Interplanetary Revolutions: Marxist Transhumanism, Mao’s Cosmic Communism, and Beyond

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Abstract

The paper introduces the transhumanism and cosmic communism of Mao Zedong and discusses its relation to a Marxian conception of human nature and analogous Soviet visions. Having shown that the two-sided understanding of human nature in Marx opened doors for its transhumanist interpretations, the article identifies instances of the latter in the ideal of the New Soviet Man, the views of Trotsky, and the communist (or at least Sovietized) cosmism of Tsiolkovsky and Bogdanov. In parallel to and prior to his contact with Marxism, Mao became occupied with the problems of immortality, alternative spaces, the destruction of the Earth, and the power of human will, and his early transhumanism only revived after 1949. It is shown that based on his revision of historical materialism and belief in the limitless potential of human powers, Mao envisaged that technological and cultural revolutions would still and endlessly occur under communism(s), including their cosmic phases, and even after a global nuclear catastrophe. This would be, however, a future of “something more advanced” than humans, free from their current physical limitations.

Keywords: Mao, cosmic communism, transhumanism, accelerationism, continuous revolution

Medplanetarne revolucije: marksistični transhumanizem, Maotov kozmični komunizem in še kaj

Izvleček

Prispevek predstavi transhumanizem in kozmični komunizem Mao Zedonga ter obravnava njegovo povezavo z marksističnim pojmovanjem človeške narave in analognimi sovjetskimi vizijami. Potem ko prispevek pokaže, da je Marxoovo dvostransko razumevanje človeške narave odprlo vrata transhumanističnim razlagam, opredeli primere slednjih v okvirih ideala novega sovjetskega človeka, pogledih Trockega in komunističnem (ali vsaj sovjetskem) kozmizmu Ciolkovskega in Bogdanova. Vzporedno z marxizmom se je Mao ukvarjal s problemi nesmrtnosti, alternativnih prostorov, uničenja Zemlje in moči

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človeške volje, medtem ko je njegov zgodnji transhumanizem oživel šele po letu 1949. Prispevek pokaže, da je Mao na podlagi svoje revizije historičnega materializma in prepričanja o neomejeni potenciali človeških moči predvideval, da se bodo tehnološke in kulturne revolucije v komunizmu(-ih) še vedno in v neskončnost dogajale, vključno z njihovimi kozmičnimi faza mi in celo po globalni jedrski katastrofi. Vendar bi bila to prihodnost »nečesa naprednejšega« od ljudi, nečesa osvobojenega trenutnih človekovih fizičnih omejitev.

**Ključne besede:** Mao, kozmični komunizem, transhumanizem, akceleracionizem, kontinuirana revolucija

...τὸν τῶν ἀνθρώπων βίον ὑπὸ δυοῖν τούτων μεγίστοιν τυραννούμενον, ἐλπίδος καὶ φόβου, καὶ ὅτι ο τούτων ἑκατέρῳ εἰς δέον χρήσασθαι δυνάμενος τάχιστα πλουτήσειεν ἄν· ἁμφοτέροις γάρ, τῷ τε δεδιότι καὶ τῷ ἑλπίζοντι, ἑώρων τὴν πρόγνωσιν ἀναγκαιοτάτην τε καὶ ποθεινοτάτην οὖσαν...

... Human life is under the absolute dominion of two mighty principles, fear and hope, and anyone who can make these serve his ends may be sure of a rapid fortune.

Whether a man is most swayed by the one or by the other, what he must most depend upon and desire is a knowledge of futurity ...

Lucian, *Alexander, the False Prophet*

Human beings probe the limits of their capabilities across times and cultures, and once the cosmos becomes the subject of their knowledge, they start to ponder whether and how it could become the arena of their future history. Such questions are usually first expressed within literary narratives, and then philosophical utopias, which only have social and political implications after science proves them to be mere fantasies. Already in the second century CE, the above-quoted Lucian wrote *A True Story* (Ἀληθῆ διηγήματα): a tale about the cosmic war between the King of the Moon and the King of the Sun over the colonization of the Morning Star. This work included descriptions of alien lifeforms, spaceships, and

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“Alexander, the False Prophet” (Αλέξανδρος ἢ Ψευδόμαντις), also known as “Alexander, the Oracle-Monger”, is a satire written by Lucian of Samosata (c. 120–180 CE), a Hellenized Syrian writer and Epicurean thinker. The titular Alexander of Abonoteichus (c.105–170 CE) was a charlatan who claimed to be a healer and the prophet of the serpent-god Glycon. The cult of Glycon spread across the Roman Empire and even Marcus Aurelius himself sought prophecies from Alexander; Marcus’ predecessor, Antoninus Pius, struck Roman coins in honour of Glycon.
interplanetary weapons, and is usually considered the first work of science fiction. And yet it is only with the Enlightenment that the next works in this genre were produced (such as Voltaire’s *Micromégas* of 1752), a genre which then entered its “classical” phase at the turn of the 20th century (H. G. Wells’s *The War of the Worlds* of 1898 and others).

While philosophers were typically sceptical of these visions, their audiences still fell under their spell, particularly since 19th-century philosophy itself provided them with hitherto unknown ideas of progress, evolution, and antagonism. Sooner or later, these philosophies of history were bound to become the conceptual basis for the refinement and justification of what had been merely an exercise in philosophical imagination. Such was also the case with Marxism, all of its (original) views on the natural and historical limitations of human nature notwithstanding. It is most clearly seen in the works of the Soviet “cosmic communists” and other Russian Marxists who followed them with their transhumanist ideas, including Lev Trocky. This essay demonstrates that analogous yet distinctive “cosmic” ideas are to be found in Chinese Marxism, and specifically in the thought of Mao Zedong. It is shown that the theoretical foundations for the cosmic communism of Chairman Mao were already firmly established in his early transhumanism, and then in his accelerationist revision of historical materialism. Unlike the Soviet Marxists, however, the later Mao’s vision of a post-human future departed from idyllic technoutopias and decidedly broke with the remnants of Christian eschatology still present in the fantasies of Russian cosmic communists. This overlooked part of Maoism testifies to the “long march” of transhumanist ideas across divergent historical backgrounds and cultures, and can possibly extend our own philosophical imagination when it comes to the challenges of space colonization, human enhancement, and the trans/post-human future of societies.

**Marx on Human Nature**

Marx’s conception of human nature is reconstructed based on remarks scattered throughout both his earlier and later writings, and is therefore still a matter of heated debate. Hence, although at first glance it does not seem to offer much room for any transhumanist projects, its two-level character partially allows for such unexpected developments.

Marx’s view of human nature is most frequently associated with his refutation of Feuerbachian naturalism. His *Sixth Thesis on Feuerbach* famously states that “The essence of man is no abstraction inherent in each single individual. In its reality it is the ensemble of social relations” (*Das menschliche Wesen ist kein dem einzelnen...*)
Individuum inwohnendes Abstraktum. In seiner Wirklichkeit ist es das ensemble der gesellschaftlichen Verhältnisse) (MECW vol. 5, 4). This would suggest that Marx was a social constructivist who dispensed with any abstract definition of human nature.

And yet only a year later (1846), in The German Ideology, the first chapter of which the Sixth Thesis was essentially an outline of, Marx and Engels start delineating the premises of their materialist conception of history with the following statement:

The first premise of all human history is, of course, the existence of living human individuals. The first fact to be established is the physical organization of these individuals and their consequent relation to the rest of nature […] Men can be distinguished from animals by consciousness, by religion or anything else you like. They themselves begin to produce their means of subsistence, a step which is conditioned by their physical organization. (MECW vol. 5, 31)

The natural constitution of human beings is the most fundamental factor that conditions their productive activity, which distinguishes them from other animals. This natural endowment does not define humans, but rather delimits them. However, for that reason it cannot be detached from human nature. Human powers are naturally limited, and this is one of the crucial points of Marxian anthropology.

What’s more, it was also central for Marx’s Capital. The very concept of labour power presumes its natural limits: “The minimum limit of the value of labor power is determined by the value of the commodities, without the daily supply of which the laborer cannot renew his vital energy, consequently by the value of those means of subsistence that are physically indispensable” (MECW vol. 35, 183). The minimum limit of the value of labour power translates into the maximum limit of the working day:

The working day has a maximum limit. It cannot be prolonged beyond a certain point. This maximum limit is conditioned by two things. First, by the physical bounds of labor power. Within the 24 hours of the natural day a man can expend only a definite quantity of his vital force. (ibid., 240)

These limits, regardless of the level of technological advancement, are most brutally tested by the capitalists who do not respect the fact that, besides the time required for work and the regeneration of their energies and powers, workers also need time to satisfy their intellectual and social needs.

These needs are, in fact, the key to Marx’s conception of human nature. The human vital energy (force) in question is not a hidden mysterious entity, but something
used to satisfy human needs and visible only in the satisfaction of the latter. As Marx observes in his 1844 Manuscripts, man is “endowed with natural powers, vital powers”, but the objects that man needs, which exist outside of him, are “indispensable to the manifestation and confirmation of his essential powers” (MECW vol. 3, 336). In some places, Marx goes as far as to identify human nature with a “totality of needs and drives”. The nature of these needs constitutes the true differentia specifica between humans and animals. Animals, such as bees or ants, also produce, but Marx believes that they produce only “under the dominion of immediate physical need, whilst man produces even when he is free from physical need and only truly produces in freedom therefrom” (ibid., 276). This means that man does not produce only in accordance with the standard and needs of his own species, but universally, that is “in accordance with the standard of every species” and in compliance with “the laws of beauty” (ibid., 277).

It is through free labour and its products that man most fully expresses himself as a man, to the extent he “sees himself in a world that he has created”. Only in this way can individual human beings understand what it means to be human (in general), or as Marx puts it, “man is a species-being [Gattungswesen] (...) because he treats himself as a universal”. Consequently, when man “makes his life activity, his essential being, a mere means to his existence”, he then becomes alienated from his own nature: his species-being turns into something alien to him, he is reduced back to his animal form (ibid., 275–77). Human nature, whether authentic or “estranged”, must therefore relate to the social way human beings satisfy their unique needs.

There is, in fact, no contradiction between human nature qua “vital energy” and human nature as an “ensemble of social relations”. When humans “proceed from themselves”, as Marx and Engels phrase it in The German Ideology, they always encounter “their needs, consequently their nature, and the method of satisfying their needs”, due to which they have to enter into certain social relations (MECW vol. 5, 437). Hence, historical materialism does not exclude Marx’s conception of human nature. As Norman Geras points out, “the mode of production is said to be the form in which individuals express their life, which form is said in turn to bear intimately on what they are” (Geras 1983, 64). In other words, both the natural constitution of humans and the socioeconomic circumstances of their productive activity constitute the liminal conditions of human self-expression via the satisfaction of genuinely human needs. As Erich Fromm observes in his celebrated Marx’s Concept of Man, there is no opposition between the “young” and “old” Marx in terms of his understanding of human nature. The differences concern only the matters of language (for instance, the old Marx no longer uses the term “essence”), but in principle, “labor and capital were not at all for Marx only
economic categories; they were anthropological categories, imbued with a value judgment which is rooted in his humanistic position” (Fromm 2004 [1961], 32). This continuity between the young and old Marx with regard to the double meaning of human nature is testified by one of his footnotes in Capital, which criticizes utilitarianism. “[Human] nature itself is not to be deduced from the principle of utility”, Marx writes; on the contrary, “the principle of utility must first deal with human nature in general, and then with human nature as modified in each historical epoch” (MECW vol. 35, 605).

With this conclusion, however, Marxism knocks on transhumanist doors. Human nature is being modified in each historical epoch, which must include the future. The emergence of new relations of production—and new needs!—will open doors to new ways of understanding of what it means to be human. “All history is nothing but a continuous transformation of human nature”, wrote Marx in The Poverty of Philosophy of 1847 (MECW vol. 6, 192). Marx was not a positive ontologist, Alfred Schmidt reminds us, and the human nature he deals with “is only to be conceived as a historical process”; the essence of man arises in each case from a definite form of society (Schmidt 2014 [1962], 90).

Soviet Transhumanism and Russian Cosmism

The continuity between the natural and social dimension of human nature (or “human nature in general” and “human nature as modified in each historical epoch”) has significant practical, if not emancipatory, implications. Unless we (the people) change the current, capitalist mode of production, we will not know which limitations of our capabilities and shortcomings in our achievements—which are typically taken to come from the limits of natural constitution of humans—in truth result from our self-determined socioeconomic confines. If capitalism is built upon estranged labour which wastes the vital energy (force) of human beings by consuming it almost exclusively for the sake of their subsistence, then under communism people should finally be able to make full and free use of their natural potential. Such were also the conclusions of Russian communists.

As noted by Nikolai Berdyaev, a keen observer of the Russian Revolution, “communism claims to have created not only the new society but also the new man. They talk a great deal in Soviet Russia about the new man, about a new spiritual make-up” (Berdyaev 1960 [1937], 182). These ambitions were most evidently expressed in the ideological model of “the New Soviet Man” (новый советский человек), as well as the New Soviet Woman, which was then exemplified in the numerous works of Soviet literature and art of that time. This ideal was closely
associated with the Stakhanovite movement, which called for breaking the records for human productivity known from capitalist societies. Unlike the New Soviet Man, the ideal of the Stakhanovites (стахановцы) was limited to the socialist mode of production, and specifically to strengthening the socialist state. However, both the socialist model of the Stakhanovite worker and the communist ideal of the New Man (and Woman) entailed a new, hypothetical type of human psyche, which was vividly discussed by contemporaneous Soviet psychologists. The New Man was supposed to be self-conscious yet selfless, internationalist yet respectful of a particular public order; he was envisaged as someone who had achieved true self-mastery and, at the same time, was more concerned with the social good than with his own. Yet, as Raymond Bauer aptly observes, “in holding this position, Soviet psychologists walk a very thin chalk-line” (Bauer 1952, 134‒35), which readily suggests that human consciousness can determine man’s existence—an idealist and voluntarist standpoint unacceptable for any Bolshevik.

However, the most palpable images of the New Soviet Man were still expressed in the products of human consciousness, namely literature and art. It is therefore no coincidence that the boldest transhumanist vision ever made by a Russian Marxist comes from Literature and Revolution (Литература и революция)—a canonical work on Marxist literary criticism written by Leon Trotsky in 1924. Trotsky distances himself from the futile utopias of the (“bourgeois”) Futurists and pungently remarks that “the workers’ revolution in Russia broke loose before Futurism had time to free itself from its childish habits” (Trotsky 1957 [1924], 225). On the other hand, communist art did not as yet have a firm basis, as this would only emerge out of the new conditions of human life. These Trotsky envisions as follows, at the very end of his book:

Man will make it his purpose to master his own feelings, to raise his instincts to the heights of consciousness, to make them transparent, to extend the wires of his will into hidden recesses, and thereby to raise himself to a new plane, to create a higher social biologic type, or, if you please, a superman.

More correctly, the shell in which the cultural construction and self-education of Communist man will be enclosed, will develop all the vital elements of contemporary art to the highest point. Man will become immeasurably stronger, wiser and subtler; his body will become more harmonized, his movements more rhythmic, his voice more musical. The forms of life will become dynamically dramatic. The average human type will rise to the heights of an Aristotle, a Goethe, or a Marx. And above this ridge new peaks will rise. (Trotsky 1957 [1924], 376‒77)
That the creation of a “higher social biological type” necessitates remoulding the existing social relations was beyond any question; whether the peaks of a “superman” require new territories was, however, a matter of an open and vivid debate, strongly influenced by Russian cosmism. At an intersection of Proletkult and cosmism there arose an “image of the universal ‘Proletarian’, who strides forth from the earth to conquer planets and stars” (Seifried 2009, 70). The central idea of Marx—according to which the emancipation of the proletariat entails, along with the abolishment of classes, the liberation of all humanity—was taken as a premise for a new conclusion: whatever the New Man is, he must be a true Proletarian, whose activity is no longer delimited by Earth.

This alliance was facilitated by the fact that for many Russian cosmists, human-kind’s future life in space must follow technological innovations. Nikolai Fyodorovich Fyodorov (1828–1903), the spiritus movens of the movement, believed that with the help of scientific methods humans would soon be able to achieve life extension and, eventually, immortality and resurrection, based on the cloning of human cells. The main representative of the movement, Konstantin Tsiolkovsky (1857–1935), was, in turn, a pioneer and the founding father of modern rocketry and astronautics. His book The Will of the Universe from 1928 predicted that humans would colonize the galaxy, while his scientific discoveries were motivated by the desire to provide a comprehensive design for such space missions. In so doing, however, humanity would have to align with the transcendent, mysterious cosmic will; only by expressing this could it evolve towards greater perfection and self-empowerment. This would be manifested by exploration of the solar system and, eventually, populating other planets suitable for life. When the same year, 1928, witnessed the publication of Stalin’s First Five-year Plan, the compatibility of Tsiolkovsky’s visions with the Soviet strategy and narrative became evident. As Tijana Vujošević observes, it matched the doctrine that socialism is a “path toward the end of history, and communism is this history’s end, a perfect classless and stateless society in which the imperfections of the human race [...] will finally vanish”. In this way, Tsiolkovsky’s work presented “the course of Soviet history as part of cosmic evolution” (Vujošević 2017, 28). As a result, his achievements became instrumental for Soviet propaganda:

Tsiolkovsky’s reputation reached a peak on May Day 1935, when he was invited to address the nation by radio during the grand annual parade. Due to ill health, he could not attend the ceremony in person, but a speech he recorded in his Kaluga laboratory was broadcast over all nine Soviet time zones and from speakers atop the Lenin Mausoleum in Red Square, with Stalin leading the applause. (Young 2012, 150)
One cannot possibly imagine any higher or wider approval for any idea in the Soviet Union.

These scientific-political ambitions were accompanied by literary-artistic visions, following the sci-fi novel *Red Star* (Красная звезда) published in 1908 (and re-published in 1918 and 1922) and written by Lenin's main rival amongst the Bolsheviks, Alexander Bogdanov (1873‒1928). The novel depicts a fictional communist society on Mars encountered by a revolutionary and scientist, Leonid, who observes the lives of happy, equal, and indistinguishable Martians who, while not being forced to work at all, do so out of an inner need, and freely exchange the assigned jobs among themselves (see Bogdanov 1984). The common feature of both literary and scientific images is seeing the cosmic future of humankind as a period of peaceful and unlimited co-operation, and this was precisely the assumption challenged in the transhumanist musings of Chairman Mao.

**Pre-Marxist Mao, the Transhumanist**

Mao Zedong was acquainted with the ideas of social evolutionism, which had a great impact upon early transhumanism, prior to his contact with Marxism. He read the books of Herbert Spencer as well as T. H. Huxley's *Evolution and Ethics* (cf. Allinson 2020, 30), and became deeply influenced by their emphasis on the inevitability of struggle (Meisner 2007, 4). In his notes in the margins of *A System of Ethics* by Friedrich Paulsen (1846–1908), written in 1917–1918, the young Mao expresses his belief that change is permanent, and the substitution of an old order by a new one, destruction followed by a revolution and transformation, occurs both on the scale of nations and the universe. A pure peace without any disorder, as awaited by those who proclaim the advent of paradise or Great Harmony (*datong* 大同), would be, in Mao's eyes, “unbearable” to human nature; “the waves of competition and friction would inevitably break forth” (Mao 1992, 237‒38). In fact, the greater the obstacles, the greater are, as a result, the human forces that face them (ibid., 235). With successive “waves” of resistance from the universe and social reality, human beings should then be able to transform themselves into something more advanced. In line with this, Mao praises Paulsen for claiming that “human beings are capable of changing their basic natures by using their wills” (ibid., 310). This means that external reality only provides a stimulus for self-development, which can ultimately come only from within human nature:
The truly great person develops the original nature with which Nature endowed him, and expands upon the best, the greatest of the capacities of his original nature. This is what makes him great. Everything that comes from outside his original nature, such as restraints and restrictions, is cast aside by the great motive power that is contained within his original nature. It is this motive power that it the strongest and truest reality. (ibid., 263)

This passage is, undoubtedly, the earliest expression of Mao’s voluntarism. The relation of our nature to Nature is, as Mao explains, comparable to that of individual to the people. While such basic nature (benxing 本性) is certainly moulded by external influences, it is also “our potential nature”, the development of which we bear responsibility for (ibid., 308).

At their current stage, humans are still relatively “powerless” in comparison with Nature, and lag behind their potential powers. With the “progress of human wisdom”, however, humans will be able to extend themselves to the “greater self” that can benefit not only humankind or living beings, but also the entire universe (ibid., 202). There is no reason to believe that the development of human nature must be limited to the possibilities offered by this world:

The universe does not contain only the world of human life. There are many other kinds of worlds in addition to that of human life. When we have already had all kinds of experience in this world of human life, we should leave this world to experience other kinds of worlds. If human life knew no dying, and if we were to live forever on this venerable world, we cannot imagine what the content of such an ahistorical life without the changing of the generations might be like, but even if we could imagine it, what point would there be in forever experiencing one kind of life? (Mao 1992, 245–46)

Death is not, therefore, an obstacle in human development, but the most basic factor that pushes people towards surpassing their limits across generations. Only a limited life can yearn for its own transcendence. As such, death should not be feared, but welcomed with the inborn “sense of curiosity”, the same that pushes humanity ahead.

Eventually, even death is not a complete destruction, but rather a dissolution (jie-san 解散); it is a dispersal that can be united again, as Mao (ibid., 245) mysteriously hints at. The same concerns the possible end of the Earth, as “the destruction of the universe is not an ultimate destruction” and “it is certain that its demise here will necessarily be a formation there”. “I very much look forward to
its destruction”, Mao shockingly continues, “because from the demise of the old universe will come a new universe, and will it not be better than the old universe!” (ibid., 250). The relationship between the two is one of complete transformation, or of an “infant” to its mother’s womb, which is quite emblematically compared to “great revolutions, periodically cleansing the old”. This parallel shows that the capacities of human beings and, specifically, the human body, must be closely intertwined with the current physical conditions of that part of the universe we inhabit. By means of transcending the current physical limits of human life and, especially, by travelling in space, we should be able to reach the full potential of human nature and even immortality:

The question of formation and dissolution [cheng-hui 成灰] is a question of space [...] By extension, we may infer an entirely different sort of world. I can imagine space without time, and feel that I am placed in an infinite, unbounded, broad, and expansive great place that has no present, no past, and no future. In this context, it is possible to maintain the view that both body and spirit are immortal. Is this not an entirely different world? (Mao 1992, 303)

The faith in the possibility of achieving immortality—along with the idea that one can imagine space without time—follows Mao’s conviction about the redundancy of the physical category of time, which, as a human concept reducible to physical change, is not to be found in the objective world. From that viewpoint, “the revolution of the Earth around the Sun is merely motion in space” (ibid., 304). Transgressions of the current limits of human motion should therefore translate into greater longevity: new possibilities for space travels are then expected to extend the temporal limits of human experience, if not absolutely, then at least relatively.

The philosophy of science was of continuing interest to Mao from his youth onwards, and in the 1930s he enjoyed engaging in discussions with top nuclear physicists such as Qian Sanjiang 钱三强 (1913–1992) about the nature of matter (Friedman 1983, 52). Eventually, his interest in natural science and early transhumanist visions had to be set aside for revolutionary activity and involvement in the (Second) Sino-Japanese War. They re-emerged in a new, Marxist guise only when Mao, now Chairman Mao, became equipped with the political power necessary to implement his visions of the future.
Maoist Accelerationism

As a leader of a communist country during the Cold War, Mao was soon confronted with challenges that revived his youthful reflections about the future of the Earth and humanity. One of them was the hypothetical nuclear threat coming from the United States, and in estimating its seriousness Mao oscillated between famously considering it a “paper tiger” meant only to scare people, and a “real tiger” to which China must respond by building its own nuclear weapons (cf. Shu 1999). At the same time, he almost carelessly observed that “even if the US atom bombs were so powerful that when dropped on China, they would make a hole right through the Earth, or even blow it up, that would hardly mean anything to the universe as a whole, though it might be a major event for the solar system” (Mao 1977a, 152). In a similar vein, in one of his critiques of the Stalinist Short Dictionary of Philosophy (the third edition of which appeared in 1951), Mao made the following “dialectical” statement:

If life and death cannot be transformed into each other, then please tell me where living things come from. Originally there was only non-living matter on Earth... Life and death are engaged in a constant struggle and are being transformed into each other all the time. (Schram 1989, 137)

While these remarks display a great degree of affinity with the Daoists’ (specifically Zhuangzian) conception of nature, which was eagerly evoked by the later Mao, Robert Allinson aptly observes that they also “echo the early philosophical musings of the young Mao in the Margins reflected in his reading and commenting upon Paulsen” (Allinson 2020, 126), which testifies to a continuity of Mao’s anthropology and the philosophy of nature. The struggle between opposites and their mutual transformation are the major laws describing the life of human beings and their planet, regardless of current narrow perspectives. Such was also the message of Mao’s On Contradiction.

The biggest difference between the early and later transhumanism of Mao lay, in turn, in the latter’s rootedness in the revised and expanded categories of historical materialism. To formulate his own futuristic visions in the language of Marxism, Mao must have “deviated” from the basic assumptions of the materialist conception of history, which he did by reaching for the notion of the complementarity of changes, taken from the Book of Changes (Yijing 易經) itself (cf. Tian 2005, 147–55). These complementarist overtones were only strengthened in the official (post-1949) edition of On Contradiction and later editions, following Mao’s own desire to portray himself as the only creative theoretician of Marxism–Leninism behind the Iron Curtain, and gradually replaced the Engelsian idea of one-way determination within the historical process.
First of all, Mao considered the superstructure capable of the principal and innovative influence upon the base. The Marxian standpoint was, of course, a dialectical and far from crude mechanical materialism, but Mao still went further and argued that the superstructure can directly clear the way for an unobstructed development of the productive forces (see Rogacz 2023, 23‒24, 36‒37). Second, within the base itself Chairman Mao treated the productive forces and the relations of production as mutually influencing each other, and in fact gave priority to social relations in terms of their potential for initiating major historical breakthroughs. As he explicitly stated in *A Critique of Soviet Economics* (1967), one of the crucial theoretical texts validating the Sino–Soviet Split, “the major development of the productive forces always comes after changes in the production relations” (Mao 1977b, 66). In other words, a mere rearrangement of the relations of production, such as creating the people’s communes, was expected to foster economic development. The relations of production are, however, all the necessary (involuntary) social relations people must enter to live under given mode of production and cannot be, by definition, changed without any modification in the productive forces. This critique was later explicitly formulated by Deng Xiaoping, who viewed the improvement of production as the only viable way to “reform those aspects of the relations of production and of the superstructure that do not correspond with the rapid development of our productive forces” (Deng 1997, 108).

Most importantly, even within the productive forces Mao insisted on the mutual influence between the means of labour (tools, instruments, infrastructure, etc.) and human labour, meaning that technological backwardness could be overcome by the will of the people: “Of all things in the world, people are the most precious; under the leadership of the Communist Party, as long as there are people, every kind of miracle can be performed”, said Mao amidst the Great Leap Forward (Mao 1961, 454). Mao seemed to believe that the dynamic energy of the masses is almost infinite: “Now the enthusiasm of the masses is like atomic energy. Release that power. After fifteen years we’ll have 40,000,000 tons of steel.” (Mao 1969, 155) Such voluntarism entailed that people’s labour power is no less limited, which eventually led to their limitless exploitation and alienation. Accompanied with the transhumanist hope, it stood against the Marxian conception of human nature: “the maximum limit” of the working day can be prolonged, because the “definite quantity of vital force” that Marx speaks of in *Capital* is only that which he knew from capitalist societies. Maoist accelerationism did not know these limits.

Whether these hopes and faith in human potential were directly inspired by Trotsky remains an open question. It must be remembered that anti-Trotskyism was one of the key elements of the Chinese Communist Party’s ideology (cf. Benton 2017, 38). One of the reasons for that was that Chen Duxiu 陳獨秀 (1879‒1942),
the Party’s cofounder and a great theoretical rival of Mao became a Trotskyist and even exchanged letters with Trotsky himself (Kuhfus 1985). Even so, Literature and Revolution was translated in its entirety into Chinese by Wang Fanxi 王凡西 during Mao’s life, in 1971. Parts of this work, not to mention the Soviet idea of the New Man, must have been known earlier, and, as either too familiar or anathematized, spread without direct citations. The same can be said for Mao’s central idea of continuous revolution, 不断革命 or jixu geming 继续革命, which, while distinct from that of Trotsky, could have been indebted to its antecedent and shared with it the assumption that to achieve the victory of socialism the proletariat must continue revolution beyond the measures known from bourgeois revolutions, and revolutionary activity must therefore enter into a wider (and most importantly international) phase, given the hegemonic pressure of world capitalism.

Unlike Trotsky, Mao believed that revolution would continue after the victory of socialism and even during the communist stage of history, when all social classes would already have been (by definition at least) abolished. The communist future of mankind would thus not be short of cultural and technological progress, although any such advances could only come to life through antagonism:

Under socialism there may be no war but there is still struggle, struggle among sections of the people; there may be no revolution of one class overthrowing another, but there is still revolution. The transition from socialism to communism is revolutionary. The transition from one stage of communism to another is also revolutionary. There is technological revolution and cultural revolution. Communism will surely have to pass through many stages and many revolutions. (Mao 1999, 108–109; translation following Mao 1977b, 71)

What Mao foresees and anticipates is thus a series of communisms (literally the stages of communism), following the cultural and technological revolutions between the backward and progressive sections of society. At some point, this development must enter a cosmic phase.

Due to the scale of the whole process, Mao did not specify what particular stages communism must or will go through. It might as well pass through “decades of
thousands of stages” (jiwange jieduan 几万个阶段) (Mao 1999, 108). This does not mean, however, that the communist future will undergo merely quantitative changes. Mao openly doubts communism “can remain qualitatively the same, unchanging for millions of years” (Mao 1975, 227). One reason is that it is not possible for the communist society to “completely satisfy all needs at one blow”, while another is that with new inventions, new needs will incessantly emerge (Mao 1999, 136). In other words, communism is subject to dialectical transformation and self-transcendence, just as in all other periods of history. This implies that, at some point, communism itself must also be transcended. While Mao seems sympathetic to such a conclusion, what he has in mind is rather “communism as we know/imagine it”, and not the common ownership of the means of production per se. As Mao wrote in 1960: “After the world realizes communism in the future, people’s mutual relations in labour production and distribution will continue to undergo endless changes, but there will not be much change in the system itself” (将来全世界实现共产主义以后，人们在劳动生产分配中的相互关系，还会有无穷的变化，但是所有制方面不会有多大变化) (Mao 1999, 136). Future revolutions, understood as groundbreaking shifts, will involve other spheres of social life.

On the Issue of Human Cognition (1964): Mao’s Cosmic Communism

What follows from Mao’s understanding of communism and the continuous revolution is that all innovations are to occur without any change in the means of production, which implies that the extension of human capabilities should become one of the chief factors pushing communist society forward. As Stuart Schram observes, “In his [Mao’s] view, man and society will be re-shaped in a never-ending process of struggle which will continue even after full communism has been established.” (Schram 1967, 164)

This idea led to Chairman Mao’s wildest and most explicit transhumanist vision, which evokes his earlier speculations about the chances of achieving immortality in a different type of space. It was expressed in one of his lesser-known essays, “On the Issue of Human Cognition” (Guanyu ren de renshi wenti 关于人的认识问题), from August 24, 1964, based on his conversation with Zhou Peiyuan 周培源 (1902–1993) and Yu Guangyuan 于光遠 (1915–2013). Zhou was a theoretical physicist, who studied under Einstein himself (in Princeton), and a founding member of the Chinese Academy of Sciences, later becoming the president of Peking University. Yu was an economist and philosopher, and later an architect
of the Dengist market reforms, but at that time he studied theoretical physics under Zhou. The conversation was held two weeks after the Tenth World Conference organized by the Japan Council against Atomic and Hydrogen Bombs in Tokyo from July 30 to August 9, 1964 (which commemorated the bombings of Hiroshima and Nagasaki), and only a week after the first Chinese nuclear test was conducted at the Lop Nur test site on October 16, 1964 (so-called Project 596, also known as Miss Qiu, *Qiu xiaojie* 邱小姐), which in all likelihood was not a coincidence. The issues of atomic energy and the possibility of the Earth’s destruction were already closely connected with the future of humankind for the pre-Marxist Mao, and all the more so for the now “Great Helmsman” who was in charge of deciding some of that future.

The original transcript of the conversation was published under the title *A Conversation on Sakata’s Paper* (Guanyu Sakata wenzhang de tanhua 关于坂田文章的谈话). Sakata Shōichi 坂田 昌一 (1911‒1970) was a physicist and Marxist, and also the first Japanese physicist to visit the People’s Republic of China, whose works were read by Mao and who was in turn familiar with Mao’s *On Practice* and *On Contradiction* (Friedman 1983, 54‒57). Mao was exceptionally impressed by one of Sakata’s papers on basic particles, admitting that he has “never before seen such an article” (Mao 1969, 560), and predicted that in the future electrons would also be split (which did in fact happen, cf. Merali 2012). One of these papers was most probably the starting point for Mao’s conversation with Zhou Peiyuan and Yu Guangyuan. Mao did not, however, engage in a genuine exchange of opinions (definitely not in the year that witnessed the publication of the *Little Red Book*), and most probably sought scientific confirmation for his philosophical visions.

Accordingly, Mao’s speculations start with epistemology (*renshilun* 认识论), which was, in his eyes, rather neglected in traditional Chinese philosophy. Premodern philosophers could be, however, partially excused for that lack of interest. As Mao noted, due to the advances of science, which a few years before this conversation had led to artificial satellites being sent into space, we know now much more than they did. On the other hand, humans are also increasingly aware of how much is still to be known. The universe is infinite in both time and space, Mao claimed, and just as there are multiple galaxies beyond the Milky Way, so atomic particles can be subdivided into infinity. If that is the case, our knowledge has potentially no limits and no end” (*wu qiong wu jin* 无穷无尽), but only because it will try to exhaust the knowledge of the world that cannot be encompassed. In this sense, Mao agrees with Zhuangzi and his view that even ten thousand generations will not be enough to exhaust the universe (*wanshi bujie* 万世不竭) (*Zhuangzi* 33.7; Mao 1999, 389).
In response to a question for clarification, Mao specifies what is here understood by knowledge. It is not, first of all, knowledge belonging to an individual, but rather to the group. If we cannot control the climate, it is because humanity does not know how to do this. At the current, pre-communist stage of history, it is “the social class that is the subject of knowledge” (jieji shi zhishi de zhuti 阶级就是一认识的主体). The nature of class knowledge is the key to all knowledge: it goes from unaware “being-in-itself” (zizai 自在) to “being-for-oneself” (ziwo 自我). It is thus practical: all “knowledge comes from practice” (ren de renshi laiyuan yu shijian 人的认识来源于实践), and is deepened as a result of the transformation of the world (gaizao sbijie 改造世界) by means of tools, facing its respective, qualitative leaps (Mao 1999, 390‒91).

These passages echo and integrate ideas from On Practice: human beings acquire knowledge through social, and mostly productive, practice, and this practice is of a class nature and dialectically transforms the objective world. In his 1964 essay, however, Mao develops these ideas in a hitherto unformulated direction. Our brain is also a tool, even a “processing factory” (women de naozi shige jiagong chang 我们的脑子是个加工厂), and we should expect its imminent upgrade (gengxin 更新), which happens to all tools in the process of their practical adaptation to reality, Mao writes. The same will also happen to the cells of our body, which only follows the fact that all forms of energy and elementary particles are subject to constant and dialectical change (ibid., 392‒93). In other words, in the course of further exploration of the universe, human beings should adapt to a new reality using new kinds of tools and technologies, and thereby self-consciously transform themselves. The question remains as to what extent the “results” of that process would still be human beings, especially in the face of the challenges posed by nuclear war and the possible destruction of the Earth, which might entail a hitherto unknown level of adaptation:

The end of human kind and the end of the Earth we speak about has nothing to do with the Doomsday foretold by Christianity. What we mean by the end of humans and Earth is that something more advanced than humans will replace them, and that through this process things will develop into a higher stage. (Mao 1999, 391)

我们说的人类灭亡、地球灭亡，同基督教讲的世界末日不一样。我们说人类灭亡、地球灭亡，是说有比人类更进步的东西来代替人类，是事物发展到更高阶段。

The end in question is, therefore, no end at all: it is just a transformation, which means the end of humans and the death of a certain era, but, contrary to Christian teleology, neither the end of history nor, in particular, its communist phase.
What is striking in Mao’s description is that he does not seem to expect that any organisms will replace human beings, and sticks to the very general and vague category of “things” (dongxi 东西) and “objects” (shiwu 事物). Of course, we cannot predict the future result of an upgrade of our brains and cells. Yet, whatever that will be, whatever would be able to survive the end of the Earth, should be capable of reaching immortality. “All humans must die” (mei yige ren dou yaosi 每一个人都要死), as it is written in their nature; anything that would be able to transcend this limitation is, by definition, “post-human” (ibid., 391).

These predictions, expressed merely a week after the first Chinese nuclear test, were Mao’s firm answers to the question of whether the history of communism could continue even after the hypothetical destruction of the Earth, and specifically in space. At the end of the essay Mao refers to the Soviet (pseudo-)scientific research of Olga Lepeshinskaya (d. 1963), who was an advocate of the spontaneous generation of life from inanimate matter, although he disappointedly admits it has not yet brought any results (Mao 1999, 393‒94). As such, and in light of Mao’s antifinalism, these predictions should be read against another axiom of his vision of the future: the idea of continuous revolution. If one phase of communism can be replaced by another only through either technological or cultural revolution, the “higher stage” of technological advancement initiating the post-human phase of history cannot come to life other than in a revolutionary way. This means that unlike the Soviet cosmic communists, who believed that the exploration of space would coincide with the communist endpoint of history, Mao rejects all such beliefs as remnants of Christian eschatology and predicts, if not awaits, the advent of yet another period of cultural and technological revolutions, this time ignited between post-human entities.

Despite all this, Mao’s essay from 1964 has remained generally overlooked in the existing literature, as has his transhumanism. One of the main exceptions in that regard is the recent comprehensive study by Robert Allinson who, while not referring to *A Conversation on Sakata’s Paper* by title, alludes to its content and states that “such thinking goes far beyond either Marxism or early Chinese philosophy. It extends to the future and augurs the contemporary philosophical discussions of the trans-human” (Allinson 2020, 153). Mao’s transgression of classical Chinese (and probably any) philosophy in this text is rather indisputable. As for Marxism, it is, however, more complicated for the reasons delineated above. Allinson refers to the *Talk on the Questions of Philosophy* where Mao points out that “Marx put forward the view that man is a tool-maker”, but this feature of men was formed only “after undergoing a million years” of evolution, and there are no reasons to suspect the evolution of human nature will stop (see Mao 1968, 151). But Marx never denied the theory of evolution, although he did not see the struggle for existence
as anything more than a biological law; for Engels (MECW vol. 25, 493, 513), in turn, “history is only differentiated from natural history as the evolutionary process of self-conscious organisms”. In addition, Marx’s idea of “a continuous transformation of human nature” allowed for the later transhumanist developments of Marxist anthropology, such as that of Trotsky and including that of Mao. On the other hand, Mao’s cosmic communism crowns his futuristic visions and proves the continuity between his early transhumanist musings and later reflections, rooted in the radical revision of the Marxist philosophy of history. In its radical antifinalism, Mao’s vision was ready to assume that even communism itself would be transcended, or at least evolve into a quantitively new stage of human development that barely reminds us of what we know and imagine as “communism”.

Such a speculative vision was quite novel in the communist world. It would also certainly surprise some Western Marxists who were otherwise inspired by Mao, such as Louis Althusser, for whom any concept of human nature is entirely ideological, devoid of any historical-material basis, and always created to reproduce existing social relations. In some respects, however, Mao’s vision was akin in its spirit to the view of the Yugoslav Praxis School. (Although for clarity, there is nothing that indicates an exchange of ideas, much less an influence, between their representatives and Mao, cf. Tang 1986.) For Gajo Petrović, for instance, revolution cannot be reduced to the transformation of social structures, as this would not be possible without the creation of a new man. And even much more than that: “Revolution is not merely a change in man, it is a change in the ‘universe’, creation of an essentially different ‘mode’ of Being, free, creative Being, which differs from every non-human, anti-human and not-yet-fully-human Being” (Petrović 1979, 152). The chief contrast between Petrović and Mao is that the former does not prophesize any advent of a “post-human” era but instead anticipates the full realization of human essence as discussed by the young Marx (whose manuscripts are nowhere cited by Mao). Another difference is that for Petrović this future is completely open: he rejects the “construction of the future as a new phantasm that paralyzes human creativity and freedom” (Vodovnik 2012, 443), and sees it as something to be created through prefigurative politics. For Mao, future technological and cultural revolutions are bound to happen regardless of whether society wants them, even after humankind’s extinction. With Mao being more open and Petrović being bolder, both could have hypothetically met halfway. Assuming that we cannot genuinely think through and about this future, Petrović argues, “then we are condemned to create the new without thinking”, in an almost irrational way.
Perhaps this is not so catastrophic? Would it not be possible to think the old, to respect the existing as the holy limit of our thinking, and nevertheless in our practical activity, in Being, to produce something new, even to progress to higher forms of life? (Petrović 1979, 157)

While Mao would certainly advocate such an activity, he would not be convinced that, during its course, we must respect any sacred limits or be terrified by the prospects of a catastrophe.

Conclusion

The brief comparative analysis presented in this essay shows the intricacy of the connections among Mao, Marx, and various Marxisms, which brings us to the following summary.

Marx’s conception of human nature as delimited by its physical organization and the boundaries of human labour power may seem immune to transhumanist visions, but his idea of human nature as productive activity constantly transformed throughout history, which shall be unleashed upon abolishing estrangement, opened the doors for more transgressive positions, as testified by Soviet writings and art. Behind the programme of the Stakhanovites and the ideal of the New Soviet Man there lay clearly transhumanist assumptions, most openly expressed by Trotsky, which soon became merged with the ideas of the Russian cosmist, as shown by the likes of Tsiolkovsky and Bogdanov. Cosmic life devoid of the imperfections of human nature was supposed to coincide with the further development of communism. Such ideas became highly attractive to Mao, who had expressed his transhumanist hopes and fears even before getting acquainted with Marxism. His early preoccupation with the issues of immortality, alternative spaces, destruction of the Earth, and the power of human will did not end but only revived after 1949. Supported by the complementarist revision of historical materialism and a belief in the almost limitless potential of human labour power, Mao envisaged that just as technological and cultural revolutions will not stop after the victory of communism, so they will continue in the new, cosmic phase of history, most probably after a global nuclear catastrophe. In that regard, he differed from Soviet cosmic communists and tried to purify Marxism from the remnants of Christian eschatology. This would, however, be the future of “something more advanced” than human beings and free from their current physical limits. For Mao, this was only a question of “when”, not “if.”
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