



WHEN SOCIAL THEORY IS DEVOID OF SOCIAL HISTORY.

REPLY TO “TRANSHUMANISM. HUMAN NATURE AND CULTURE: A PRELIMINARY SOCIOLOGICAL CONTEXTUALIZATION” BY MARKUS LIPOWICZ

This polemic discusses two problematic aspects to the claim of a paradigmatic shift to the new technology-centered symbolic universe, as understood by Peter Berger and Thomas Luckmann.

The first problematic aspect is connected to the *status quo ante* transhumanism (before the postulated paradigmatic shift). By discussing cases from pre-modernity and peak modernity, I point out that the discussed claim does not provide satisfactory understanding of the role of technology in society. My counter-argument is built on cases of techno-religious institutions such as abbeys and rocketry research theoretical circles, using works by David Noble as the starting point.

The second problematic aspect goes back to the fundamentals of Berger and Luckmann's concept and its relation to ontology. The discussed proposal mixed this framework with the concept of culture from the Margaret Archer system, which led to a shift in ontological positioning. In effect, some preliminaries about the materiality and dynamics of Berger-Luckmann dialectics are harder to trace in the proposal. This results in problems of operationalization and loss of useful theoretical dialogue with post-constructivist tradition.

In the last part of the paper, I sketch other possibilities and challenges for post Berger-Luckmann applications in the case of transhumanism and late modernity.

Key words: transhumanism; technology; modernity; social theory; science and technology studies

In late 2021, *Studia Socjologiczne* published the paper “Transhumanism. Human Nature and Culture” by Markus Lipowicz. The author stated that “the term ‘transhumanism’ encapsulates an anthropological paradigm shift which implies a cultural recentralization of late-modern societies on the basis of a new, technology-centered symbolic universe” (Lipowicz 2021: 59).

My paper has two functions. First, it will be a polemic against the proposed claim, showing its falseness as a case of inadequate theoretical understanding of *status quo ante*. In other words, the proposed claim fails to understand the role of technology in society and social theory before late modernity. While outlining the full extent of such theory goes beyond the scope of this paper, I will outline

a few paradoxical examples from social history. Such quandaries are well known to social history of technology (SHOT), critical sociology of technology, and some elements of Science and Technology Studies (STS). This will be the second function of my text – to show not only antihistorical mistakes but also openings for new theoretical interpretations, provided by the aforementioned traditions.

My polemic is divided into three sections. In the first, I will explain how studies from the critical history of religion and technology make the problematic case for a paradigm shift at the center of the symbolic universe. This part will focus on socio-historical examples.

In the second part, I will show that socio-historical omission goes back to the ontological choice made in choosing to interpret culture through the framework proposed by Margaret Archer. It goes without saying that the “Social Construction of Reality” is heavily rooted in a phenomenological perspective, reaching even to concepts such as alienation and reification. This makes conjecture about social history and Marxian theory of technology much easier than in the case of the Archerian framework of a Johann’s Fichte “third world of ideas”.

It is a classical quandary, well known in studies of science and technology. I see no clear justification for choosing an Archerian idealistic and cultural approach over Marxian materiality, but certainly I can see the practical and theoretical consequences of such a movement. The second part of the paper will also discuss them.

The third part of the polemic will be a brief outline of my counterproposal. Transhumanism may or may not be a passing social fad, but the question of religion and technology in late modernity is worth far more careful consideration within social theory. I will outline some recent debates in the field, as well as cases I consider much more jarring than has been addressed in theory.

Part 1: Paradoxes in history of religion and technology before late modernity

In the referenced theory, transhumanism is understood “as a religiously loaded intellectual movement that aims to counter the modern crisis of social institutions by introducing a promising equivalent to the unifying power of religion – an ultimate truth for an age of ultimate confusion”(Lipowicz after Hartmut Rosa). Said equivalent is technology. Regarding *status quo ante*, the author adopts Hartmut Rosa’s position: “It was mainly religion and tradition that would indicate the premodern individual its place in the world and in society” (Rosa 2013: 226).

I state my counter-claim as: Both religion and technology were specifically intertwined long before late modernity. It was this particular interplay that

provided the dynamic for several stages of at least the Christian dimensions of capitalism. In other words, to assert that technology superseded religion (or vice versa) as the center of the symbolic universe because of transhumanism is to ignore more than few interesting chapters from history (Noble 1999). Understanding their socio-historical importance is key to understanding the stakes of ontological incoherence, which I will show in the next part.

Consider the connection between technology and religion in the instance of Benedictines and later Cistercians (I build this example on Noble 1999: 20-26). Several reasons justify using them as “*experimentum crucis*”. Imagine monks embedded in their cloisters. Then imagine late modern technologists in their robotics laboratories (e.g., Boston Dynamics). I could compare their internal work organization, discrepancies between taught ideas and actual practices of exploitation, or roles held in societies. Instead, I will point to David Noble, who discussed this in detail.

What matters for my argument is the result of his analysis. Aesthetics show two factors with key importance for any social theory of modernity. First, in the case of Christian capitalism, it was the Benedictines and Cistercians that popularized crafts and technologies, laying functional foundations for the development of advanced manufacturing and proto-factories. There is no “Spinning Jenny” without the advancements of the spindle process. This is the socio-material conjecture. It matters in this case, as technology, unlike many other theoretical objects, should not be theorized separately from material conditions. In my understanding, it is this relation to materiality that makes technology categorically different from other theoretical objects.

Yet, it would be a mistake to consider the link between Manchester, craftsmen from Flanders, Pierre Jacquard, and Cluny Abbey as a case of mere diffusion of technology. The material-intellectual history of technology goes beyond the scope of this paper, but it should weave together both “*ora et labora*” and the Spinning Jenny. On the one hand, Cluny weaving crafts provided a strong basis for Burgundy and Flemish craftspeople. From them, Jacquardian and Mancunian weaving mills slowly emerged. On the other, the “career” of the Protestant work ethic and paternalistic moralization on factory workers closely resemble the “*ora et labora*” rule and the feudal system between the Cistercian abbey and villagers supplying half-products (wool) and labor (lower classes of monks and servants).

By no means would I be the first to ask about the theological split between the Augustinian rejection of useful arts in service of salvation and the Benedictine embracing of them. Jacques Ellul, David Noble, and many others noticed it long ago, so this quandary should be at least considered when making any claims about the paradigm shift between technology and religion.

The importance of this case goes beyond simple factual or theoretical omission. This case shows that focusing only on the final justification hides the

techno-theological shift happening within the symbolic universe and its consequences for social processes. It also illustrates that Hartmut Rosa's assumption about the distinction between religion and technology in the symbolic universe was not unproblematic in the first place. Following Noble or Ellul, one can learn that the moral character of technology in pre-modernity was neither given, nor evident, nor even final.

I will now move to another era, or – to borrow some military terminology – the *Schwerpunkt* (focal point, center of gravity) of modernity, the most iconic point of the techno-scientific era, reimagined even today in series such as “For All Mankind” or “Failure Is Not An Option”. I will look at the space race at the apex of the Cold War. Importance of “Sputnik Moment” for the science education, science and technology policy and ecological framing is a subject of a contest debate, but social theory should not overlook it. Yuri Gagarin's “There is no God in Space” and global prayers for the safe return of Apollo 13 crew fall really close to our debate on transhumanist God-Man.

Americans used rockets by Wernher von Braun. Russians used rockets designed by Sergey Koroliew. The former openly made claims not so different from what any transhumanist or theologian would make: “When man, about 2000 years ago, was given the opportunity to know Jesus Christ, to know God who had decided to live for a while as man amongst fellow men, on this little planet,” von Braun later wrote, “our world was turned upside down through the widespread witness of those who heard and understood Him. The same thing can happen again today” (von Braun 1967 after Noble 1999: 136).

It is hardly surprising that Koroliew, his competitor, was equally inspired by promises of immortality discussed by Nikolai Fiodorov and other Russian cosmists (Young 2012). It is even less surprising that this vision of cosmic immortality is constantly proposed in discourse situated on different sides of the ideological spectrum than transhumanism, for example in writings by contemporary social theorists of heat and entropy (Nail 2021).

It is well-known historical knowledge (consider Noble 1999 or Young 2012) that German, American, and Russian rocketeers were heavily influenced by religious zeitgeists and tensions. Von Oberth, Goddard, and Tsiolkovsky's circles engaged with religious thinking differently. German engineers, similarly to other German intellectuals, were influenced by German Romanticism and spirituality. American propensity for mixing religion and rocketry could be partially understood through Manifest Destiny, Russian self-learning circles around Tsiolkovsky by Pan-Slavic transcendental mysticism and Buddhism influences.

Especially, the political theology and rocketry of Russian (later Soviet) Cosmists provides an interesting conundrum for the argument about the paradigm shift of transhumanists. It was religious in nature, albeit without an individual, personified god. This itself foreshadowed the cross-cultural history

of physics (Simonyi, Kramer 2012) in general and particularly in the post-World War II romance between particle physics and Buddhism (Kaiser 2011). The goal of Cosmic Eschatology was to save Life itself in any form from the thermal death of the universe; equivalent to the second coming was the forging of new universes. Cosmists imagined hibernation, consciousness transfer, and human hybrids long before transhumanists came into the debate.

If I had to use the framework I critique, I would have to fit Cosmists into a category such as “humanistic values as binding keystone in the symbolic universe, with technology having only a secondary role”. But framing provided by Lipowicz is not enough to understand the circle of Konstantin Tsiolkovsky and Sergei Korolev. If it does not work for Korolev, it does not help me to understand Sputnik. I personally doubt any theory of the symbolic universe of technology in modernity that does not account for Sputnik. Putting my personal preference aside, “Sputnik Moment” is usually understood one of the key turning points in modern science and technology education. Theorizing transhumanism without explaining Sputnik and Sputnik Moment is not worth much in terms of understanding societies.

The mistake lies in disregarding technology as a particular social relation on par with institutionalization. To be more precise, I call this kind of institutionalized technology ‘infrastructure’ after Susan Leigh Star and other symbolic interactionists (Leigh Star, Ruhleder 1994; Leigh Star 1999; Bowker et al. 2015; Bowker, Leigh Star 1999). The Meadean roots of Berger and Luckman still bear ripe fruits.

Let others find joy in tracing more examples from social history. I will only add that Euro-American bias in the history of religion and technology, which is clearly visible in Noble’s argument, is not a significant obstacle. Readers will discover that the Confucian tradition’s tangle with religion brings us to a similar conclusion (Bod 2022).

This is why I contest the claim that transhumanism represents a paradigm change. I vehemently argue that in theoretical underpinnings for transhumanism and their contemporary representations, religion should not be analyzed in disjuncture with material technology, as if on some separate ontological plane.

They were not mutually exclusive in the first place. Religious, miraculous mysticism was always close to the wonders of technology. Technology did not replace religion; they have been complementary since the beginning of pre-modernity for Benedictines, for rocket engineers, for millenarian alchemists. The capitalist promise of salvation through work and technological wonders was always based in religious structures of thinking.

This is not to say that the Durkheimian theory of society is untrue, obsolete, or irrelevant. Quite the contrary: my examples prove that religious thinking was intimately connected with technological promises at least since times of Benedict

of Nursia (about 500 AD) or the transformations of Confucianism between the Ming Dynasty and Joseon Dynasty in modern Korea in the XIII century (Baker 2017). Durkheim's intuition about the religious underpinnings of social ties may be even more valid than Durkheim himself imagined. To understand this, I have to discuss some theoretical issues.

The mistake lies not in assuming a conceptual framework of Durkheimian explanation of social bonds in religious thinking. The mistake lies in the ontological erasure of dialectics underlying the thought of Berger and Luckmann.

Part 2: Issues with the ontological handling of theoretical objects in the Archerian “third world”

The discussed paper proposes to understand culture through the general framework of Margaret Archer, i.e., through the logic of the Cultural System (Archer 2004). The Cultural System is clearly a Fichtean (Platonic in genesis) third-world theoretical proposal. Ideas, such as human values or technology, exist on a different ontological plane than material objects such as biological tissues or looms. The discussed theory does not openly discuss this shift, yet it abstains from discussing any example of idea operations other than the strictly theoretical.

In my reading of Berger and Luckman, the symbolic order operates on the same ontological plane as humans and societies. It is embedded in technology, institutions and other instances. It is not to be discovered in some Archerian immutable system of universalia. I claim that the ontological assumptions behind the concept of symbolic imaginary are different from the assumptions behind the term “culture” used in the discussed paper. If theory goes with the latter, it loses phenomenological and Marxian traces to the former.

Look for yourself and go back to the theoretical foundations of symbolic universes by Berger and Luckmann. Before the types and traditions can be brought into consideration, Berger and Luckmann very carefully examine the case of technological interaction (through the example of building a canoe). Cognitive load when handling technology is always there, similarly to George Mead and Herbert Blumer. Berger and Luckmann are also aware of the Marxian criticism of idealism, including Marx's well-known phrase on the spindle and feudal society (Marx 2021).

When the discussed paper adds Archerian culture to the mix, it also shifts the ontological and socio-material foundations of symbolic universes. The shift occurs on the continuum from material, empirical, and intersubjective to idealist, third-world, and universal. It should be openly stated and discussed, yet it is not. The consequences are left for the reader and user of the proposal. This

is why the discussed proposal fails the simplest operationalization test, as well as failing theoretical verification with socio-historical examples.

The “beneficial” trade-off is that by eschewing this tradition, Lipowicz is able to engage in discourse about the technology without theorizing it in detail. This is rather convenient, as social theory is not universally known for its propensity to discuss detailed case studies about technological artifacts. Unfortunately, this kind of ontological cut is perfunctory for other studies of technology, such as theorizing using ethnographic cases. I discussed this issue in detail in terms of the relationship between modernity, misuse, and laboratories (Zarod 2017).

The technology infrastructures I introduced before cannot be regarded as materialized social relationships and norms if I simply restrict my theory to another ontological plane. There is little place for post-Marx tradition in Science and Technology Studies (STS) in the realm of pure ideas. This is why socio-historical examples given in the previous chapter are so hard to consider within the framework of discussed theory.

If you don’t believe me, compare the discussed paper with the ANT idea of black boxes, the symbolic interactionism theory of infrastructure (Leigh Star, Ruhleder 1994; Leigh Star 1999; Bowker et al. 2015; Bowker, Leigh Star 1999), or modern theories of repair and care. In all those cases, technology has some special traits, which other institutions may not have. We gain clarity.

This is why among examples in my polemic I constantly mix infrastructures and ideas. This is why the concept of infrastructure so easily translates due to shared roots in Symbolic Interactionism and materialism. This is why adding Archer to the mix should be made with much more deliberation than was done in the discussed case.

It is a very simple theory-operationalization stress-test. Scholars are more than welcome to use other theories, for example, feminist philosophies of care (e.g., Bellacasa 2011 or Henke, Sims 2020), which for more than decade has been serving as standard critiques for constructivist studies of technology.

Part 3: How to understand transhumanism through social theory. An outline of a potential counter-proposal

Despite all of my objections to Lipowicz’s paper, I still think its central subject is an intriguing one. I completely disagree with the proposed answer and tools, but similar to Lipowicz I believe that transhumanism could be theorized through social theories of religion and technology. In the final part of my paper, I will focus on my counter-proposal. My understanding is that transhumanism can be read as millenarian reaction to the crisis of faith in technology.

It may sound absurd, but allow me to share an example. Is the discussion around transhumanism not symmetrical to the discussion surrounding apocalyptic theologies? One side anticipates the end of the world, while the other is terrified of this possibility. One side believes that Human 2.0 will be a savior, the other is sure that Homo Deus (from the works of Yuval Noah Harari) will be a false prophet bringing doom and apocalypse. Some believers are excited and believe that the end of toil is nigh, while others say that the end of the world is not something to be enjoyed and waited for.

Faced with climate crisis, loss of employment to machines, or failures of science during the Covid pandemic, society must face the same cognitive dissonance as millenarian zealots throughout history. Some parts of society radicalize their beliefs, while hoping for a short wait for the end times. Other parts lose their beliefs completely, become numbed or indifferent. The former become transhumanists. The latter are more numerous, visible for example in the Eurobarometer survey on science and societies: as a rule of thumb, in wealthier countries fewer people believe in technological progress than in developing countries (Special Eurobarometer 2021).

How one can state that technology has become the new focal point of the symbolic universe, when public trust in science and technology is weaker (or different) than in the “peak modernity” era? It is a well-known fact among scholars studying science education and public understanding of science. What does it mean that technology is placed in the center of the symbolic universe? Does it mean that societies believe that things work because of their internal, yet otherwise incomprehensible and fundamentally unchallengeable logic? Because of their technological inertia, akin to any infrastructural systems? Because new generations of consumer technologies are shipped to market?

Meanwhile, the key point of my counter-examination of transhumanism is simple: to examine transhumanism as an element of some social process, not as a sign of social effect in the symbolic imaginary on an abstract plane. Go through it more slowly, even to the point of checking Berger and Luhman’s steps of institutionalization and checking whether or how it became tradition, cross-checking it against historical parallels of millenarian cults and crises of faith, this time in the case of the faith processes underlying modern capitalism. My initial intuition was to juxtapose it with biohacking and synthetic biology, but I eschewed it ultimately to focus on issues of power in computer security. Perhaps, after the Covid-19 pandemic, I may go back to it and re-read it with the help of fellow political theologians or historians of ideas (such as Ratajczak 2020).

So, instead of ending on a critical note, I end on a conciliatory one. Intuition about using Durkheim as a vantage point for theorizing technology is generally a good idea, as long as it does not ignore the social history nor ontology behind other concepts used. This is why, despite all my criticism, I am grateful to my

polemist for opening the debate. Perhaps it is the only point on which Marxists and Idealists may finally roam free among machines of loving grace.

“I like to think
(it has to be!)
of a cybernetic ecology
where we are free of our labors
and joined back to nature,
returned to our mammal
brothers and sisters,
and all watched over
by machines of loving grace.”
(Brautigan 1971)

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