

Remolding the Human: The Transhumanist Ideas in Marx and Russian Marxists

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ABSTRACT. Transhumanism is a young ideology, and its creators have hazy and confused notions of their forerunners and philosophical roots. The authors attempt to show that some of the ideas and concepts of Karl Marx and some Russian Marxists meet the aspirations of transhumanists to radically transform the human body. This is, first of all, the idea of the revolutionary role of labour and technology in the history of mankind, along with the concepts of the “inorganic body” of man and the essence of man as an “ensemble of social relations.”

KEYWORDS: transhumanism, bioconservatism, inorganic body, human essence, human identity, freedom, labour.

Introduction

Those who aspire to glimpse into the distant future should, as Newton advised, climb onto “the shoulders of giants.” For an ideology as newborn and as unfledged as transhumanism is,¹ it is vital to lean on firm points of support in the history of human thought. So far, transhumanists have failed in this task, nor have they displayed any particular interest in undertaking it. They have been more passionate about the technological side of the matter, viz. androids, cyborgs, nootropic drugs, etc. Nick Bostrom’s effort to identify the ideological roots of the transhumanist movement can hardly be considered a serious contribution to the history of science (Bostrom 2005). This is more a bird’s-eye overview than an in-depth analysis of the topic.

Christian theologians’ excursions into the background of the problem, from Francis Bacon to Pierre

Teilhard de Chardin,² have been more impressive, but remain a view from the outside, not the kind of self-critical introspection transhumanism requires as, for that matter, any other ideology or research program does.

Following is an attempt to see whether and how a Marxist philosophy of history can help solve the problems on the transhumanist agenda.

Marx as a Precursor of Transhumanism

The cornerstone of transhumanist thought is the idea of the infinite human being. Philosophers have been familiar with it since the time of Heraclitus: “By setting off you would never find out the ends of soul, though you should travel along every path: so deep a measure does it have” (B 45 DK). Plato, too, stressed the difference between the infinity of the soul and the limited capacities of the human body. He would even call the body the prison of the soul. As Plato writes in

1 This movement emerged in the late twentieth century, and in 1998, philosophers Nick Bostrom and David Pearce founded The World Transhumanist Association.

2 See Chapters 2–3, by Michael Burdett and David Grummett, in Cole-Turner (2011).

Phaedo (82e), “the lovers of knowledge are conscious that their souls, when philosophy receives them, are simply fastened and glued to their bodies: the soul is only able to view existence through the bars of a prison, and not in her own nature” (Plato 1873, 411).

Transhumanism tries to resolve this contradiction of classical metaphysics in its own way. It seeks to *transform the human body* by means of technologies, endowing it with countless degrees of freedom, overcoming, indeed, death itself, and thus forcing open the door of the “prison” of our corporeality.

Marx was the first to point out the revolutionary role of technologies in the history of mankind. Incidentally, Bostrom enlisted Marx in the party of “bioconservatives,” without a shadow of a doubt and without a single argument.³ Marx showed how technological development changed the structure of society, creating new social classes and forms of property. “The hand-mill gives you society with the feudal lord; the steam-mill, society with the industrial capitalist” (Marx 1973, 95). And earlier, Marx wrote about man’s universality “which makes all nature his inorganic body.” Plants, animals, stones, air, etc., that “constitute theoretically a part of human consciousness, ... in the realm of practice ... constitute a part of human life and human activity” (Marx 1988, 75-6).

The human, therefore, has not one body, but two. He constructs his second, inorganic, body by his own labour from the material of external nature. All human “programs” of behaviour, including habits and norms of everyday life, rules of language, moral and legal imperatives, dogmas of religion, etc., are “recorded” in this man-made body. Labouring man can turn any natural thing or any phenomenon of nature into a “meta-chromosome” that stores information about his personality, the character of his thought and behaviour. It is this technology of “programming” man’s own vital activity with the help of external things that is the human race’s major advantage over other living species: it gives us *freedom*. Every time man changes the surrounding world, he changes himself, and in this improves the common “genotype” of mankind. Man is both a subject and a product of his own labour: “*The entire so-called history of the world* is nothing but the

creation of man through human labor” (Marx 1988, 113). Marx called this conceptual novelty a materialistic understanding of history.

Marx, to be sure, understood “the human essence” to be “the ensemble of the social relations” and, by no means, an “abstraction inherent in each single individual” (Marx 1976, 4). There is neither a trace nor a shadow of “biosocial” dualism in this definition. The essence of man is one hundred percent social. As to the body, it is a violin the “ensemble of social relations” plays.

The “Bio-Conservative” Objections

Critics of transhumanism put the concept of human “biological nature” at the forefront of their argument. This is precisely the concept Marx rejected with his formulation of the “abstraction inherent in each single individual.” The guarantee of our human identity is seen as some anthropological constant or in the human genome, technological interference threatens to destroy both “our generic-ethical self-understanding,” and “the necessary conditions for an autonomous way of life, and universalistic understanding of morals,” Francis Fukuyama writes (cited in Žižek 2008, 435).

From Marx’s point of view, the “biological nature” of the human is but a *naturalistic myth* rooted in the misunderstanding of human practical life, of the fundamental difference in the way of life of man and animal. If so, the entire line of reasoning of the opponents of transhumanism is beside the point, and this applies not only to the rationalist arguments of enlightened “bio-conservatives,” such as Fukuyama, but also to anathemas from the lofty perspectives of “theological anthropology.” The latter discipline depicts the human body and mind as *imago Dei* or the perfect creations of the Lord God. A prime example of such an argument can be found in Vladimir Kutyrev’s writings.

Transhumanism is an anthropo(humano)phagia, a direct challenge to the identity of the human, as we know him, as we know ourselves having evolved over millions of years in the tempos of reason living and born on that basis or having been created by God ‘who saw that it was good.’ (Kutyrev 2011, 24)

The nature of the human body or, for that matter, the nature of any other body is no obstacle to labour. Practical transformation of nature, including and pri-

³ James Steinhoff (2014) showed that Bostrom’s assessment of Marx is clearly inadequate.

marily the nature of the human body, is the “generic activity” of the human. To attempt to impose any kind of anthropological taboos on our practical abilities would be both senseless and useless. Labour has long since changed our natural body and changed it irreversibly, has straightened our spine vertically (despite a whole bunch of adverse health effects), has transformed the anthropoid’s upper limb into that “tool of tools” we call the human hand. The modernization of the body will doubtless go on, no matter what its opponents say. Actually, the human body is transformed every time human work transforms the surrounding world.

[Man] acts upon external nature and changes it, and in this way he *simultaneously* changes his own nature. He develops the potentialities slumbering within nature, and subjects the play of its forces to his own sovereign power. (Marx 1982, 283; italics ours)

Whatever humans do boomerangs back onto them, affecting their bodies and minds, not to mention their social life. Transformation of environment and transformation of human nature are not two different processes, but *two sides of one and the same process of social labour*. If Bostrom and other transhumanists learned that lesson of Marx, they would be on much firmer ground in their polemic against bioconservatives.

In general, transhumanism should not be portrayed as an *alternative* to classical humanism. The “hard core” of the humanistic worldview, as shaped in the age of the Renaissance, remains safe and sound: *the human is the ultimate goal, the end in itself of any human activity*. The human’s self-perfection, including that of his body, mind and social relations, is the principal vector of world history. It is not difficult to find this basic provision in the transhumanist manifestos provided they are read without prejudice and with a minimum of scientific honesty.

There may be theorists and practitioners of transhumanism, of course, who might try to destroy this core, but any research program must be judged by its *best, advanced* developments. Marxism, it will be remembered, did not avoid being deformed and discredited by some of its adherents already during Marx’s lifetime, prompting Marx to refuse to identify himself as “a Marxist” (see Engels 1975, 22).

Human Nature and the Problem of Freedom

For Marx, human freedom is directly proportional to man’s command of nature, including command of his own biological nature. Command of nature depends, in turn, on the development of productive forces, i.e. tools and technologies: “People won freedom for themselves each time to the extent that was dictated and permitted ... by the existing productive forces” (Marx and Engels 1976, 431). Freedom is, therefore, a dimension of sociohistorical, not individual life. The paradox of history is that societies have developed enormous productive forces at the expense of crippling bodies and minds of men of labour. Some social classes have expanded their freedom by enslaving others. Marx called this paradoxical development *alienation*. A great social revolution was needed for the progress to cease to resemble a pagan idol drinking the nectar of freedom from skulls of the slain.

What does this mean as far as the problem of transformed human corporeality is concerned? Technological progress is a necessary, but far from sufficient, condition for liberating the body. Human bodies cannot be free unless human society is free. In situations of alienation, freedom of some implies bondage of others. This deplorable fact is virtually ignored by transhumanists. As James Steinhoff correctly observes,

most transhumanist thought tends to place little emphasis on the social nature of the human – and this is where transhumanists should take a point from Marx. The transformation of the human seems to be regarded by most transhumanists as a process undergone by atomistic individuals who each exist in no more than a loose aggregate with others. (Steinhoff 2014, 9)

Since the human body is an element of the productive forces – indeed, their primary, key element – development and transformation of the human body has to and will continue. From this standpoint, bioconservatives’ protests are hardly more than Luddite-type naïveté devoid of any historic sense. But bioconservatives are right to highlight potential threats and risks that new technologies might entail for living individuals. In the world of alienation these threats are more than real because capital prioritizes valorization over human well-being. However, new

technologies entail not only threats; they promise new possibilities and thus, greater freedom. Would this not justify the risks?

In his time, Marx drew attention to the pernicious nature of “the factory system,” the harm it did to the health and, indeed, the very lives of labourers, especially child labourers. Unlike contemporary bioconservativists, however, he saw the remedy for technological threats in *development of technologies themselves* and transformation of the social working conditions. So,

as Robert Owen has shown us in detail, the germ of the education of the future is present in the factory system; this education will, in the case of every child over a given age, combine productive labour with instruction and gymnastics, not only as one of the methods of adding to the efficiency of production, but as the only method of producing fully developed human beings. (Marx 1982, p. 614)

This idea of combining productive labour with physical and intellectual training, already present in the writings of Charles Fourier, became the foundation of the early Soviet concept of “labour school” (by Pavel Blonsky and others).

Russian Cosmism and Consciousness Engineering

Transhumanism had a precursor in the person of Nikolai Fyodorov.⁴ This Russian *supramoralist*⁵ seems to have been the first to charge science and technology with the task of “overcoming nature” implying putting an end to the biochemical restraint on human existence. No human could be considered a genuinely free person, Fyodorov argued, while he had something in him that he had received from nature for free, “be it even a cell not owed to his own toil” (Fyodorov 1982, 430).

In contrast to transhumanists, the ultimate goal was for him universal brotherhood in labour rather than individual immortality. In this he was an irreconcilable adversary of that “unbrotherly” social order, and was close ideologically to Marx and communism.

⁴ See, for instance: Cole-Turner 2011, 25–8. Or consult the Wikipedia articles on Transhumanism (English, Russian, French).

⁵ Fyodorov called “supramoralism” a demand for the consolidation of all living people towards the common cause of resurrecting our dead ancestors by means of science and technologies.

All Russian cosmists, from Fyodorov’s *Philosophy of Common Cause* to Ilyenkov’s *Cosmology of the Spirit*, sought to understand the import of human presence in the universe. They shared the belief that humanity had a mission of cosmic magnitude and developed sublime deontologies that went as far as humankind’s collective self-sacrifice to prevent the heat death of Mother Nature.⁶ The reader interested in these issues should consult the recently published anthology starting with the Editor’s Introduction “Russian Cosmism and the Technology of Immortality” (Groys 2018).

A contemporary human is unfit for the cosmist task. Therefore both their body and their mind are to be transformed to match the scale of the challenge. The ancient imperative *gnothi seauton*, ‘know thyself,’ is to be substituted with the new one: *poiei seauton*, ‘create thyself.’ This is obviously something every transhumanist will endorse. However, one can create oneself only if one understands what one *must be/become*. And this implies a deontology of a kind, even if vaguely grasped. Otherwise the human’s android self-portrait will prove to be inadequate or, worse still, “unbrotherly.”

Marxists’ and Cosmists’ visions of men of the future were quite different, of course. However, we have good reasons to bring them into line with one another, because they all sought the transformation of human nature by means of science and technologies.

Russian Cosmists inherited and radicalized the Marxist shift from divine grace to secular technology. ... Fyodorov goes even further than Marx in his project of achieving immortality and resurrection of the dead through technology and rational social organization. ... And Fyodorov believed just as firmly in technology: because everything is material, physical, everything is technically manipulable. (Groys 2018, p. 5)

According to Groys, the principal difference between the project of Marx and that of the Cosmists lay in their attitude to death. Cosmists advocated the “biopolicy of immortality.” Fyodorov would consider Marx’s communism as an exploitation of the dead in favour of the living. Marx thinks of technology in terms of historical progress, whereas Fyodorov directs technology toward the past. Technologies are to change

⁶ See Ilyenkov, 2017.

mortal into immortal, very much like art does it. As to the state, it is to become a museum of humankind. It is not a metaphor, but a philosophical amplification of the concept of museum (see Fyodorov's work "The Museum, Its Meaning and Mission").

The idea of "remolding" the human circulated widely in post-revolutionary Soviet Russia. This was understood as, first and foremost, development of a "new consciousness," thus bringing psychologists ("engineers of human souls," as Stalin called them in a private conversation) to the foreground. The young psychologist Lev Vygotsky wrote in 1927:

In the new society our science will take a central place in life. "The leap from the kingdom of necessity into the kingdom of freedom"⁷ inevitably puts the question of the mastery of our own being, of its subjection to the self, on the agenda. In this sense Pavlov⁸ is right when he calls our science the last science about man himself. ... When one mentions the remolding of man as an indisputable trait of the new mankind and the artificial creation of a new biological type, then this will be the only and first species in biology which will create itself. (Vygotsky 1997a, 342)

Referring to Kautsky and Trotsky, Vygotsky formulates his ideal of the reformed human. This will be a person who bends his emotions, instincts and unconscious psychic processes to his will, turning his behaviour and his very life into artworks. He will become a true Superman, but different from Nietzsche's concept thereof, only when compared to his ancestors, not to his neighbours. Such a person will be great not among the crippled dwarfs, but great among the great, and will act in alliance with the equal, striving for a common goal.

Not a new biological breed, but a socially organized Superman, enlightened through and through, in every cache of the most elemental forces of the body, freed from the most terrifying slavery – enslavement to the self – and from the most bitter dependence – on one's own nerves and psyche – by subordinating to himself the play of the body's inner forces as he does the outer forces of nature. (Cited in Zavershneva 2012, 56)⁹

Molding new humans, like melting new metals, are the kind of experiments better performed under laboratory conditions. Right after his arrival in Moscow, Vygotsky stated on an application form that he would like to work with deaf-blind children. Deaf-blindness is a kind of natural anomaly that makes the educational process more dependable on and totally controlled by the pedagogue, especially at initial stages. In the absence of laborious and purposeful educational effort, a deaf-blind child is utterly incapable of mental development. It is the educator's art that is to make a human person of him. Vygotsky was convinced that if a deaf-blind child's central nervous system is undamaged, such a child has the same "limitless possibilities for development and education" as normal children (Vygotsky 1987, 181).

In 1963 Alexander Meshcheryakov, a representative of the next generation of the Vygotsky school, established a Boarding School in Zagorsk that housed some 50 deaf-blind children. This boarding school would subsequently be called the "Synchrophasotron of the science of the human." The philosopher Evald Ilyenkov took an active – both theoretical and practical – part in the Zagorsk educational experiment. As he asserted, in the final analysis, we were left with no doubt whatever that

a scientifically organized process of education, even with such a seemingly insurmountable obstacle as complete absence of sight and hearing at once, can lead the child to the path of full-blooded human development and form ... a mentality of the highest order, opening him access to all the treasures of human spiritual culture and bringing him up a universally developed, truly talented person. (Ilyenkov 1977, 69)

Forming the Ideal Human

Transhumanist literature presents no common model of a posthuman. While hedonistic utilitarianism à la Helvétius and Bentham sees minimization of suffering and maximization of pleasure as the criterion of perfect human existence, other authors find this criterion too human and argue that the posthuman mind is to be free of the affects of joy and sorrow. A person enclosed in an immortal electronic body (or rather data carrier) will be rid of such biological behaviour regulators as affects.

7 The phrase is from *Anti-Dühring* by Frederick Engels.

8 van Pavlov, the author of the theory of conditioned reflexes.

9 This archival paper has not yet been published. Zavershneva's translation is slightly refined.

The “liberal eugenicist” Nicholas Agar invokes Isaiah Berlin and John Rawls to call for leaving post-humans the right to choose freely between modes of life and forms of body. Everyone has his own taste, so let all flowers flourish. This common sense truism underlies Agar’s “pluralistic view of human excellence,” or otherwise, a “pluralism about human flourishing” (Agar, 2005).

Marx’s idea of the human ideal was as old as the world, too. Marx shared it with most Renaissance humanists. It was simply that of a harmonious person: clever, kind, healthy, diligent, and endowed with a subtle sense of beauty. The communist movement’s historic goal was to form

the rich individuality which is as all-sided in its production as in its consumption, and whose labour also therefore appears no longer as labour, but as the full development of activity itself, in which natural necessity in its direct form has disappeared; because a historically created need has taken the place of the natural one. (Marx 1978, 249)

The concluding expression “natural necessity has disappeared, etc.” sounds like a catchphrase from a Transhumanist Association manifesto, does it not?

The problem, however, is that the division of labour and private property form personalities of a totally different type, that of a narrow specialist chained to the wheelbarrow of his trade, to use Ilyenkov’s expression. The division of labour swells common productive capacity, but cripples individuals: “the individual has been turned into a fraction” (Vygotsky 1994, 179). The concrete fullness of human development is achieved at the expense of curtailed personal, individual development, at the expense of turning most individuals into living abstractions. Both Diderot and Marx branded this type of human development as *idiotisme du métier*. Are transhumanist technologies to immortalize a professional cretin, incapable of passions and hence lacking compassion and, with it, the totality of affects hitherto identified as “human”?

Alas, our time does not favour a universally developed, harmonious personality. The division of labour grows ever deeper, and there seems to be no end to it. It also appears that human personality is to be endlessly and infinitely fractionalized, like the number π . All that

remains to Marxists nowadays is to elaborate theories about how to educate universal humans and test those theories under laboratory conditions if chance appears.

As to the question whether it is time for us humans to aim our technological weapons at wicked Thanatos, Marxists, it seems, have to answer it in the negative – for reasons that are concrete-historical, not bioconservative. Humankind is still far from historic maturity, the *akme* of world history is yet ahead. Efforts to immortalize the present underdeveloped type of human personality hardly deserve approval.

What precisely are the conditions required for the formation of the communist Superman? Vygotsky reflected intensely on this question in his *Educational Psychology* (1926). Chapter X gives an outline of the system of molding new humans by means of a peculiar labour education. The current approach fostered *professionalism*, while the new system should foster *polytechnism*.

Despite the exact meaning of the term, polytechnism should not be taken to refer to any sort of “multi-craftsmanship,” i.e., the combination of several specialties in a single individual, but rather a familiarity with the general foundations of human labour, with the “alphabet” from which all its various forms derive, or, figuratively speaking, the extraction of a common factor consisting of all these forms outside a pair of brackets. It goes without saying that the educational value of this form of labour is infinitely great, since it signifies the highest flowering of technology, which itself is realized in step with the highest flowering of science. (Vygotsky 1997b, 188).

In short, polytechnic labour is *applied science*. Polytechnic education of children is made possible and feasible only in highly automated industry, when the powers of nature replace human physical force. Vygotsky judged that at his present, there were still neither proper material conditions nor a mass social demand for a new type of personality. The process of polytechnization of labour

cannot be considered complete in the slightest degree, even in ... America, and even less so here in Russia. Thus, polytechnism is a truth for some future day towards which the school must be oriented in its own efforts. ... We have to understand the sense of professionalism that has to be fostered by our schools as a concession to the real world, as a bridge from

public education to everyday praxis.¹⁰ (Vygotsky 1997b, 201)

As long as “everyday praxis” (of the divided labour) demands *professionalism*, any attempt at mass production of the Superman is doomed to failure. Humanity has a long historical road of the automatization of labour ahead, before polytechnic education becomes a pressing issue. By this time, the new, relevant pedagogical theory should be ready: “Questions of education will have been resolved when questions of life will have been solved. ... It is then that pedagogics, as the creation of life, will assume the foreground” (Vygotsky 1997b, 350). Vygotsky tries to discern the *truth for tomorrow*; he draws a *pedagogical ideal* of the human freely creating his own lifestyle. But he takes this ideal not from mere speculation, as utopians do. He retrieves it from reality, from very material “life.” The transformation of social production into applied science and the ensuing “polytechnization of labour” is a real, ongoing process that will sooner or later overpower the process of the division of labour. This historical moment will become a melting point for human nature.

Conclusion

For all their apparent differences, Marxist and transhumanist theoretical programs turn out to be blood relatives, at least, in a number of aspects. However, we have no intention to present Marx as an apostle of transhumanism. The scope of this paper forces us to limit ourselves to highlighting one or two points of their divergence, focusing on the points of affinity of Marx’s understanding of human nature and technology with the implicit, still not properly understood, premises of the transhumanist project.

What should both parties do? In the authors’ humble opinion, Marxists should, to the best of their ability and in all available ways, promote the polytechnization of labour (instead of proletarian dictatorships). And transhumanists should ponder the question of what kind of personality they would like to catapult into eternity. Otherwise, technologies might create an eternal hell instead of a scheduled earthly paradise. The human being is a product of its own labour, an artistic and artificial creature, from head to toe. Humans are creators of their own identity, “and this is good,” as the author of the book of Genesis said.

¹⁰ This passage is cited with the two terminological refinements: “professionalism” (professionalizm, in the Russian original) instead of “vocational career,” and “praxis” (praktika) instead of “experience.”

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