Union of Scientifically Enlightened Citizens*. To begin with, the posthumanist worldview takes the dualist polarisation of science and society as false. There are no fixed or definite (social, epistemological or other) boundaries, legitimating scientific autonomy and virtual independence from society, or culture, or technology, or nature for that matter. Hence posthumanism nudges the European Commission and its experts to stop the scratching where there is no itching: less pompous bureaucracy, more adaptive performativity.

Also, the elaboration of “policies more relevant to citizens” is based on the obsolete assumption that science is fundamentally apolitical, therefore “the values of science” are basically epistemic (consistency, simplicity, scope, structural elegance, predictive power, etc.). But posthumanism emphasises that science politicises far and wide. Precisely every aspect of our lifeworld is political, i.e. emerged in the art of governance, dominance, decision-making, relations, competition, know-how, tradecraft, bargain, evasiveness, etc. For this reason, highly scientifically literate societies, e.g. in France⁴,

are equally highly sceptical about scientific righteousness and omnipotence.

Lastly, science’s “what” in Nietzsche’s terms is a particular optional mode or regime of our presence:

We have science these days precisely to the extent that we have decided to *accept* the testimony of the senses, - to the extent that we have learned to sharpen them, arm them, and think them through to the end. Everything else is deformity and pre-science: I mean metaphysics, theology, psychology, epistemology. (Twilight of the Idols, 3)

It altogether implies, “where” and “how” science operates: the conclusive decision to choose science consequentially determines the process of “scientific understanding” and the type of “reality”:

Ultimately, man finds in things nothing but what he himself has imported into them: the finding is called science, the importing - art, religion, love, pride. Even if this should be a piece of childishness, one should carry on with both and be well disposed toward both - some should find; others - we others! - should import! (The Will to Power, 606)

How science obliges humanity? By involving, incorporating it into posthuman condition, or “scientific spirit.” (The Will to Power, 1062).

I agree with Stefan L. Sorgner (2007: 142) that in this respect, “by promoting science and with it belief in human senses, we promote humanity as well, through development towards the *Uebermensch*”. In other words, scientific spirit is the developmental medium, wherein an evolutionary account of organisms and “a rather physical view about the progression of the universe” are credible.

Now, by extending Sorgner’s interpretation we could infer that victory of the scientific spirit over the quasi-religious spirit develops into victory over humanist – dualist, representationist, essentialist – spirit. Sorgner himself concludes (2007: 149):

Nietzsche, of course, does not want to please the herd. Yet, he expects the herd to accept his conception of the world in the long run. This is no more than a necessary consequence of Nietzsche’s belief that the scientific spirit will govern the following millennia, that his hypotheses are scientific, and that he is able to change perspectives.

I subsume that posthuman condition quite smoothly expresses Nietzschean scientific spirit for at least two reasons. First, it is the refusal to get involved in zealous categorisations of social/individual, scientific/unscientific, natural/normative, human/bestial, etc. (cf. The Will to Power, 458), thus positively charging the inquiry mode with political skilfulness. Second, both posthumanist thinking and Nietzsche nearly explicitly

confess and humbly accept the high possibility that all of it – all the efforts to communicate and act scientifically – might simply end up as a childish ambition and inherent stupidity.

[S]cience is preparing a sovereign ignorance, a feeling that there is no such thing as “knowing,” that it was a kind of arrogance to dream of it, more, that we no longer have the least notion that warrants our considering “knowledge” even a possibility – that “knowing” itself is a contradictory idea. (The Will to Power, 608).

Thus, a ‘scientific’ interpretation of the world, as you understand it, might still be one of the stupidest of all possible interpretations of the world, i.e. one of those most lacking in significance. (The Gay Science, 373).

The more balanced posthumanism would be likely to accept Nietzsche’s assistance in upholding certain constraints toward unsubtly relentless biotechnological expansion. Nevertheless, citizens of the Union of Scientifically Enlightened Citizens would probably approve various techno-scientific solutions – BCIs, AI, bioengineering, etc. – borne out to simulate and/or substitute human activities; they might even approve the large-scale policy replacement with digital simula-cra. Yet they would hardly absorb illiterate science policy, which pretends to univocally represent scientific knowledge, or scientific values, or social needs, or human destiny. Posthumanistically, there is also no such thing as humanity; however, nothing forbids modestly entertaining diverse human clans with the contradictory knowing of their good and bad deeds.

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Endnotes

- ¹ <https://ec.europa.eu/programmes/horizon2020/en>
- ² https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-swfs_en.pdf
- ³ https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-swfs_en.pdf
- ⁴ <https://www.sciencemag.org/news/2019/06/france-most-skeptical-about-science-and-vaccines-global-survey-finds>