We may be posthuman now;\(^1\) nevertheless, our fascination with the intersection of technology and the body is still less a question of the practical consequences of prosthetic, genetic, and cybernetic interventions on the “accident of history” that is our “biological substrate,”\(^2\) than it is a reflection of the same techno-utopian/dystopian trend of thought that reached a peak in the opening decades of the last century. Perhaps nowhere did this trend find such radical expression as it did in Russia in the decades before and after the 1917 Revolution. Declares a representative of the Soviet New Man in Iurii Olesha’s 1927 novel *Envy*: “I am a man-machine. You won’t recognize me. I’ve turned into a machine. If I haven’t turned yet, then I want to turn.”\(^3\)

The literary artists on whom this essay will focus do not necessarily identify with the statements of their more enthusiastic protagonists. Non-conformists and fellow-travellers such as Olesha write under the aegis of European modernism, which had its birth, as R. L. Rutsky observes, with the “reemergence of an artificial or technological element that was excluded from romantic aesthetics.”\(^4\) Their mechanized humans and animated modernist machines are as liable to raise dystopian fears as inspire utopian longings.

Of course, it is the latter that are given official precedence in the narrative of technological progress that is at the heart of the Marxist-Leninist interpretation of history. This narrative links modern technology – particularly in the context of factory work – to the development of a proletarian mass subjectivity. Inspired by the growing prominence of images of human(oid) machines in popular culture (exemplified by Karel Čapek’s 1920 play *R.U.R.* *)
(Rossum’s Universal Robots), unsympathetic observers of post-1917 Russia were quick to elaborate upon this link, perceiving a dehumanizing mechanization of the collective proletarian body underlying the Bolshevik preference for collective over individual identity. The ultimate example of this was Nazi propaganda, with its portrayal of the communist enemy as half robot, half Neanderthal. Not only was this not the official Soviet view of things: the mainstream Bolshevik vision of a transformed humanity did not really embrace as a positive ideal either the figurative or literal merger of human and machine. Certainly by the time of the Nazi-Soviet propaganda clash of the 1930s, the collective tends to be depicted using traditional images such as that of Stalin’s “great family.” Prior to this, during the more openly utopian first decade of the Soviet experiment, the mechanized proletariat does appear – but mainly in unofficial discourse. Some pro-Bolshevik writers do seem to have sincerely promoted the ideal of revolutionary transformation as mechanization – the “culture of the human machine,” as the proletarian poet and labour activist Aleksei Gastev puts it.

Yet, as will be argued later in this essay, to the extent that radicals such as Gastev are not flaunting their insouciance about the dehumanizing potential of this ideal simply pour épater la bourgeoisie, they still leave themselves a loophole: in the background of their collectivist visions one always senses the presence of the individualist engineer-hero, the overseer of the mass transformation – and a reassuring, implicit proxy for both author and reader. It should be stressed that none of the texts at issue in this essay actually address themselves to a mass reader, or explicitly seek to mold a new mass subjectivity, in the manner of mainstream Soviet literature after the institution of the doctrine of Socialist Realism in the 1930s. This is true for the pro-machine tracts of writers such as Gastev – and even more so for those independent-minded poets and novelists who will be the major focus here, and for whom the equation of human and
machine is never unproblematic.

In real terms, when Gastev writes of the “culture of the human machine,” he is gesturing towards the creation of a proletarian mass psychology – but mainly he is referring to the Taylorist imperative of harmonizing the movements of human and machine for the sake of workplace efficiency. In metaphorical terms, this harmonization stands for some vaguer, more fundamental change in human nature that is to be wrought by the Marxist-Leninist harnessing of technological progress. As will be discussed further on, the magnitude of the hopes pinned on technology in early twentieth-century Russia was directly proportional to its relative backwardness in this area. The nation pictured itself on the brink of an historic clash between the age-old ways of the Slavic peasant and the revolutionary advances of the industrialized West. In Russia the debate over technological progress is intimately involved with the issue of the nation’s relationship with Europe – or in broader terms, the eternal question “East or West?” In the opening decades of the twentieth century, various factors conspired to bring this multifarious dichotomy (which has also subsumed the opposition of collective vs. individual) to even greater prominence.

In European thinking, the East/West duality has itself always included a technological aspect. It can be traced to the fifth century BC, when Herodotus and his contemporaries framed the Greco-Persian wars as a clash of civilizations: despotic, barbarian Asia versus free and culturally ascendant Europe. Various explanations were offered for the ultimate success of the Greeks against their numerically superior opponents. For example, along with the Persians’ autocratic form of government, Hippocrates mentions the Asian climate as a major cause of the “deficiency of spirit” observable in its inhabitants. Among these factors, though, the most immediate for the military outcome was the technological advantage enjoyed by the Greek city-states. Herodotus emphasizes the crucial deficiencies in Persian arms and armour, for which the
natural virtues of the Asians (their piety, honesty and bravery) could not compensate.\textsuperscript{10}

Twenty-three centuries later, expressions of the Orientalist duality, in Russia as elsewhere, put even more emphasis on technological difference.\textsuperscript{11} In the face of Occidental progress, the Orient remains “rotting in moral degradation and repose in undisturbed slumber in the lap of Mother Nature,” as the nineteenth-century Russian critic Vissarion Belinsky puts it.\textsuperscript{12} Alternatively, if some technological or scientific virtues \textit{are} to be found in the East, they are relegated to an absolute past, beyond the teleology of European civilization. Thus, another nineteenth-century proponent of Westernizing reforms, the philosopher Petr Chaadaev, tells the cautionary historical tale of “dull Chinese immobility”:

\begin{quote}
And notice, since time immemorial China apparently possessed the three great instruments which have, so men say, done the most to accelerate the progress of the human spirit in our lands: the compass, the printing-press, and cannon powder. Well, what good were they?\textsuperscript{13}
\end{quote}

Although debate continues as to whether the Soviet experiment was a product of Westernization, or in fact constituted a “retreat from Westernizing trends in Russian history,\textsuperscript{14}” the Bolsheviks certainly present themselves as the twentieth-century heirs of Chaadaev and Belinsky. One of the most explicit declarations of revolutionary techno-utopianism from the Bolshevik leadership itself comes from the pen of Trotsky, whose Westernizing bias is unmistakable. In the vertiginous concluding paragraphs of his \textit{Literature and Revolution} (1924), he calls on Soviet society to embrace a “passion for mechanical improvements, as in America”–while making only a passing reference to Japan, as the negative example of a society in chaos. (The Great Kanto Earthquake, worst in the nation’s history, had taken place just the previous year.) He goes on to describe how a “coagulated Homo sapiens” will enter into a “state of radical transformation,” resulting in a Communist species in which the “average human type will rise to the heights of an Aristotle, a Goethe, or a Marx” (as opposed to a Confucius or a Tagore or a
In the official literature of the first decade or so of the Soviet era, it is easy to find this sort of bias. Valentin Kataev’s 1932 production novel *Time, Forward!* is an early exemplar of socialist realism. It fictionalises the author’s own experience the year before at the nascent showpiece of Stalin’s first Five-Year Plan – the Magnitogorsk metallurgical complex. The focus is on the workers’ attempt to set a new world record for pouring concrete. Their strategy combines innovative engineering with the X-factor of labour enthusiasm, to defy the operational parameters of their imported European cement-mixers.

This challenge to the West is issued on Russia’s border with the East: Magnitogorsk lies in the southern Ural region, on the edge of Siberia. Near the beginning of *Time, Forward!*, Kataev’s narrator describes a train from Moscow hurtling past the obelisk marking the Europe-Asia boundary:

A meaningless pillar. We’ve left it behind. Does this mean we’re in Asia? It’s ridiculous. We move at breakneck speed to the East and carry with us revolution. Never again will we be Asia.

This declaration is repeated twice at the novel’s end, bolstered by a triple incantation of “Never, never, never!”*, along with the narrator’s demand that the “meaningless pillar” be torn down. He thus sets himself squarely in the tradition of the Russian Westernizers, for whom the only salvation is to learn from Europe, and for whom Asia exists only as an example to be avoided. Kataev, though, is not explicit about why Russia, if it has been Asia in the past, should fervently wish to be so no longer. He does not echo Belinsky’s deprecations. Writing in support of the current regime (and not, like Belinsky, as its sworn enemy), Kataev cannot ignore the political reality of the USSR as a transcontinental state. Nor can he forget the Bolsheviks’ stated aim to include the rest of the East in its revolutionary project – an aim which Lenin had born in mind
when writing an article in *Pravda* with the provocative title “Backward Europe and Advanced Asia”.17

Admittedly, the Bolshevik leader was only referring to positive political developments that he claimed to have detected in China (this was 1913, when hopes for revolution in Western Europe were dim – and in Russia, dimmer still). He had nothing to say about the question of technological progress. All the same, he is not the only Russian in the revolutionary era to reverse or subvert the usual East/West opposition; and for some writers and thinkers this reversal also has a technological dimension.

Even before we consider this dimension, we should recall the basic difficulties involved in applying the East/West dichotomy to Russia, which has variously seen itself as a representative of the East (in the Eurocentric eyes of critical Westernizers), of the West (e.g., in the context of the disastrous 1904-05 war against Japan),18 as belonging to neither one nor the other (this is Chaadaev’s unhappy conclusion)19 – or as a mixture of the two. Again, antiquity provides the precedent: a century after Herodotus, Aristotle made this same claim for Greece, finding within it the best qualities of both Europe and Asia.20 Modern claims for a uniquely Russian “liminal” or “Eurasian” culture tend towards similar self-flattery.21

Russia is only one of a number of European nations that has drawn the boundary between Orient and Occident within its own frontiers. For this, geographical contiguity with Asia is not essential. As Liah Greenfield describes the evolution and spread of the modern concept of nationalism from its origins in sixteenth-century England, each European power has looked westward (France to England, Germany to France, Russia to all three) in its efforts to assert its own status. The usual process may include imitation of and competition with a Western neighbour, the emergence of Nietzschean *ressentiment* from a recognition of national inferiority,
and its resolution via a “transvaluation of values” that reverses the East/West polarity.\textsuperscript{22} Perhaps, though, it is in Russia that this process has manifested itself most fully – and inconclusively. On the official level, Catherine the Great’s insistence that “Russia is a European State”\textsuperscript{23} has never been denied. Yet when Belinsky and the Westernizers attacked the regime of Nicholas I in the first half of the nineteenth century for its Oriental stagnation and despotism, the Tsar’s education minister Sergei Uvarov was unafraid to declare that “it is to Asia that we owe the foundations of the great edifice of human civilisation.”\textsuperscript{24} It is unclear to what extent Uvarov’s embrace of Asia (or, more generally, his famous patriotic tenets of “orthodoxy, autocracy and nationality (narodnost’)) reflects an identification with the positively transvalued Oriental Other set forth by the Romantics as a model for regeneration of the European West.\textsuperscript{25} Certainly this influence is palpable among the intellectual rivals of the Westernizers – the Slavophiles. The latter varied in their allegiance to the concept of autocracy; but the Slavophiles were eager to boost Russia’s unique narodnost’, along with the opposition of orthodox Russia against secular Europe, echoing the opposition of Eastern spirituality versus Western materialism promoted by Romantic thinkers such as Friedrich Schlegel.

Similarly, in the Romantic revival of the turn of the twentieth century, the modernist heirs of Slavophilism do not hesitate to identify themselves – and Russia’s future in general – with Asia. A number of prominent avant-garde writers (including the poets Andrei Bely and Aleksandr Blok, and the prose writer Boris Pilnyak) responded to the Revolution by calling themselves “Scythians”. These semi-legendary barbarians were first mentioned by Herodotus back in the fifth century BC. A more recent tradition held them to be the Asiatic forebears of the Russian people. This tradition is recalled by one of the leading opponents of nineteenth-century Tsarism, the socialist Aleksandr Herzen. Originally a Westernizer, he became disillusioned with
Europe, which, following John Stuart Mill, he saw as stagnating into the same “dead immobility of the Oriental peoples” that already afflicted Russia. As an antidote, Herzen proposed an alternative version of the Orient: one characterized not by “Chinese” stagnation, but by the revolutionary dynamism of the nomad horsemen: Mongols, Turanians, Scythians. To European correspondents such as the French anarchist Proudhon, he presented himself as an “incorrigible barbarian,” and affirmed: “en véritable Scythe je regarde avec plaisir comment ce vieux monde – auquel nous n’appartenons qu’en partie – se meurt.”

This strain is reprised by the turn-of-the-century philosopher Vladimir Solovyov, who predicts the coming destruction of European civilization by an Asia united under the banner of Pan-Mongolism. Influenced by Solovyov, writers such as Aleksandr Blok make Russia itself the leader of the barbarian wave. Asserting their revolutionary maximalism, spontaneity, and independence of spirit, they proclaim themselves Scythians. Blok’s eponymous poem is addressed in 1918 to a Europe still reeling from the suddenness of the Bolshevik coup:

Yes, we are Scythians! Yes, Asians are we,  
With slanted and greedy eyes!29

However, Blok’s defiant “yes” is no more to be taken at face value than is the novelist Kataev’s over-use of King Lear’s favourite word (“Never again will we be Asia”). If we read past the infamous opening lines of Blok’s “Scythians”, we find that his wild nomads are not simply an Asiatic antithesis of bourgeois Europe. Instead, he recalls the historical role Russia sees itself as having played in saving the West by absorbing the Tatar onslaught:

What for you has been centuries, is for us but a single hour.  
We, like obedient slaves,  
Held a shield between two enemy races  
The Mongols and Europe!

In contradictory fashion, Blok threatens the West with a Russia that has revealed the elemental
power of its Asiatic nature; yet this is also a Russia that has fought against the Orient, a Russia whose Bolshevik “barbarian lyre” calls the “old world” of Europe to a “brotherly feast of labour and peace.”

Here Blok shares the great ambition of fellow Russian Symbolist poets such as Andrei Bely: to portray his nation as the locus of eternal ontological oppositions, including that of East and West, but also as the site of their mystical, apocalyptic resolution. The Symbolists originally looked for this resolution in turn-of-the-century millenarianism, or in the failed 1905 Revolution. Those of them like Blok and Bely who aligned themselves with Lenin’s cause saw 1917 as one more kairotic moment, when (to use the words of Kataev from *Time, Forward!*), the Bolsheviks not only straddle the frontier between Europe and Asia, but “are standing on the boundary of two worlds, two cultures.”

In “Scythians” Blok recalls Dostoevsky’s characterization of the genuine Russian as a “universal man” capable of understanding all European races, and destined to unite the world “not through the sword but through the force of brotherhood.” Thus he writes:

*We love all: both the ardour of cold numbers,*  
*And the gift of divine visions,*  
*We understand all: both acute Gallic sense,*  
*And gloomy Germanic genius...*

Here technology reenters the picture. The Scythians’ Asiatic embrace of “cold numbers” and Gallic rationalism suggests their receptivity to science and technology as part of the revolutionary project. Yet, summoning us to the future site of the technological triumphs of *Time, Forward!* (Asia’s Ural frontier), Blok also suggests (in the context of his overall message that it is Europe’s turn to fight with the Orient) that these still are still fundamentally Western categories:

*Come all, come to the Urals!*
We’re clearing a field for battle between
Steel machines, where the integral breathes,
And the wild Mongol horde!

Fellow Scythian Boris Pilnyak paints a similar picture. The Orient per se is usually subsumed in the second part of his basic opposition – that of Europe versus a primordial, Slavophile Russia dominated by the peasantry.³² Pilnyak’s best-known work is The Naked Year, written in 1920 and considered the first Soviet novel. In it he presents two competing versions of the Revolution, that of the countryside and that of the Europeanized city-dwellers. Technology belongs primarily to the latter: the key question is “Who will prevail in this struggle – mechanical Europe or sectarian, Orthodox, spiritual Russia?”³³ Pilnyak’s Scythian sympathies lie naturally with the countryside; but he does not need Trotsky to point out to him (as the latter does in his critique of Pilnyak in Literature and Revolution) that the only acceptable path to Communism is via “the industrializing and modernizing of our economy” and “uprooting the idiocy of rural life” – and not “through woodland superstitions and stagnant fatalism.”³⁴

Another major writer influenced by Scythianism is the Symbolist poet and novelist Andrei Bely, friend and rival of Blok, and a key stylistic influence on Pilnyak.³⁵ For all the phantasmagorical experiments of his novel Petersburg (1916, revised 1922), Bely is more realistic in his treatment of the question of technology and the Orient than either Blok or Pilnyak. This is because he does not simply repeat hoary clichés about the slumbering and/or barbaric Orient, but incorporates the events of recent history – to be precise, of 1905, the year in which he sets his tale. A major cause of the revolutionary chaos depicted by Bely was Russia’s aforementioned humiliation in its war with Japan over Manchuria. This, the first major defeat of a European power by an Asian nation in modern history, came as a shock both to the Russian Empire and to the West as a whole. Since it ended its two centuries of self-imposed seclusion in
the 1850s, Japan had been assiduous in keeping up with the latest in European military technology and strategy. The tsarist regime, in contrast, seemed less interested in weapons than in the sacredness of its mission. As Nicholas and Alexandra concentrated their efforts on distributing tin icons to the departing soldiers, one Russian general complained, “They attack us with artillery and we pay them back with ‘Te Deums’; they blow us up with mines and we defend ourselves with holy images.”

Again, Russia’s Europeanness was necessarily accented in its encounter with the Empire of the Rising Sun. (Correspondingly, Meiji Japan would come to see the conflict as a step in realizing its destiny of liberating Asia from European control). Yet here it is Russia that represents the Oriental side of the spiritualism/materialism opposition, as well as Herzen’s “dead immobility of the Oriental peoples” when it comes to the question of enthusiasm for technological progress. This is but one real-world motivation for the way in which Bely subverts the East-West duality in *Petersburg*, reversing its stereotypical attributes, allowing one pairing to rupture and bleed into another in a confutation of any reconciliation.

Though there is plenty of room in Bely’s mystical modernism for visions of ancient anthroposophic Turanians, mandarins of the Middle Kingdom, and atavistic horsemen of Genghis Khan, the Oriental principle (what Bely calls the “Mongol cause”) also stakes out a position at the pinnacle of technological progress, as represented by that early 20th-century *nec plus ultra*, the motor car:

At this moment there sounded – a deafening, inhuman roar: unbearably flaring its huge headlight, rushing past, puffing kerosene, an automobile – under the arch toward the river. Aleksandr Ivanovich regarded the yellow Mongol mugs as they cut across the square [...] 

– Lord, what was that?
– An automobile: distinguished Japanese guests...
Of the automobile there remained no trace.
Today we tend to focus on Japan as a technological power only in the post-World War II context (to which contemporary scholars have attempted to affix categories of varying utility: “techno-orientalism,” “cyber-orientalism,” “cyberAsia” and the like). Yet it was not only Bely and his compatriots who, much earlier in the century, had already accepted its arrival on the world stage. Thus Oswald Spengler (whose work was well received by a number of Russian writers) notes in his *Man and Technics* (1931): “Within thirty years the Japanese became technicians of the first rank, and in their war against Russia they revealed a technical superiority from which their teachers were able to learn many lessons.”

In conflating the high-tech Japanese with an earlier race of conquerors from the East (“yellow Mongol mugs”), Bely may also be recalling that it was also by virtue of superior technology and tactics that the Tatars crushed the Russian forces in the thirteenth century. With advances such as a highly mobile cavalry and composite bows, Genghis Khan’s warriors were nothing like the Herodotus’ Persians.

It must be stressed that Bely’s equation of the Mongol cause with technological advancement in no way renders it a positive revolutionary force. Here are the author’s own comments:

The dominant note of the Tatar, of the Mongol in my *Petersburg*: this is the replacement of spiritual and creative revolution – which is not actually revolution, but the infusion of a new impulse into humanity – with unenlightened reaction, numeration, mechanisation [...] Thus in a typical reversal, Bely denies the positive attributes of Scythianism (“spiritual and creative revolution”) to his Mongol horsemen, reducing them to the paradoxical guardians of a modernized, mechanized Oriental stagnation. Unlike his follower Pilnyak, who laboured to graft the techno-enthusiasm of Futurists and proletarian poets such as Mayakovsky and Gastev onto his Scythian worldview, Bely never felt the need to take a stance on the value of technological
progress in itself – or, for that matter, on the relative merits of Orient and Occident. In *Petersburg*, it is impossible to come to any definite conclusion: again, all oppositions, all values melt into one another or suffer reversals of polarity. Technology only serves “unenlightened reaction”; and the Mongol cause reveals itself (in the mystical hallucinations of Bely’s main protagonist) as “not the destruction of Europe, but its immutability.”

In contrast, Pilnyak does make an effort to accommodate Bolshevik techno-utopianism, especially in the follow-up to his *Naked Year*, the novel *Machines and Wolves* (which came out in 1924, the same year as Trotsky’s aforementioned attack on the author). In this new book, Pilnyak gives the upper hand to the new “mechanical Europe” over the old “spiritual Russia”. His preference is obviously for the “Russian, snow-stormy” wolf. Yet this Scythian of beasts must give way to the “romanticism of the proletarian machine revolution.”

Pilnyak does, however, hint at a way of reconciling the wolflke Russian people with the machine. Between the regular factory-worker and his romantic machines, he introduces a strange intermediary: Kuzma Ivanovich Kozaurov is a little old peasant with swampy eyes, a mossy beard, and a potato nose. “Kuzma Ivanovich knew a secret, mysterious to engineers; he believed that there’s a soul living in a diesel, just as in people, – this soul he knew how – by sorcery – to breathe into the machine.” These midwives of machinery, Pilnyak observes, exist nowhere but in Russian factories. In his personification of a bond of magical sympathy between peasant and technology he alludes to the trope of the intuitive cunning of the Russian craftsman, most famously portrayed in Russian literature in the Nikolai Leskov’s 1881 story “The Tale of Cross-eyed Lefty from Tula and the Steel Flea”. (Leskov’s hero triumphs over the Europeans by putting horseshoes on a clockwork flea that had been presented to Tsar Aleksandr I as an example of the very latest in English technology.)
Among Pilnyak’s contemporaries, the mysterious Kuzma is also paralleled in the protagonists of Andrei Platonov, including several characters in his major novel *Chevengur* (1929). These are self-made engineers and self-made proletarians, sprung from the bosom of nature, and prone to treating all of material reality, whether rock or tree, flesh or steel, with a reverence that recalls the animism of the pre-Christmas Slavs. In *Machines and Wolves* Pilnyak himself recalls pagan Slavic traditions when his quest for a synthesis of the Oriental, Slavophile noble savage and the proletarian romantic leads him to reveal the existence of a “machine devil” – the *mashinnik*. This supernatural being he offers as a Bolshevik counterpart to the *domovoi* (house-spirit) or *leshii* (forest-spirit) of pagan belief.

Pilnyak also reinterprets the archetypal Western vocation of engineer (Spengler’s “Faustian man”) to make it resemble that of an astrologer or alchemist – or of the high priest of a timeless Asiatic cult:

In Egypt, Assyria, Babylon – whence there set out, got as far as our time, got lost in the centuries – stargazers, astrologers, mages, monks, sorcerers, alchemists, masons, having muddled humanity’s history with metaphysics – having muddled the centuries, having become muddled in the centuries – they led the world, – god had a court, and each court hundreds of god’s votaries, – of course, you wouldn’t call god’s court a factory or hundreds of junior deacons workers, – but god, standing in the sanctuary, departed from realities into a thing in himself, into unreality, mysticism.[...] He who has brought into the world a machine that has become stronger than his will, – black, sooty, oily, – if he knows about the astrologers and alchemists, he will understand – that he is their brother; for machines, like god, have no blood. This one – by his alchemy – has replaced the alchemist and himself will be lost in the centuries, like deacons of Astarte who painted god in the sanctum sanctorum, – he will be lost by his metaphysics. They are few, these junior deacons of the machine, they are communists, they are proletarians.46

Note that Pilnyak’s “deacons of the machine” constitute something of a technological elite (“They are few…”). If these are indeed the proletarian heirs of Egypt, Assyria and Babylon, then they also represent another reversal of the usual terms of the Orientalist duality – i.e., Western individualism versus Eastern collectivism. In general, the ostensible Marxist-Leninist preference
for the collective masks a continuing reliance on Romantic narratives of exceptional individuals (Lenin and the Bolshevik leadership, the Party as an elite vanguard). When it comes to the specific case of technology, this contradiction is all the more evident. As has been already suggested, in the background of utopian visions of the collective as a single-minded colossus of labour, working in perfect harmony with the factory, becoming a part of its machinery – there always stands the unmechanized Faustian engineer-hero, the privileged initiate. This is true even for the most provocative proponents of the collective human machine, such as the poet Gastev. Thus the Bolshevik philosopher Aleksandr Bogdanov strongly suspected that “lurking behind Gastev’s description of proletarian culture was an elite of engineers, standing above the proletariat and controlling it completely.”

The Scythian novelist Evgeny Zamyatin elaborates on this suspicion in his novel We (1921), which satirizes the utopian pronouncements of Gastev and the proletarian poets. The hero of this dystopian classic is the engineering mastermind behind a spaceship dubbed the Integral (recall Blok’s use of this symbolic mathematical term in his “Scythians”). Zamyatin shows him admiring how his workers build the craft, moving “in rhythm, like the levers of a single huge machine.” The engineer longs to be “caught up in the steel rhythm,” but realizes that his individualism will never let him join this sacred collective.

Zamyatin’s image of the revolutionary Scythian is itself entirely individualistic: “Solitary across the green steppe gallops a wild rider with windswept hair – the Scyth.” This lone horseman is an eternal wanderer and heretic, implacably opposed to the received wisdom of the crowd. Such an image is made possible in part by the Romantic revaluation of the Orient, with its positive emphasis on the inner life of the spirit and concurrent focus on the individual. It is counterbalanced in the writings of other Scythians by the image of the barbarian collective – the
horde – as emphasized by Blok in his poem: “Of us there are hosts, and hosts, and hosts, / Just you try and battle with us!”

Perhaps the aforementioned figure of Kuzma Ivanovich from Pilnyak’s *Machines and Wolves* offers a symbolic resolution of the conflict between solitary engineer and labouring collective: the machine sorcerer is a man of the people; yet in his peasant cunning he holds a power comparable to that of the engineering elite. More importantly, Pilnyak’s creative attempt to merge the realms of primitive animism and modern technology is indicative of an important larger trend in Russian revolutionary techno-utopianism. A paradoxical fusion of the primordial and the contemporary (or even futuristic) can be found throughout the Russian literature of the early twentieth century, reflecting the interests of European modernism as a whole. (Compare the mythic subtext of such works as Joyce’s *Ulysses*, as well as the general modernist tendency to animate the machine with a utopian or dystopian soul.)

Of course it also reflects the industrial reality of post-1917 Russia, the very backwardness of which only served to fuel Bolshevik fantasies about the transformative power of technology. As Susan Buck-Morss writes, under the “pretechnological conditions that existed in the early Soviet Union,” the “cult of the human-as-machine sustained a utopian meaning.” In 1920, Aleksei Gastev became head of the Central Institute of Labour, where he dedicated himself to training factory workers in the Taylorist techniques, teaching them how to adapt their movements to those of the machine for maximum efficiency. In the words of Buck-Morss,

In this still preindustrial context, human bodies practicing the rhythm of machines were like shamans practicing magic, mimicking a desired state in order to bring it into existence. Scientifically calculated body movements were the industrial-age equivalent of a rain dance.

Sympathetic magic, unlike the familiar eighteenth-century concept of incremental technological progress, promises immediate and substantial results. This brings in a key point for the
understanding of early Soviet techno-utopianism. The pro-Bolshevik avant-garde of proletarian poets and Futurists may give the appearance of worshipping technological progress at any cost; yet what they are really interested in is technological apocalypse. In the words of the Futurist poet Mayakovsky, their goal is to “thunder out a new myth.”\textsuperscript{53} They seek to escape teleology altogether, to find themselves in a realm outside of history. The avant-garde painter Malevich affirms that “All creation . . . is a matter of constructing a device to overcome our endless progress.”\textsuperscript{54} In the end, utopian artists such as Mayakovsky and Malevich see themselves as engaged in a Nietzschean struggle to defeat technology by its own means. Their attitude reflects a Russian revolutionary suspicion of Enlightenment teleology which pre-dates Lenin. (Thus the recovering Westernizer Herzen tells of how he finally succeeded in overcoming his “mystical belief in progress.”\textsuperscript{55}) The preference for apocalypse over progress, as well as the strategy of defeating technology by its own means, also recalls influential early twentieth-century views on technology and the rise of the East. In the second part of Spengler’s \textit{Decline of the West} (1923), as well as in the later \textit{Man and Technics}, the author accepts that there is now nothing stopping the nations of the Orient, led by Japan, from adopting the whole range of advanced technologies which the West has been so foolish to give away:

> Instead of keeping strictly to itself the technical knowledge that constituted their greatest asset, the “white” peoples complacently offered it to all the world, in every Hochschule, verbally and on paper, and the astonished hommage of Indians and Japanese delighted them.\textsuperscript{56}

Spengler also notes that in this respect we must include Russia among the Asian races, rather than the “‘white’ peoples” of what he calls the “Faustian civilisation” of Western Europe. (Here he pauses to raise an Aryan left eyebrow, while we meditate on the fact that race is more than skin deep...) The Russians, no less than the Indians or Japanese, are driven to “fathom the secret of this terrible weapon” that is the technology of the Faustians. Yet, along with the rest,
“inwardly he abhors it.”

So also the Russian looks with fear and hatred at this tyranny of wheels, cables, and rails, and if he adapt himself for today and tomorrow to the inevitable, yet there will come a time when he will blot out the whole thing from his memory and his environment, and create about himself a wholly new world, in which nothing of this Devil’s technique is left.

In the end, Russia and the East are destined (partly because of their “‘native’ cunning” – shades of Pilnyak once again) to surpass the West and then destroy it with its own weapons (shades of Malevich and the apocalyptic approach of the Russian avant-garde). Again, for them technology is not a “spiritual need” as it is for Faustian man. (On the contrary, their Asiatic brand of Christianity can only condemn it as the “Devil’s technique.”) Thus Russia, along with the rest of the Orient, will discard this tool “as soon as it has served its purpose,” and Western civilization as we know it is no more.
NOTES

1 As implied by the title of N. Katherine Hayles’ *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics* (Chicago: U of Chicago P, 1999), and discussed in a recent issue of this journal devoted to the topic (*Cultural Critique*, No. 53, (Winter, 2003)).


5 Gerhard Hirschfeld, “Nazi Propaganda in Occupied Western Europe: The Case of the Netherlands”, in David Welch, ed., *Nazi Propaganda* (London: Croom Helm, 1983), 156.


8 To be precise, the Father of History himself was less categorical in his negative generalizations about the Orient than were some of his contemporaries (such as Aeschylus in his *Persians*), subverting in various ways the developing “stereotype of the barbarian as weak, effeminate, and servile”. (Michael Flower, “Herodotus and Persia,” in *The Cambridge Companion to Herodotus*, ed. Carolyn Dewald and John Marincola (Cambridge: Cambridge UP, 2006), 275.)


11 On the growing importance of scientific thought and technological innovation as markers of Western superiority from the beginning of the Age of Exploration in the fifteenth century, see Michael Adas, *Machines as the Measure of Men: Science, Technology, and Ideologies of Western Dominance* (Ithaca, NY: Cornell UP, 1989).
20


13 *Ibid.* For Chaadaev, the ultimate reason for this sorry stasis is moral: China lacks the “new impetus” which was bequeathed to the Western spirit by Christianity.


16 V. P. Kataev, *Vremia, vpered!,* in his *Sobranie sochinenii*, 9 vols. (Moscow: Khudozhestvennaia literatura, 1968-72), vol. 3, 139, 423-24. (All translations from Russian are mine, unless otherwise noted.)


23 Quoted in *ibid.*, 190.

24 Quoted in Lukin, *The Bear Watches the Dragon*, 27.

Nationalism, 332-33


28 Caryl Emerson, The Cambridge Introduction to Russian Literature (Cambridge, 2008), 175.


30 Kataev, Vremia, vpered!, 204.

31 F. M. Dostoevskii, “Pushkin (ocherk),” in his Sobranie sochinenii s piatnadtsati tomakh (St. Petersburg: Nauka, 1995), vol. XIV, 439. Similar assertions were made earlier by both Westernizers (Belinsky) and Slavophiles (Konstantin Aksakov). Again, the original source is German, in claims by thinkers such as Humboldt and Fichte for the exceptional, “pan-human” essence (and hence universal mission) of the Teutonic people. (Greenfield, Nationalism, 364-66.)


34 Trotsky, Literature and Revolution, 87.

35 Trotsky concludes his diatribe against the popular Pilnyak by complaining about his artistic dependence on the “worst sides” of Bely (Ibid., 89).


38 Andrei Belyi, Peterburg (St. Petersburg: Nauka, 2004), 100. As Robert A. Maguire and John E. Malmstad note in their translation (Petersburg Penguin: Harmondsworth: Penguin, 1978), 325), these “distinguished Japanese guests” would have been members of the delegation sent to the capital to formalize the peace treaty with Russia.


Pil’niak, *Mashiny i volki*, 73-4, 97.


Blok, *Selected Poems*, 93.


V. V. Maiakovskii, “150,000,000,” in his *Polnoe sobranie sochinenii v trinadtsati tomakh* (Moscow: Khudozhestvennaia literatura, 1956), v. 2, 125.


Pilnyak in *Machines and Wolves* portrays the factory workers’ obsession with the deadly flywheel: “out of every ten – oilers – one will perish, throwing himself by his own will onto the flywheel, beckoning, hypnotizing with its rotation, draining the will into death like a boa’s gaze” (*Mashiny i volki*, 95).

58 The Decline of the West vol. 2, trans. Charles Francis Atkinson (New York, NY: Knopf, 1932), 504, n. 1. Seemingly illustrating Spengler’s point, the plot of Kataev’s *Time, Forward!* centers on the question of whether the communist enthusiasm of his engineer-heroes will be defeated by what a Party *apparatchik* condemns as their disdainful attitude toward imported European machines and their design specifications.