TECHNOLOGIES OF GENDER:
SOVIET LITERATURE AND FILM IN THE 1920S AND 1930S

BY

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DISSERTATION

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ABSTRACT

My dissertation, "Technologies of Gender: Soviet Literature and Film in the 1920s and 1930s," examines the vital role technology and machines – both actual and imagined – play in defining the 'new Soviet man' and 'new Soviet woman' in early Soviet culture. As I argue in my dissertation, the period of the 1920s and 1930s witnesses a radical change in the perception of physicality brought about by new technology. My project elucidates how the rise of technology and technological discourse in Soviet culture remakes the body and reconfigures traditional gender roles, producing a Soviet cyborg (in Donna Haraway's terms), first male, then female.

In the twenties, in order to combat mortality and render the body perfect, male authors engage in writing about sophisticated technologies based on experimental scientific and medical research (as in Boris Pil'niak's 1928 *A Matter of Death* and Andrei Platonov's 1927 *The Ethereal Tract*). These technocratic utopian imaginings introduce the cyborg that has overcome all mortal constraints, including biological procreation (Platonov). While in the predominantly male avant-garde culture women's role and access to technology are reduced, I show that in socialist realist texts and films of the 1930s, the reverse takes place: women instead of men now have a privileged relationship to machines. Women artists and workers contest the hyper-masculinist culture and through female cyborgism remap their bodies and consciousness to create their own feminist politics (Marietta Shaginian's 1931 novel *The Hydroelectric Plant*, Esfir' Shub's 1932 film *K.Sh.E.*, and Pasha Angelina's all-female tractor brigade). The official culture of the thirties refashions itself in the feminine idiom to demonstrate that the never-ending advancement under Stalin exceeds the revolutionary achievements of the 1920s. This obsession leads to the creation of the Soviet heroine of labor, the female cyborg embodied in the image of the woman at the tractor wheel riding into the bright future, the ultimate symbol of transformed

Stalinist technocratic society (as in Sergei Eisenstein's *General Line* (1929), Ivan Pyr'ev's *Tractor Drivers* (1939), and Grigorii Aleksandrov's *Bright Path* (1940). The project considers both well-known and lesser-known writers/texts and films. At stake is a new way of looking at both literature and cinema of the 1920s-1930s from the point of view of gender technologies and technologies of gender.

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To my parents

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INTRODUCTION

My project examines technologies of gender in early Soviet culture and the vital role technology and machines—both actual and imagined—play in defining the "new Soviet man" and "new Soviet woman." Realization that the old body can no longer keep up with new technological developments creates an obsession with bodily transformation via its synergy with machines. What particularly interests me is how technology and technologically-inflected discourse transforms the male and female body and reconfigures traditional gender roles. Sergei Eisenstein's film *Old and New* (1929) was the first that engaged with technology from a gendered angle. It appeared on Soviet screens at a time when political culture was positioned at the historical cusp of "traditional" and "modern" discourses, transitioning from Lenin's New Economic policy to the Stalinist collectivization drive. *Old and New* symbolically shows the end of the 1920s era that glorified the masculinity myth by anticipating the following decade in which female culture begins to take the lead. The two scenes that are particularly significant in this context are those in which the main protagonist Marfa Lapkina plows the land and operates the tractor.

Figure 1: Marfa working the land (frame capture). **Figure 2:** Marfa operating her tractor (frame capture).

How did we get from the old to the new Marfa? This question opened many perspectives. What binds these two juxtaposed images together is technology and gender. In both frames, the

woman works with technology and her tools have an effect on her body and mind. The first shows the peasant Marfa working the dry land using her body to maneuver the plow. Her primitive wooden tool exhausts her and affects her physical and mental performance. Eisenstein shows that the material world of nature, the hard soil and burning sun, overpower Marfa. The second image shows unrecognizable Marfa driving a tractor. She is transformed from a backward peasant to a modern woman. Marfa's femininity is pronounced, she shows a beaming smile, wears lipstick, radiates physical health. Instead of her peasant headscarf and poor clothes, she is wearing a leather hat and a driver's uniform. Marfa's confident gaze shows through modern protective glasses. Her uniform ensures adaptable interaction with the machine and is a part of her new bodily identity. Marfa is now a tractor driver. The modern machine alters her identity, enhances her body, and heightens her confidence. Even the nature in the background responds to new technology by transforming from rough land into fertile green meadows with trees. Marfa Lapkina's transformation is a story of productive new alliances with technology that blur body-machine boundaries. Her story is that of a cyborg.

In the contemporary world, the term cyborg is a part of our everyday lexicon. Moreover, multifaceted technologies are opening up new ways of thinking about what being human means. The post-human subject's daily interaction with the interconnected digital environment, prosthetic wearable technology (including computer clothes, eyeglasses, and watches), virtual assistants powered by artificial intelligence (Alexa,[1] Siri, Cortana), and sophisticated medical technology (digital implants) changes perspectives and identities at the level of the individual body. How did we get from a dream of perfecting the human form to the silicon-based cyborg?

[1] Alisa (Alice) is a Russian digital virtual assistant developed by Yandex in 2017. All these voice assistants started with a female voice and female names. After numerous complaints, including the latest UNESCO report, the major technology companies began introducing gender neutral as well as male voice assistants. For the UNESCO report see more at https://news.un.org/en/story/2019/05/1038691 (last accessed June 16, 2019)

Understanding the shift to post-humanism requires an in-depth look at the early decades of the twentieth century, a time that like our own saw radical changes in the human form by means of science and technology. The Soviet project, with its utopian thrust and reliance on technology provides particularly rich material for an examination of the transformation of both society and humanity. Before turning to my analysis of the early Soviet period, I will briefly outline some general Western trends and attitudes in the modernist period to technology that existed before and after WWI and compare them with the late Imperial and early Soviet context.

The turn of the twentieth century saw massive industrialization and urbanization followed by a rapid development of modern communication and transportation technologies. The substantial changes in urban landscape and daily exposure to new technologies altered the sensory experience of the individual. According to Georg Simmel, Siegfried Krakauer, and Walter Benjamin, the theorists of the sensory interpretation of modernity, in a technologized metropolis the human psyche was under constant perceptual shock. In analyzing the modern city as the primary site of hyperstimuli, Ben Singer elaborates on the effects the accelerated metropolis had on its inhabitants:

> Amid the unprecedented turbulence of the big city's traffic, noise, billboards, street signs, jostling crowds, window displays, and advertisements, the individual faced a new intensity of sensory stimulation. The metropolis subjected the individual to a barrage of impressions, shocks, and jolts.…Modernity, in short, was conceived as a barrage of stimuli.[2]

In the new sensory reality, the individual's cognitive map became heightened and required new thrills and supplementary perceptual excitement. Moreover, realization that the traditional

[2] Ben Singer, "Modernity, Hyperstimulus, and the Rise of Popular Sensationalism," in *Cinema and the Invention of Modern Life*, Leo Charney and Vanessa R. Schwartz, eds. Berkeley: University of California Press, 1995. p. 73.

notions of space and time have been eradicated and accelerated through technology influenced ideas of bodily change in the direction of extending its possibilities. In this period, technologization of modern capitals invited comparisons between modern cities and what was traditionally interpreted in medicine as mechanistic bodily functions. Capital cities were described as hearts of countries, pumping blood into the living organism of nations, the metro's circulatory system and streets were compared to blood circulation, the city acquired mechanized veins and arteries, the railways were seen as prosthetic legs, modern parks and boulevards as cities' lungs. In turn, these analogies encouraged ideas of mechanization of the human body. Modern medical devices were penetrating and improving the body's potentials; thanks to modern technology, such as cars and airplanes, the individual body was not confined to its organic limits any longer. Along the positive sides of technologizing the human, the early twentieth century saw radical ideas of coupling machines and flesh culminating in Marinetti's 1917 "Manifesto of Futurist Dance," in which he advocates "the fusion of man with the machine, achieving the metallism of Futurist dance" and the union "with the divine machines of speed and war."[3]

It is important to emphasize that dreams of becoming enhanced and surpassing human physical limits were not novel. The ideas of affiliating humans and machines were particularly prominent in the Enlightenment period and have inspired philosophers to rethink the mind-body categories. Cartesian dualism insisted on independent existence of the body and mind, theorizing the body as matter devised in mechanistic fashion, and the mind as immaterial substance that can exist outside matter. Isaac Newton's mechanization of the universe influenced La Mettrie's *L'homme Machine*, in which he completely rejected the notion of mind as nonphysical and separate from the body, rendering it entirely material. Borrowing from Newton, Adam Smith

[3] F. T. Marinetti, "Manifesto of Futurist Dance," in *Futurism: An Anthology*, Lawrence Rainey, Christine Poggi, Laura Wittman, eds., New Haven: Yale University Press, 2009 pp. 236-37.

envisioned the universe as an enormous machine and projected this notion onto nature and human society, naming it "beautiful." Allison Muri asserts that the English medical lexicon of the Royal Society of this period used the same language that was utilized to describe machine mechanisms.[4] Human-machine analogies were prominent in the long eighteenth century (1685–1815) and informed the modern period. The idea of crafting the human haunted Friedrich Nietzsche, who in 1895 wrote that "humans are the still undetermined animals."[5] Nietzsche asserted that humans are not bound by unchanging nature as are animals and are creatively immersed in the process of self-overcoming, with the ultimate goal of becoming *Übermensch* in their self-mastery.

While Nietzsche did not elaborate in which direction the self-overcoming is going, in 1914, Henri Bergson talked about the repercussions of concrete technological bodily enhancements: "Each new machine being for man a new organ—an artificial organ which merely prolongs the natural organs—his body became suddenly and prodigiously increased in size, without his soul being able at the same time to dilate to the dimensions of his new body. From this disproportion there issued the problems, moral, social, international…"[6] In 1930, Sigmund Freud echoed Bergson's thought in entirety: "Man has, as it were, become a kind of prosthetic God. When he puts on all his auxiliary organs he is truly magnificent; but those organs have not grown on to him and they still give him much trouble at times."[7]

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[4]Allison Muri, *The Enlightenment Cyborg: A History of Communications and Control in the Human Machine, 1660-1830*, Toronto: University of Toronto Press, 2007, p. 30.

[5] "Der Mensch das noch nicht festgestellte Tier ist," in Friedrich Nietzsche, *Beyond Good and Evil: Prelude to a Philosophy of the Future*, ed. Rolf-Peter Horstmann, trans. Judith Norman, Cambridge: Cambridge University Press, 2002, p. 56.

[6] Henri Bergson, *The Meaning of the War: Life and Matter in Conflict*, trans. H. Wildon Carr, T. Fisher Unwin, London, 1915, p. 34.

[7] Sigmund Freud, *Civilization and Its Discontents* (1930), *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, vol. 21 (1927-1931), trans. James Strachey Norton, New York, 1961, p. 39.

Freud was writing post-1918, while Bergson expressed his concerns about the fetishization of technology at the eve of the WWI. In his brief pamphlet Bergson was excoriating the transformation of society into a material thing. He saw the birth of a three-headed "formidable machine"—the alliance of German politics, military, and industry— "marching forward in mechanical order"[8] into the bleak future. The Great War, the first completely mechanized war in human history, showed the radically altered world in four years of "continuous clang of militarism and industrialism, of machinery and mechanism."[9] Modern warfare saw the use of armored tanks, cars, aircraft, artillery, machine guns, and chemical weapons. Technological violence, death, diseases, and famine profoundly changed the human psyche. Powerful new machines that were glorified as harbingers of progress and supposed to serve humanity turned out to be highly destructive. Artillery shells and machine guns severely wounded and mutilated bodies. The post-war period had to fight existential dread, shell shock, and various mental disturbances. The 1914–18 catastrophe left a destroyed world full of fragile human bodies.

World War I also reshaped the notion of what art is, as themes of death, fractured bodies, and nightmarish visions penetrated the works of surrealists, expressionists, and Dadaists. Artists were responding to trauma by integrating these themes in their works. The aestheticization of machines that existed before the war remained an important theme as artists gained insight into how technology as prosthesis may transform the human body and consciousness. Harriet Murav writes that,

> the use of prosthetic or technological devices to enhance human capacity, whether for creativity or destruction, is, however, double-edged. What is added on always implies a

[8] Bergson, *The Meaning of the War*, p. 36.
[9] Ibid. 34

> capacity that is limited or has been destroyed. Central to the idea of the prosthetic is the interrelation of loss and (improved) restoration: the artificial limb indicates the loss of the amputated limb. The connection between enhancement and loss is central to the prosthesis of writing.[10]

The ambiguity and the connection between loss and restoration seems particularly relevant for Virginia Woolf's 1919 short story "Sympathy" that revolves around the themes of death, loss, and recovery. The narrator learns about the death of her friend in the morning paper, which prompts her to see decay everywhere around her: "But how death has changed everything!...Death has done it; death lies behind leaves and houses and the smoke wavering up, composing them into something still in its tranquility before it has taken on any of the disguises of life."[11] To build on the theme of dying, the narrator begins with the concrete death-notice in the *Times,* then moves to philosophical thinking about death not only as completion of life but as a way to be. The thoughts about death permeate the entire narrative and culminate in a delirious image of a reaper with a scythe who is about to harvest the souls of the two lovers lying on the grass. However, the thanato-thinking ends once the narrator becomes aware that she is on an express train. The instant in which she harmonizes with the speed, movement, and power of the train brings existential relief: "some burden has fallen, some impediment has been removed" (110). The liminal moment in which the boundary between human and machine is transcended brings an insight that imbues life with new significance. After this experience, the narrator realizes that she misread the name in the papers and that her friend did not die. In other words, the machine sharpens her perception and alters her negative world-view.

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[10] Harriet Murav, "Real Men and Phantom Stories: Violence and Prosthesis in Soviet War Literature," *Ab Imperio*, no. 4, 2008, p. 524.
[11] Virginia Woolf, "Sympathy," *The Complete Shorter Fiction of Virginia Woolf*, San Diego: A Harvest Book, 1989, pp. 110-11.

Modernist prose is fascinated with the body-consciousness-machine alliance. The WWI experience showed that humans were mere appendages of machinery, or as Walter Benjamin asserted "war is an uprising on the part of technology, which demands repayment in 'human material.'"[12] Post-war literature gestured toward an association between humans and machines and investigated the possibilities of transformation and the insight technology might bring to the modern subject. The modernists repeatedly experimented with perception and the modes of seeing the world anew via machines. In Thomas Mann's *The Magic Mountain* (1924), the young engineer Hans Castorp experiences epiphany upon seeing an X-ray of his hand:

> And Hans Castorp saw exactly what he should have expected to see, but which no man was ever intended to see and which he himself had never presumed he would be able to see: he saw his own grave. Under that light, he saw the process of corruption anticipated, saw the flesh in which he moved decomposed, expunged, dissolved into airy nothingness—and inside was the delicately turned skeleton of his right hand and around the last joint of the ring finger, dangling black and loose, the signet ring his grandfather had bequeathed him: a hard thing, this ore with which man adorns a body predestined to melt away beneath it, so that it can be free again and move on to yet another flesh that may bear it for a while. With the eyes of his Tienappel forebear—penetrating, clairvoyant eyes—he beheld a familiar part of his body, and for the first time in his life he understood that he would die.[13]

[12] In "The Work of Art in the Age of Its Technological Reproducibility" (second version, 1936), in Walter Benjamin, *The Work of Art in the Age of Its Technological Reproducibility and Other Writings on Media*, Michael W. Jennings, Brigid Doherty, and Thomas Y. Levin, eds., Cambridge, Massachusetts: Harvard University Press, 2008, p. 42.
[13] Thomas Mann, *The Magic Mountain*, trans. John E. Woods, New York: Vintage, 1995, p. 216.

While Woolf's narrator overcomes the dread of death while travelling on the express train, Hans Castorp realizes his own mortality via the X-ray technology that penetrates his body. In both cases, the existential insight is the most valuable experience as it gives life a new meaning. Hans Castorp gains knowledge of the interior of his body by looking at his X-ray image, which blurs the borders between technology and flesh. His X-ray becomes an intimate image of his inner organic self. The possibility of analyzing and experiencing disembodied flesh (radiology imagery) through various devices becomes not only a source of knowledge of the finitude of human life, but also a chance to surpass the limits of that very same body. When Hans Castorp for the first time hears dislocated voices coming from the gramophone, he recognizes that something majestic has happened: "somewhere inside him a voice said: 'Wait! Look out! An epoch begins! For me!" (630). He is mesmerized by the prospect of existing and being in the future outside his flesh. Modernist art in the West gestured toward regeneration and recovery from WWI trauma. Like at the turn of the century, technology again became a site of excitement announcing the arrival of an era filled with new sensory experiences and corporeal optimism.

At the start of the twentieth century, however, it didn't seem like the new epoch was beginning for Russia. The empire was largely agrarian and underdeveloped vis-à-vis Western European powers such as Britain, France, and Germany. Eighty percent of the total population were peasants that lived in utter poverty. According to Sheila Fitzpatrick, the reasons behind Russia's delayed development are its late emergence from feudalism (1860s) and limited industrialization. The country was lacking advanced technology and its people were working the land with primitive tools: "wooden ploughs were in common use, modern farming techniques

were unknown in the villages and peasant agriculture was not much above sustenance level.…The peasants were not much more than a generation away from serfdom."[14]

The general underdevelopment was also felt in the big cities. Some accounts written in the Soviet period that reminisce on the life of the Imperial St. Petersburg describe the city as dull and lacking the excitement of other Western metropolises. Remembering his childhood years, Viktor Shklovsky writes about the general feeling of inertia and emptiness at the Russian turn of the century. He portrays the beginning of the epoch as a ghostly time with no sense of movement, where everything seems to be at a standstill: "quiet beginning of the century. Time is silent, frightened, and self-sufficient."[15] Imperial St. Petersburg wasn't exactly "a barrage of stimuli" like New York, where the individual could feel the technological excitement of the new era. The slow, self-sufficient time Shklovsky refers to reflected both official and subjective time flow. Russia was still using the Julian calendar, which was thirteen days behind the Western calendar and was, metaphorically speaking, lagging behind the rest of Europe. Shklovsky asserts that the immobility was also imposed on the body and mind: "it is forbidden to put elbows on the table. In general, life is full of no's. Do not walk on the grass, do not crumple the grass, do not walk the dogs…do not break the lattice…I begin to read non-books" (79). The general negation of life in Shklovsky's description culminates with his yearning for modern technology. He lives in a non-technological time, in his room "the telephone does not ring—there is no telephone yet, there is no street car, no automobile..." (79). Technology was tied to the arrival of the Russian Revolution and was considered the means of overcoming Imperial stasis and backwardness. Fitzpatrick asserts that "the key to 'building socialism' was economic development and modernization. As prerequisites of socialism, Russia needed more factories, railways, machinery,

[14] Sheila Fitzpatrick, *The Russian Revolution*, New York: Oxford University Press, 2008, p. 17.
[15] Viktor Shklovsky, *Zhili bili*, Sobranie Sochinenii v trekh tomakh, vol. 1, Khudozhestvennaia literatura, Moscow: 1973, p.78.

and technology…Building socialism meant transforming Russia into a modern industrial society."[16] For Shklovsky, the machine is able to confront the old world and turn it upside down: "an engine of more than forty horsepower annihilates the old morality."[17]

However, the First World War, the Russian Revolution, and the Civil War that followed devastated the economy and initially halted the already limited industrial development. The country was left in ruins, overwhelmed with death, poverty, and hunger on a mass scale. The only industrial development plan that was launched in the early 1920s was Lenin's electrification campaign. Lenin's attempt at recovery, such as the introduction of the New Economic Policy (NEP) in 1921, brought concrete results in 1924–25 when the country experienced tangible industrial and economic improvement. This was also the time when Soviet Russia welcomed the ideas of internationalism, international revolution, and endorsed foreign investment that helped the modernization of the Soviet Union.

The turn from a global direction began already in the late 1920s, when Stalin announced his industrialization drive that became the country's top priority in the following decade. Stalin terminated the NEP and initiated a new route for socialism, articulated in the slogan "Socialism in one country." This meant that the time of internationalism had ended, the relationship with the West was considered dangerous, and that the Soviet Union was entering a xenophobic period in its history. Stalin's collectivization of the countryside campaign initiated during the First-Five Year Plan was followed by ideas of industrial competition on a world-scale. Fitzpatrick writes:

> Moscow's central politicians and planners were clearly in the grip of "gigantomania," the obsession with hugeness. The Soviet Union must build more and produce more than any other country. Its plants must be the newest and the biggest in the world. It must not only

[16] Fitzpatrick, *Russian Revolution*, p. 111.
[17] Viktor Shklovsky, *Zoo or Letters Not about Love*, trans. Richard Sheldon, Chicago: Dalkey Archive Press, 2001, p. 116.

> catch up with the West in economic development, but surpass it. Modern technology, as Stalin never tired of pointing out, was essential to the process of catching up and surpassing. The new auto and tractor factories were built for assembly-line production…because the legendary capitalist Ford must be beaten at his own game.[18]

While the 1920s were relatively open to the West, the following decade was marked by a radically isolationist political direction. Both periods depended heavily on the development of technology. The publicity given to the Lenin's electrification campaign was immense and it had a significant impact on early Soviet art. In the early 1920s, Soviet Russia had not yet developed industry, but it did have a discourse on technology. Alongside political discussions about the arrival of a technological future, authors and artists like Shklovsky used this time to write about machines: "the future was approaching with cars, radios, air balloons, and talking machines."[19] Reflections on rapid development, acceleration at an unstoppable pace created enthusiasm for machines in which technological discourse functioned as a prosthetic substitute for actual technological scarcity. In the 1930s, enthusiasm continued as technology was being mass produced and the authors didn't have to imagine it, but could experience it directly at the various construction sites. Both cultures needed an official art which would express and support the transformation of the Soviet Union in its technological and ideological hypostases. Lenin envisioned the entire country as a gigantic powerful machine in which art was "a cog and the screw of one single great Social-Democratic mechanism set in motion."[20] Defined like this, art itself adopted the spirit of mechanization and began aestheticizing the machine, electricity, and tools. Stalin launched his Cultural Revolution that modeled itself upon the industrialization drive and reflected technocratic aspirations of the 1930s. Technology—both actual and imagined—

[18] Fitzpatrick, Russian Revolution, p. 134.
[19] Shklovsky, *Zhili bili*, p.52.
[20] V.I. Lenin, "Party Organization and Party Literature" in *Novaia zhizn'*, no. 12, 1905, p.180.

gave shape to the avant-garde and Socialist Realist cultures and functioned as a catalyst for the transformation of art, society, and politics.

Along with historical sources, valuable scholarly literature that analyzes the relationship between technology and art, both in Soviet Russia and Western Europe, has engaged in questions of theorizing the avant-garde and its relationship to mass-art, politics, and the body. In his classic *Theory of the Avant-Garde*, Peter Bürger argues that the historical avant-garde criticizes art as an institution and demands to reintegrate art in the praxis of life within the society.[21] Although Bürger primarily analyzes Dada and Surrealism, leaving German Expressionism and Russian Futurism out of his discussion, his argument of deinstitutionalizing art and bringing it into life seems particularly relevant for the Soviet situation. Shklovsky argues that "art always and only deals with life. What do we do in art? We resuscitate life. Man is so busy with life that he forgets to live it. He always says: tomorrow, tomorrow. And that's the real death. So what is art's great achievement? Life."[22] In the Soviet context, the alliance of art and life is achieved by bringing technology into art. In his essay *A Struggle for Form*, Shklovsky asserts that it is to the author's advantage to "introduce technology into art….Technology and science transform things for us, illuminate the reservoir of forms. It is only necessary to live inside technology and not to purloin its material by force. As a result of such extra-literary work we will obtain new literary form."[23] Bürger's formulation of bringing art into life praxis is particularly fruitful in the Soviet context in which artists and theorists were seriously pondering what art is and what task it should serve in

[21] Peter Bürger, *Theory of the Avant-Garde*, trans. Michael Shaw, Minneapolis: University of Minnesota Press, 1984.
[22] *Shklovsky: Witness to an Era*, interviews by Serena Vitale, trans. Jamie Richards, Chicago: Dalkey Archive Press, 2012, p. 57.
[23] Viktor Shklovsky, "Bor'ba za formu," in *Gamburgskii schet, stat'i, vospominania, esse, 1914-1933*, Moscow: Sovetskii pisatel', 1990, p. 392.

the newly created society. At a time when intellectual and cultural experimentation flourished, technology and machines infused art and life with new energy.

Andreas Huyssen's book *After the Great Divide*[24] offers an interpretation of technology as the crucial element in bridging the gap between the masses and art. He maintains that mass culture depends on the technologies of mass (re)production while at the same time technology and the experience of the technologized age have profoundly transformed works of art. Technology played a crucial role in overcoming the life-art dichotomy which the Soviets so fervently advocated. Huyssen's reflections on the bipolar experience of technology in the modern age, the aesthetization of technology and the horror of the apparatus caused primarily by WWI machinery, is especially useful for analyzing the full scope of avant-garde attitudes and responses toward technology in the decade of the 1920s.

In his seminal book *The Total Art of Stalinism*, Boris Groys asserts that the avant-garde was institutionalized from the very beginning and advocated an aesthetico-political organization of the country. The intrusion of technology in nineteenth century Europe caused chaos and the disintegration an old world; eradicated by technologized humanity. Groys argues that the Russian avant-garde appeared as a logical result of this radical transformation, and rather than interpreting technology as a site of transforming life, Groys reads it as a remedy that provided relief from the initial technological shock. He analyzes the Russian relationship with technology in Benjaminian fashion: "Contrary to what is often maintained, the Russian avant-garde was far from enthusiastic about technology or inspired by a naive faith in progress. From the outset, it

[24]Andreas Huyssen, *After the Great Divide: Modernism, Mass Culture, Postmodernism*, Bloomington: Indiana University Press, 1986.

was on the defensive rather than the offensive. Its paramount task was not to destroy but to neutralize and compensate for the destructive effect of the technological invasion."[25]

In her book, *Wonderlands of the Avant-Garde,* Julia Vaingurt enters into conversation with both Bürger's notion of repealed autonomy of the avant-garde method and Groys's claim that the avant-garde attempted to conflate art and politics. According to Vaingurt, the Soviet avant-garde was not merely an instrument of the regime, it was also a creative force in which technology allowed artists "to refashion themselves from contemplators of life to its engineers, and transform life in accordance with their aesthetic designs."[26] Vaingurt proposes two conceptions of technology: instrumental, which is in the service of the state, and imaginative, which is liberating, creative, and individual. She argues that the avant-garde served contemplative rather than constructive aims (13), and here she is in line with more positive interpretations of technology, such as Susan Buck-Morss, who asserts that technology represented "dream images, expressing the wish for a transformed relationship between human beings and their environment," and that in the Soviet Union people were making machines to enhance their existence.[27]

Improving human existence by focusing on human biology and the body as a whole becomes another important theme in critical literature that engages in the analysis of the Soviet techno-utopian project. Enhancing the body through metallization as a metaphor for the creation of the communist New Man is the main subject of Rolf Hellebust's book *Flesh to Metal*. For Hellebust, the acquisition of various qualities of metal, primarily iron and steel, which is further

[25] Boris Groys, *The Total Art of Stalinism: Avant-garde, Aesthetic Dictatorship, and Beyond,* trans. Charles Rougle, Princeton: Princeton University Press, 1992, p. 14.
[26] Julia Vaingurt, *Wonderlands of the Avant-Garde: Technology and the Arts in Russia of the 1920s*, Evanston: Northwestern University Press, 2013, p. 4.
[27] Susan Buck-Morss, *Dreamworld and Catastrophe: The Passing of Mass Utopia in East and West*, Cambridge, Massachusetts: The MIT Press, 2000, p. 64.

subject to transformation, is at the core of eliminating the difference between worker and machine. In his analysis of Alexei Gastev's *Poetry of the Worker's Blow* (1918), Hellebust looks into the formation of the metallization myth in which, through a series of metamorphoses, the worker's body changes from flesh to metal into the imagined titan.[28] The metallization narrative that springs from literature further influences Soviet culture, whose main symbol becomes the metallized and technologized revolutionary body.

Another theme relevant to the Soviet obsession for extending bodily limits, which is also pertinent to my project, is the quest for immortality. In her monograph *Abolishing Death*, Irene Masing-Delic argues that while the Soviets abandoned Orthodox religious mysticism of transcendental immortality, they became invested in the idea of a materialist resurrection of physical bodies. In the Soviet state, immortality would be achieved by scientists aided with advanced resurrection technology. Imagining that science and technology together would create immortals only reflected an endless reliance on the power of Soviet ideology. Masing-Delic asserts that in accordance with this conviction "the embalmed Lenin…was to become the first to return from the dead….He was to become the first to be made to rise by scientific means.[29]

Along with the quest for immortality, early Soviet culture was obsessed with physiological aspects of the body, elimination of impurities, and rejuvenation. In his book, *Sex in Public*, Eric Naiman asserts that early Soviet culture projected its ideological and political concerns utilizing a corporeal lexicon.[30] Proletarian culture thought about society as a collective uncorrupted body, which represented the might of War Communism. This was a male

[28] Rolf Hellebust, *Flesh to Metal: Soviet Literature and the Alchemy of Revolution*, Ithaca: Cornell University Press, 2003, p. 48.
[29] Irene Masing-Delic, *Abolishing Death: A Salvation Myth of Russian Twentieth-Century Literature*, Stanford: Stanford University Press, 1992, pp. 15-16.
[30] Eric Naiman, *Sex in Public: The Incarnation of Early Soviet Ideology*, Princeton NJ: Princeton University Press, 1997.

biologically improved body (endocrinology flourished around this time[31]), free from diseases. Alongside this corporality, images of disfigured, sexualized, feminized bodies reflected the anxieties created during the NEP period, perceived as a temporary retreat to capitalism. Naiman does not focus on analyzing technology as such, but I think that anxieties about the NEP era influenced the appearance of apocalyptic visions of technology as well. The female malfunctioning machine Ophelia in Yury Olesha's *Envy* (1927) illustrates the technologized body gone awry. Ophelia, who exists only in her creator's mind, symbolizes the techno-gendered NEP body, onto which the political apprehensions of the 1920s are inscribed.

Scholarly accounts that I have discussed generally emphasize that technology played a vital role in art by enabling the union of art, life and politics, bringing the ideological art to masses. Newer scholarly works argue that technology served the imaginary and creative goals in art, rather than just carry out the state politics. Some scholars interpreted obsession with technology in arts as a remedy for technological advancement that initially shocked the modern Soviet subject. Scholars who focused on the body and technology contributed to the field by analyzing the New Soviet Man as a techno-worker whose revolutionary body reflected the strivings of the newly formed socialist country. The obsession with body altered by technology reflected itself in the proliferation of bizarre ideas of scientific resurrection as well as fascination with physiological aspects of the body that can be technologized and rejuvenated. I contribute to the existing literature by looking at how technology affected the notions of gender by transforming and inscribing both male and female bodies into the cultural and political canvas of the avant-garde and early Socialist Realist period.

[31] Frances L. Bernstein, "'The Dictatorship of Sex': Science, Glands, and the Medical Construction of Gender Difference in Revolutionary Russia," in *Russian Modernity: Politics, Knowledge. Practices*, David L. Hoffmann and Yanni Kotsonis, eds. Basingstoke: Macmillan Press ltd, 2000, pp. 138-160.

What most of the critical literature acknowledges is that the 1920s and 1930s witnessed a radical change in the perception of physicality brought about by new technology. However, the ideas of altering and improving the body were not a novelty of this particular period. Nineteenth century Russia endorsed the ideas that a body can be disciplined and trained to serve revolutionary goals and ultimate reason. In Nikolai Chernyshevsky's novel *What Is to Be Done?* (1863), revolutionary Rakhmetov trains his body on a bed of nails and renounces life's pleasures to serve socialism, science, and the commune. Chernyshevsky regards the human body as a complex chemical combination that works on explicable mechanistic principles. In Chernyshevsky's novel the modern man thinks of himself as human-machine and dreams of living in harmony with technology. The Crystal Palace that appears in Vera Pavlovna's fourth dream, is a symbol of this techno-utopian dream. The edifice is built of cast iron and glass, furnished with aluminum furniture; electricity is used instead of oil lamps; the work is done by means of advanced technology. In his *Notes from the Underground* (1864), Dostoevsky is in dialogue with Chernyshevsky and parodies rationalism and scientific determinism. The Underground Man asserts that humans cannot be turned into an organ stop, into a piano key, or into a mathematical formula. For the Underground man, humans that act according to reason only are mechanized and have no identity. These opposing attitudes become relevant in Evgenii Zamiatin's dystopian novel *We* (completed in 1921), in which the One State (the Soviet version of the Chrystal palace) is inhabited by malfunctioning robots (the math teacher Pliapa) and not entirely mechanized humans (D-503) who are subjected to the Great Operation (lobotomy) that prevents rebellion.

Nikolai Fedorov, regarded by some contemporary thinkers as one of the precursors of transhumanism, is another important nineteenth century figure who with his idiosyncratic

worldview, thought about restoring human bodies and resurrecting the dead ancestors. In his posthumously published work, *The Philosophy of the Common Task* (1906-1913), Fedorov argues that sophisticated technology of the future will restore the fragile body and help develop immortal human beings. Fedorov's ideas became relevant in the 1920s and influenced many writers, such as Boris Pil'niak, the main topic of chapter one. It is important to emphasize that along with Western influences, early Soviet culture also draws from these nineteenth century Russian sources and builds on them. With the arrival of new technological era, authors and artists were reevaluating many nineteenth century ideas and adapted them to match their contemporary moment.

In early Soviet culture, technology was vigorously celebrated almost in all the arts. Cinema, itself a technologized medium, showed how, the human body gained new qualities and perspectives when exposed to camera lens, that were inaccessible to human kind in the pre-mechanistic time. In his 1922 "We: Variant of a Manifesto," Dziga Vertov enthusiastically writes about "kinship with the machine,"[32] asserting that: "the new man, free of unwieldiness and clumsiness, will have the light, precise movements of machines, and he will be the gratifying subject of our films" (8). According to Vertov, film camera (kino-eye) improves "shortsightedness of the human eye"(14); editing possibilities enable faster or slower bodily movements, technology has "its own dimensions of time and space" (16), and cinema makes "a man more perfect than Adam"(17). Through technologized visuality, the film medium creates a new Soviet body: "From one person I take the hands, the strongest and most dexterous; from another I take the legs, the swiftest and most shapely; from a third, the most beautiful and expressive head–and through montage I create a new, perfect man." (Vertov 17)

[32] Dziga Vertov, *Kino-Eye: The Writings of Dziga Vertov*, Annette Michelson, ed., trans. Kevin O'Brien, London: University of California Press, 1984, p. 7.

Beside his improved techno-body, a "man more perfect than Adam," gets a new political identity. Lenin realized the enormous political potential of cinema and has allegedly said to Anatoly Lunacharsky, the head of Soviet Ministry of Education (Narkompros), that "off all your arts, in my view, the most important for Russia is cinema."[33] Lenin realized that Soviet cinema could easily reach the masses and provide immediate ideological instruction. Sergei Eisenstein sees political agitation as one of the leading principles of Soviet cinema: "the first thing to remember is that there is, or rather should be, no cinema other than agit-cinema."[34] Like most of his contemporaries, Eisenstein bonds socialism and art through technology asserting that in theater and cinema a work of art "is first and foremost a tractor ploughing over the audience's psyche in a particular class context."[35]

The enthusiasm for machines and its potentials for reconstructing the imperfect human body were vital for Vsevolod Meyerhold and his biomechanical acting method. Inspired by Taylorism, Meyerhold believed that the human body had the potential to perfect itself by utilizing technological abilities. The body as an instrument can be manipulated in acting in order to produce the maximum effect with minimal energy used. According to Meyerhold, the machine is the model for the new human body, a "human organism is like a car engine (avtomotor)."[36] In order to achieve machine movements, all the bodily excess, that is, unnecessary and unproductive movements have to be eliminated through a carefully calculated conscious process. The movement of the actor's body can be scientifically trained for the purpose of achieving

[33] This quote is usually translated in critical literature as "Of all the arts, the cinema is the most important for us." In the Russian original, which I translated, the phrase goes as follows: "Iz vsego vashego iskusstva, po-moemu, samoe vazhoe dlia Rossii— kino" in Anatoly Lunacharsky, "Teatr i iskusstvo: O khudozhestvennoi politike," *Izvestiia*, no. 94, 1923, p. 5.
[34] Sergei Eisenstein, "The Montage of Film Attractions, " in *The Eisenstein Reader*, Richard Taylor, ed., trans. Richard Taylor and William Powell, Basingstoke: Palgrave Macmillan, 2009, p. 40.
[35] Sergei Eisenstein, "The Problem of the Materialist Approach to Form," in *Eisenstein Reader*, p. 56.
[36] Vsevolod E. Meyerhold, "Plan kursa po biomekhanike"(1922) at http://teatr-lib.ru/Library/Mejerhold/method/#_Toc262407026 (last accessed April 25, 2019)

perfect rhythm, precision, and stability of the machine. In his first interview, Eisenstein enthusiastically comments on Meyerhold's concept of the techno-body: "In the era of mechanization, the body of the actor-biomechanist works like a machine. Every movement of separate muscular groups is obliged to be seen as a motor reflex of the entire body-apparatus."[37]

Soviet literature was also immersed in discussing the technological age and its influence on humans. In *Cement* (1925), Gladkov's character Brynza is obsessed with technology. A self-taught engineer, Brynza lives in the factory with machines and feels he is one with them: "When I'm with the engines, I am an engine myself…For me there is only one thing: me and the machine; we are one."[38] Similarly, in Olesha's *Envy* (1927), Volodia Makarov, a soccer hero and "a completely new man,"[39] wants to become a machine: "I am a man-machine…I've turned into machine. Or if I haven't yet turned into one, I want to…Wonderfully indifferent proud machines…Works right through a job without a shiver of wasted motion. I want to be like that, too. (*Envy* 301)

In his poetry Vladimir Mayakovsky utilizes technology to create a new mass body that has wings like an airplane, legs like steam engines, and a soul filled with electricity. In his "How Verses are Made" (1926), Mayakovsky talks about the necessity of writing poetry within the physical space of the machine. In order to write, a poet must "take the bus No. 7 on Lubianskaia Square to Nogin Square. This disgusting jolting will enhance the charm of a different life."[40] The machine is a push necessary for life, it expands the body, alters physical space with its mechanical "jolting" and stimulates the creation of art. For Mayakovsky, technology along with

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[37] "Biomekhanika: Iz besedy s laborantami Vs. Meierhol'da S.M. Eizenshteinom I V. I. Inkizhinovym," at http://teatr-lib.ru/Library/Eisenstein/O_meyer/#_Toc292184206 (last accessed April 25, 2019)
[38] Fedor Gladkov, *Cement*, trans. A. S. Arthur and C.Ashleigh, Evanston: Northwestern University Press, 1994, p. 16.
[39] Yuri Olesha, *Envy*, in *The Portable Twentieth-Century Russian Reader*, Clarence Brown, ed. New York: Penguin Books, 1985. p. 264.
[40] V. Mayakovsky, "Kak delat' stikhi?," in *Polnoe sobranie sochninenii*, vol. 12: Stat'i, zametki i vystuplenia (1917-1930), Moscow: Khudozhestvennaia literatura, 1959, p. 99.

science can save the body from death. Roman Jakobson remembers the conversation he had with Mayakovsky in which the poet talked about eliminating mortality. "'Don't you think, he suddenly asked, "that we will at last achieve immortality?"… "I am absolutely convinced," he said, "that one day there will be no more death. And the dead will be resurrected.'"[41]

In his 1923 poem "About that,"("Pro eto") the lyrical subject is asking for a scientist to resurrect him:

Voskresi	Resurrect me
Khotia b za to	Even if only because
Chto ia	I was
Poetom	a poet
Zhdal tebia	waiting for you
…	…
Voskresi menia	Resurrect me
Khotia b za eto	Just for the sake of it
Voskresi-	Resurrect me
Svoe dozhit' khochu!	I want to live out all of it![42]

The belief of Mayakovsky's generation was that science equipped with advanced technology would alter life and abolish death. Jakobson asserts that these verses went beyond literary imagination and that for Mayakovsky this "was not just a literary device but a genuine and seriously offered request." (Jakobson, pp. 285-6) Even the way Mayakovsky's funeral procession

[41] Roman Jakobson, "The Generation That Squandered Its Poets," in *Language in Literature*, Krystyna Pomorska, Stephen Rudy, eds., Cambridge: Harvard University Press, 1987, p. 285.
[42]Vladimir Maiakovsky, Polnoe sobranie sochinenii v trinadtsati tomakh, vol. 4, Moscow: Khudozhestvennaia literatura, 1957 at http://az.lib.ru/m/majakowskij_w_w/text_0340.shtml (last accessed April 27, 2019)

was organized spoke of the poet's admiration for technology. Vladimir Tatlin designed the constructivist funeral wreath and the catafalque on which Mayakovsky's body was placed to go through Moscow streets. On April 21, 1930 *Literaturnaia gazeta* minutely described Mayakovsky's technologized funeral procession:

> they are removing from the [Writers'] club the coffin draped in red and black. The coffin is mounted on the platform of a truck (na platforme gruzovogo avtomobilia). Next to the coffin, on a steel-colored platform there is a wreath made of hammers, flywheels and screws; the inscription reads: 'An iron wreath to an iron poet'… Around 7 pm the International is heard from the crematorium.[43]

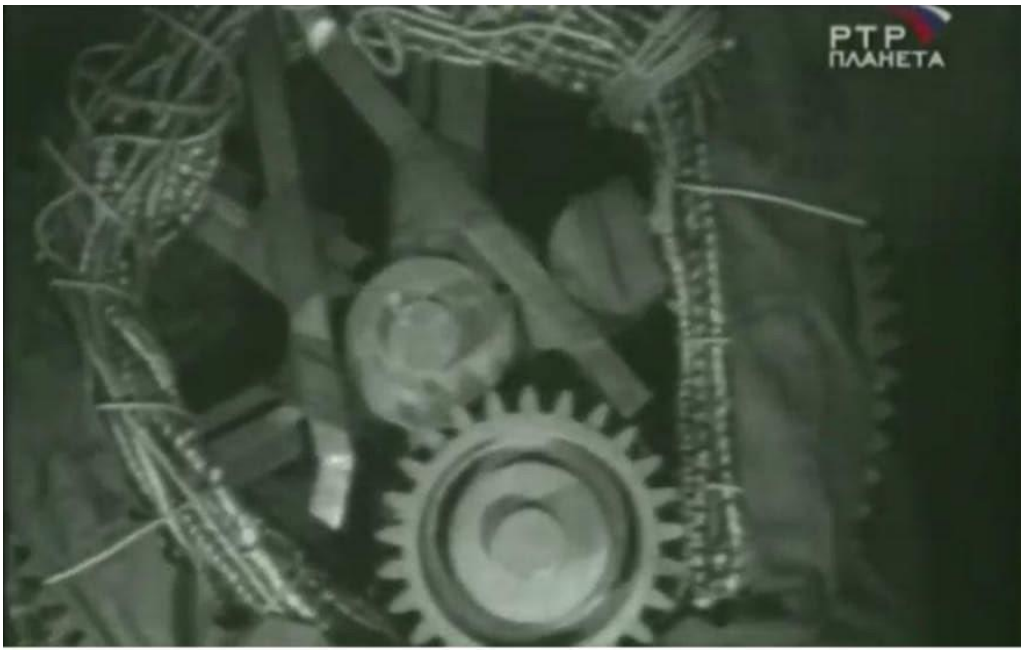

Figure 3: The funeral wreath designed by Vladimir Tatlin (Frame capture).

Even in death, Mayakovsky's body continued to be altered by new technology. The fact that his body was cremated was also very avant-garde for Moscow that got its first crematorium only two and a half years earlier. According to the *Literaturnaia gazeta,* on April 14, 1930, the day of the

[43] D. Kal'm, "Za grobom poeta revoliutsii," *Literaturnaia gazeta*, no. 16, 1930, p. 2.

poet's suicide, the State Institute for Brain Research extracted Mayakovsky's brain in order to analyze it and display it in their "Pantheon" organ collection. Like Lenin's body, Mayakovsky's brain was to serve as a reminder that in the future he might be resuscitated with the help of science like he asked to be in his poem. To unite the two Vladimirs around the theme of scientific immortality, Jakobson quotes Mayakovsky's verses about Lenin in which the poet looks at Lenin's displayed body at the Mausoleum to express the belief in the deathless future:

> Death will never dare
> To touch him.
> He stands
> In the total sum of what's to be! (Jakobson, p. 286)

The ideas that the human body can be modified, physical limits surmounted, human life prolonged or even made everlasting flourished in early Soviet culture. The Soviets were engaged in creating their techno-body communist utopia believing that their science and technology will redefine human beings.

I analyze the Soviet techno-body, both male and female, by utilizing the notion of the cyborg. Most standard definitions of the cyborg explain the term as the body transformed, manipulated, or enhanced by technology. This body is partly mechanical and partly biological. The exact proportions of machine and organism are not strictly determined. This characterization is further expanded with a locus, that is, the setting where the cyborg is placed. The cyborg may appear in the physical world, in the fictional realm, and in the digital environment. As such, cyborg represents a broad identity, it can be a concept, image, metaphor, a part of material or digital reality. The range of all these meanings go from the very narrow to overly open-ended.

The narrow definitions explain the cyborg strictly: the hybrid of machine and organism. The broadest understandings go as far as to name a cyborg anything that involves a minimal contact between the human organism and technology: a person riding a bicycle is a cyborg. The strict definitions are exclusive of various other understandings of the term, while the broadest ones are relativizing the concept by being too inexact. These attitudes are persistent and are also based on how individuals see their own interactions with technology. The problem of definition is and was unsettling for many thinkers who scrutinized the subject in scholarly and scientific literature. I will briefly outline some of the major theoretical contributions to cyborg literature that have informed my understanding and analysis of Soviet cyborgs. Although the term cyborg seems to be chronologically displaced when applied to any period before 1948, critical literature that discusses cyborg identities has questioned this position.

The term "cybernetics" first appeared in Norbert Wiener's eponymous book in 1948 introducing the study of control and communication in the animal and the machine. The term cyborg first appeared in 1960 in a text titled "Cyborgs and Space" by Manfred Clynes and Nathan Kline. The text was inviting "man to take an active part in his own biological evolution" and by becoming a "self-regulating man-machine" adapt to outer space conditions.[44] The human-machine hybrid encourages a proactive body-environment relationship by adjusting to extraterrestrial circumstances. According to Clynes and Kline, the cyborg provides a system in which "robot-like problems are taken care of automatically and unconsciously, leaving man free to explore, to create, to think, and to feel." (73)

Although the name cyborg was novel, the idea of modifying human identity with technology wasn't radically new. Cyborgian conceptions have evolved through history from the

[44] Manfred E. Clynes and Nathan S. Kline, "Cyborgs and Space," *Astronautics*: *Journal of the American Rocket Society*, New York, September 1960, pp. 72-73.

Enlightenment man-machine ideas of Descartes, La Mettrie, Leibniz, and Newton to the contemporary silicon-cyborgs. Literary cyborgs can be traced back to Homer's *The Iliad* and his portrayal of Hephaestus, Hera's lame son thrown from Olympus because of his bodily deformity. It is in his seclusion, living on the margins of ancient society protected by female deities (sea-nymphs) that Hephaestus remakes himself and becomes the first machine inventor. In *The Iliad*, he creates the first female automatons, his assistants in the forge and his alternative proto-cyborgian family. With his tools, Hephaestus refashions himself and becomes a cyborgian god. He makes himself a wheelchair that becomes part of his new modified body.

Figure 4: Hephaestus on a winged throne ca. 510 BCE.

In her discussion of Enlightenment cyborgs, Alisson Muri expands the traditional concept by asserting that "the figure of the cyborg is a metaphoric, academic, and political construction as much as it is a physical one."[45] She argues that the cyborg is not a twentieth century category, but rather an evolving concept that mutates over time and resists narrow definitions. Mark Coeckelbergh's book *New Romantic Cyborgs*, discusses the connections between Romanticism and technology and challenges the notion that the two are incompatible by showing examples of

[45] Muri, *Enlightenment Cyborg*, p. 17.

cyborg alliances in Mary Shelley's *Frankenstein* (1818) and Bram Stoker's *Dracula* (1897). In these works, themes of reanimating corpses via galvanism or Gothic machines and electricity through the occult remain central to the narratives. Coeckelbergh asserts that in "mechanical Romanticism" new tools were not mere instruments; they were tools of transformation: a transformation of society, of nature, and of the self."[46] In his book *The Dada Cyborg*, Matthew Biro traces the origins of the Weimar cyborg in Berlin Dada art and argues that historical avant-garde anticipates the contemporary transhumanism "through its radical practices of imagining new forms of non-bourgeois, hybrid identity."[47]

All contemporary cyborg literature acknowledges its debt to the groundbreaking Donna Haraway 1985 essay "A Cyborg Manifesto" that has redefined the meaning of a cyborg in cultural theory. One of the major points that Haraway made was to argue that the cyborg is "a condensed image of both imagination and material reality."[48] By including the realm of imagination, Haraway acknowledged fiction as the equally valid terrain for the creation of cyborgs. Fiction included writing and artistic creation in general where the imaginary has vital relevance for the transformation of the human being. In this way, the cyborg expanded its existence into the cultural texts that allowed creating diverse modes of life and alliances. Another vital point in Haraway's essay is that cyborg image welcomes transgression of boundaries that enable the interaction between diverse and contradictory systems. Cyborg transgresses boundaries between material and immaterial, human, machine and animal, imagination and reality to bring a possibility of new affiliations and potent mergers. These new cyborg affiliations

[46] Mark Coeckelbergh, *New Romantic Cyborgs: Romanticism, Information Technology, and the End of Machine*, Cambridge, Massachusetts: The MIT Press, 2017, p. 102.
[47] Matthew Biro, *The Dada Cyborg: Visions of the New Human in Weimar Berlin*, Minneapolis: University of Minnesota Press, 2009, p. 10.
[48] Donna J. Haraway: "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature*, New York: Routledge, 1999, p. 150.

suggested alternative forms of identifications, new ontologies, and different politics. In his book *The Dada Cyborg*, Miro expands on Haraways's notion and argues that the German avant-garde introduces the image of the cyborg to imagine new forms of non-bourgeois, hybrid identity. The Soviet case materialized this imagination by creating the socialist identity. What is particularly important for Haraway is the introduction of female cyborgs that have the potential to transgress gender roles and create new gender politics. She argues that new interactions, such as female engagement with technology, exposed the flaws of patriarchal domination by empowering women in direction of changing their traditionally submissive position in the society. This notion seems especially relevant for the Soviet culture of the 1930s. By introducing female cyborgs, or in the Soviet vocabulary "heroines of labor", as utopian images of women who actively worked with technology, the new culture provoked its female subjects to rethink their identities and create their new ontologies by radically transforming their lives. Haraway's cyborg is also about feminist writing and consciousness, as her empowered female cyborgs are writers that gain full awareness of their newly created identities. In the Soviet context, which saw the rise of first women authors writing about machines in the thirties, the conflation of technology with writing and new gender awareness is particularly pertinent.

My usage of the term cyborg adheres to these broader views that invite breaking down the body-machine-animal boundaries; are inclusive of the fictional as well as the material world; acknowledge that the cyborg has evolved through various historical periods; embrace the term as a cultural category as well as political one; are sensitive to gender politics and emancipation; and interpret the contact (animate and non-animate) as a site of transformation and creation of new productive alliances. My understanding of technology encompasses all kinds of machines, devices and mechanical structures, medical technology in its various manifestations (prosthesis,

implants, complex diagnostic machines) where innovation technology plays a crucial role in sustaining health and improving the human body. I also utilize the term to designate the process of making or doing (such as technologies of writing), technology as a skill, craftsmanship, production, and art (techne), and ultimately the medium of cinema whose ontology depends on technology.

In light of these extended views, my project aims to understand how the rise of technology and technological discourses in early Soviet culture helped to remake the body, producing a Soviet cyborg first male, then female. In the twenties, in order to abolish mortality and render the body perfect, male authors engaged in writing about sophisticated technology based on experimental scientific and medical research. Along with the factory which is the central place of forge of the new machine-people (workers and engineers in the poetry of Gastev and prose by Platonov and Pil'niak), another site where the male cyborg arises as a symbol of new society and culture is experimental medicine. Altering the body via advanced machines coupled with new Soviet science, becomes a literary obsession for many authors writing in this period.

In the early twenties, in Soviet Russia and the West the medical science became obsessed with technological improvements of the body, including surgical rejuvenation, and the study of human internal secretion glands for the purposes of enhancing primarily male bodies. Leading Western rejuvenators such as Eugen Steinach (Vienna), Sergei Voronov (French surgeon born in Russia), Harry Benjamin (Berlin, New York) and Fred Koch (Chicago) worked extensively on male sexual hormones. As Hirshbein argues, "the theory of surgical rejuvenation in the 1920s was that men were old when their sex glands malfunctioned, and that old men's bodies and

spirits could be transformed with more material from the sex glands."[49] Complicated surgical procedures that involved sophisticated technology aimed at restoring youth and vitality, including work efficiency and thinking power, to aging men by reactivating their sex glands. These procedures involved uni- and bi-lateral vasectomy and grafting testes from young chimpanzees onto older men.

To the rejuvenators, technological modification of the body via manipulation of glands had the potential to remake the human body and manipulate sex. The first experiments involved animals and made the scientists believe that humans can also be altered like rats, roosters, and dogs. In 1924, in his book on rejuvenation, Norman Haire minutely describes Eugen Steinach's laboratory in Vienna:

> The rats on which the original experiments were made, beautifully dissected and displayed—the castrated male and the spayed female; then the castrated male into which a testicle had been grafted, and the spayed female into which an ovary had been grafted; then the masculinized female, the feminized male which actually suckled the litter of another animal; the various hermaphrodites and homosexuals artificially produced; the rejuvenated senile rates... One must see it to grasp it all.[50]

Frances Bernstein writes that Soviet scientists B. A. Ivanovskii, N. I. Shchukin and others enthusiastically underwent similar experiments which allowed them to theorize that animals and humans are interchangeable. Shchukin gives almost the same example of animal testing done in the Soviet Union:

[49] Laura Davidow Hirshbein, "The Glandular Solution: Sex, Masculinity, and Aging in the 1920s," *Journal of the History of Sexuality*, vol. 9, no. 3, 2000, p. 280.
[50] Haire, Norman, *Rejuvenation: The work of Steinach, Voronoff, and Others*, London: G. Allen & Unwin, 1924, pp. 11-12.

> Look at Figure 1. In the upper left is a normal rooster. Beneath him is the same rooster after his sex glands were removed. He lost his former appearance: his coxcomb, beard-tuft and ornamentation disappeared. On the lower left is the same rooster after ovaries taken from a chicken were grafted under his skin. In such an unusual place the ovary continued its action and the rooster was made to look like a chicken.[51]

The Soviet government supported all these experiments including Il'ia Ivanov's bizarre attempts at hybridizing humans and apes. The government financed Ivanov's trip to Africa in 1925. The top political officials, Anatoly Lunacharsky and Lev Kamenev, signed the budgetary approval. After two years spent in Africa, Ivanov reported on the failed insemination of chimpanzee females with human sperm, and his rejection from the French governor to inseminate women with ape sperm. In 1927, the Soviet government opened a Primatological Nursery in Abkhazia on the Black sea to continue with the hybridization project. Alexander Etkind writes that,

> Five Soviet women were to be found to take part in these experiments; the Communist Academy required Ivanov to obtain their written consent to be inseminated with sperm from apes. The Academy specifically claimed that these Soviet women should undergo the insemination, pregnancy, and motherhood of the hybrids because of their pure interest in science; they would receive no money for their service to science.[52]

The entire scandalous experiment failed in 1930. Etkind claims that this experiment was supported by the Bolsheviks because its potential success would be a victory of atheism and materialism and would show the superiority of Soviet science. Oleg Shishkin, argues that this project was meant for the Soviet elite in need of rejuvenation surgery. Kirill Rossiianov reads

[51] Frances L. Bernstein, "'The Dictatorship of Sex'," p. 144.
[52] Alexander Etkind, "Beyond Eugenics: The Forgotten Scandal of Hybridizing Humans and Apes," *Studies in History and Philosophy of Biological and Biomedical Sciences*, no. 39, 2008. p. 207.

these experiments as an attempt at transcending boundaries between humans and animals. In any case, Etkind asserts that most of the Kremlin elite have fully supported the research: "Aged and worn men who religiously believed in science, the Bolsheviks used methods of rejuvenation extensively. Kremlin doctors experimented with various methods of rejuvenation: implantations of monkey glands, known as Voronov operations; vasectomies, known as Steinach operations; and a curious substance extracted from pregnant women's urine, known as gravidan." (Etkind 208)

Literature in the twenties was not indifferent to scientific experiments conducted in the twenties. In 1924 Mikhail Bulgakov writes his novella *The Fatal Eggs* in which he paints an apocalyptic picture of science that gets out of control. The main protagonist, a specialist in amphibians, Professor Persikov accidentally discovers a ray of red light that induces amoeba reproduction and growth at enormous speeds. The newspapers publicize the news within hours and describe the red ray as having the ability to "extend life of lower organisms."[53] The fact that the ray is red alludes to Bolsheviks and their control of science that was engaged in producing and extending life. At the same time, the country is affected by an unknown chicken disease that results in a complete extinction of all poultry. A Sovkhoz manager Aleksandr Rokk takes Persikov's apparatus to breed new chickens. Persikov comments "so you want to resurrect (voskresit') your chickens immediately" (345). Obviously, Bulgakov satirizes the discourse of resurrection through Persikov. The apocalyptic scenario begins to unfold when the reptile eggs which Persikov ordered for his research are by mistake sent to Rokk's farm. Not knowing what kind of eggs he got, Rokk uses the ray and breeds gigantic aggressive snakes, ostriches, and crocodiles which begin killing people. Persikov is killed by a mob that punishes him for the appearance of the snakes. Bulgakov was instructed to change the initial apocalyptic ending in

[53] Mikhail Bulgakov, *Rokovye iaitsa*, in *Sobranie sochinenii*, vol. 2, Moscow: Golos, 1995, p. 317.

which Moscow is destroyed by the giant snake army, and ends his satiric story of Bolshevik technology of life by choosing a different kind of device. Bulgakov skillfully finishes the story with a frost in August, described as a deus ex machina, that ends the snake invasion. Although primarily a satire on the Soviet obsession with devising a radically new science and technology, Bulgakov's *The Fatal Eggs* also reveals a fascination and anxiety around this subject. Upon the discovery of the ray, Persikov's assistant Ivanov enthusiastically comments: "Professor Persikov, you have discovered the ray of life…H. G. Wells' characters are nothing in comparison to you…And I thought these were all fairy tales" (316).

Bulgakov was so fascinated with this topic that already in the following year 1925 he wrote *The Heart of a Dog*, a novella whose central theme is rejuvenation and eugenics. In the novella, Professor Preobrazhenskii[54] regularly performs rejuvenation surgeries on rich aging citizens. Obviously, Professor Preobrazhenskii here uses Voronov's method of transplanting apes' sexual glands onto humans. His patients first notice that their sexual life has improved. One of them comments: "This is beyond description… I haven't experienced anything like this in twenty-five years."[55] After this initial success the patients demand more rejuvenation. Most of the bodies in the novella are corrupted either by various diseases and injuries or by age. In the beginning of the story, the dog Sharik is in pain as his body was injured by a local cook who poured boiling water on him: "My body is broken, beaten! People have physically abused it. The main thing is that when the boiling water hit me it ate through my coat and therefore there is no protection for my left side (47). The promiscuous local female typist who sells her body for some decent food is also sick: "the top of her right lung isn't well and she has a French female disease [syphilis]" (47). Descriptions of meat preparation techniques from separating flesh from bones,

[54] Professor Preobrazhenskii's his last name is derived from preobrazhenie which means transformation, transfiguration.
[55] Mikhail Bulgakov, Sobach'e serdtse, in Sobranie sochinenii, vol. 3, Moscow: Golos, 1995, p. 58.

to mincing and cutting the insides of animals abound in the story. Professor Preobrazhenskii has an entire collection of human brain specimens exhibited in his office. Disfigured, injured, and decaying bodies in the novella symbolize what Naiman aptly describes as the political discourse of the 1920s, "the disorganized corrupted body" with "biological scars left by capitalism."[56]

The Soviet techno-surgical intervention appears as a site where healthy communist bodies are constructed. Professor Preobrazhenski preforms an operation in which the testes and pituitary gland of a local deceased hooligan are transplanted into the dog Sharik. Bulgakov's description of the surgical procedure, including the recovery period, uncannily matches the actual medical reports on rejuvenation surgeries described in doctor Haire's book *Rejuvenation: The Work of Steinach, Voronoff, and Others*, published in London in 1924. Bulgakov, who was a trained venereologist and closely followed the latest medical developments both in his home country and the West, incorporated a very accurate surgical procedure in his novella with the exception of the transplantation of the pituitary gland of a human into Sharik's head, which he entirely fictionalized. The result of Professor Preobrazhenskii's eugenic procedure is the cyborg born out of meld of technology, animal, and human. In the words of Donna Haraway, the cyborg appears "precisely where the boundary between human and animal is transgressed," (152) and Bulgakov creates a story where these boundaries have been profoundly disturbed. Once Bulgakov's hybrid learns how to speak, he selects a cyborgian machine-dog name for himself Poligraf Poligrafovich Sharikov. Doctor Bormental' who assists with the surgery exclaims that "a homunculus has been created without the help of Faust's retort." (91) In Goethe's *Faust*, Wagner creates a manufactured little human Homunculus who lives in the laboratory. Homunculus lives in the lab retort as he has no material body. He jocularly calls Wagner his father and discusses his imperfect creation via introspection:

[56] Naiman, *Sex in Public*, p. 225.

"Well, there, Papa! ...[57]

Clutch me affectionately to your breast,

But not too roughly, or the glass might shatter.

Such is, you see a property of matter:

Things natural find all the world scant place,

While things synthetic want a sheltered place.[58]

Drawing from Enlightenment's dualism of the body and mind (spirit), Homunculus talks about his existential status of being neither fully material (as his retort might shatter) nor immaterial (he cannot live with things natural). Homunculus's irresolvable contradiction, being neither the body nor the mind finds its solution in Bulgakov's novella. Bulgakov gives his homunculus, Poligraf Poligrafovich, an actual cyborgian body that doesn't require a retort to sustain. The cyborgian body of Poligraf Poligrafovich overcomes the mind-body aporia, if only temporarily, by offering a newly crafted body, a new sheltered place, that hosts the mind. For Bulgakov technology was a site of admiration, but also anxiety, and he never fully glorified it as many of his contemporaries did. Bulgakov's apocalyptic vison of a newly crafted man, who in the course of the novella turns into a horrible Soviet official with dangerous canine behavior, resolves in another operation in which professor Preobrazhenskii reverses the process and Sharikov returns to being a dog.

Rejuvenation and immortalization through blending physical boundaries were central ideas in Aleksader Bogdanov's "Tektologiia" written in the 1920s. In it, Bogdanov talks about conjugation, a term he borrows from biology, as the main principle of melding disparate

[57] Like in *Faust*, Poligraf Poligrafovich jokingly calls professor Preobrazhenskii his dad (papasha, 96).
[58] Quoted in Şeyda Sivrioğlu, *The Faustus Myth in the English Novel*, Newcastle upon Tyne: Cambridge Scholars Publishing, 2017, p. 78.

categories (animate and non-animate) with the purpose of initiating transformation. According to Bogdanov it is the tool, apparatus, or the machine that initiates the conjugation process: "conjugation connects our brain with the most distant star when we see it through a telescope, and with the smallest bacterium that we see through the microscope."[59] Bogdanov asserts that once the elements begin the conjugation process, they are in interaction, begin to intermingle and influence each other by moving from one into another. In other words, Bogdanov talks about the blurring of fixed borders via technology that produces change. The moment when all the borders are broken down, Bogdanov names ingression or process of entering or intruding (*ingressiia, vkhozhdenie*, 158). Technology enables the union (*soedinenie*) of "tender cells of the brain with steel" (159). In 1926, Bogdanov opened the Institute for Blood Transfusion in which he tested out conjunction on the physiological level. He was exchanging blood of young people with blood of aging or sick patients in order to, as he claimed, rejuvenate the latter and make the former wiser. Bogdanov compares blood rejuvenation with resurrection:

> someone else's blood can almost "resurrect" (voskreshat') and bring back to life people who are in agony; moreover, the blood does it with such speed that it has an effect of a miracle on those who observe the process of blood exchange. The blood of one person acts as an active factor in tissue rearrangement of another person. Once the blood is exchanged it continues to regenerate the organs... In the long run, it changes the entire organism by overcoming the processes of its decline.[60]

Blood conjunction is achieved by transfusion technology: "the most appropriate apparatuses are the suction-injection pumps, and injector syringes with two openings; when using the tubes, it is

[59] Aleksandr Bogdanov, *Tektologiia:Vseobshchaia organizatsionnaia nauka*, Book 1, Moscow: Ekonomika, 1989, p. 144.
[60] A. Bogdanov, "O fiziologicheskom kollektivizme," 1921, at https://ruslit.traumlibrary.net/book/bogdanov-vestnik/bogdanov-vestnik.html#work007001 (last accessed May 1, 2019)

necessary to it with a paraffin coating." Bogdanov's cyborgian blood network was aimed at creating one communal body, which was ideologically founded: "The deep and uniquely revolutionary purpose of this method lies in breaking the borders of physiological individuality, in supporting one organism with the vital elements of another to fight against destructive spontaneity, in direct biophysical collaboration" (Ibid.).

According to Groys, the peculiar blood exchange represented "communism on the body level" that granted materialistic prolongation of life or even immortality. Groys argues that in this way, "yearning for immortality is not mitigated by god but rather by the state. The state undertakes to pay the people with time, not money or consumer goods, but with a life span until their immortality [is reached]."[61] Bogdanov had many patients, among them Lenin's sister Maria Ulianova, Maxim Gorky, and based on his son's recollections, Stalin was thrilled by the idea of the rejuvenation of the military. However, Bogdanov died in 1928 as a result of one of the transfusion exchanges with a student suffering from tuberculosis and malaria who after the procedure made a complete recovery. Thanks to Bogdanov's founding of the Institute for blood research, the Soviet Union had a centralized system of blood banks in many centers (Leningrad, Kiev, Minsk, Tbilisi) before WWII, which, according to Douglas Huestis, no other country had at a time.[62]

What these examples show is that in the 1920s, the fascination for most of the authors was to engage in writing that discussed ending mortality and rendering the body perfect via sophisticated technology based on experimental scientific and medical research. Their main obsession was altering the male body, which reflected the strivings of the new culture that,

[61] Boris Groys, "On Early Russian Transhumanist Ideas," at https://www.youtube.com/watch?v=uawmofhvNzE (last accessed May 1, 2019)
[62] Douglas W. Huestis, "Alexander Bogdanov: The Forgotten Pioneer of Blood Transfusion," *Transfusion Medicine Reviews*, vol. 21, no 4. October 2007, pp. 337-340.

according to Eliot Borenstein, was primarily engaged in constructing "the myth of a new, masculinized society."[63]

The theme of combating death by means of technology is taken up in the first two chapters on Boris Pil'niak and Andrei Platonov. Writing under the influence of Nikolai Fedorov's philosophy that celebrated machines as the catalysts for achieving immortality, Pil'niak places the body at the center of literary experimentation and fashions his cyborgian engineers, factory workers, and scientists. While his female characters, largely depicted as morally corrupt, perish from various lethal diseases, the male protagonists work to save the male body. In his short story *A Matter of Death* (1928), Pil'niak creates a cyborg who undergoes body freezing experiments to test out the alternatives in achieving perfection of the human form.

Biotechnological obsession is vital for Andrei Platonov's work, who contributes to the Soviet quest to reshape the body by engaging in "anthropo-technology." In this chapter, I discuss Platonov's eccentric ideas about human transformation via technology, a project he called "the digestive tract of the universe." Through Pavlovian-inspired imagery of the digestive tract, conceived as a powerful machine system, Platonov produces a peculiar immortal body. This body features a mechanical reproductive system that creates immortal individuals. In this male-technocratic utopia, women's role is reduced, and the perception of gender altered. In Platonov, we see the world freed from biological procreation introducing the cyborg that has overcome all mortal constraints.

The transition from the 1920s to the 1930s shows that women, whose access to machines was foreclosed by the hyper-masculinist culture of the Soviet avant-garde, "seize the means of production," and it is their role in relation to the new technology that gains a privileged place in

[63] Eliot Borenstein, *Men without Women: Masculinity and Revolution in Russian Fiction 1917-1929*, Durham, NC: Duke University Press, 2000, p. 4.

socialist realist art. While men experiment with biotechnological medical research, women opt for industrial machines to remake themselves, challenge the prevailing misogynist attitude, speculating about the future of technology. While in 1920s avant-garde literature women are consistently denied access to technology, my third and fourth chapters show that in socialist realist texts of the 1930s, the reverse takes place: women instead of men now have a privileged relationship to machines. In chapter three, I analyze the works of two female authors, the novelist Marietta Shaginian and film director Esfir' Shub, who contest the masculinist perspective on technology and through their own engagement with machines remap their bodies and consciousness to create their own feminist politics. Female cyborg is the main theme in which technology plays crucial role in the remaking of the society, and, most importantly, of women.

In my fourth chapter, I look at the representation of female tractor drivers in literature, press, and film. By integrating women into heavy industry in the thirties, the Party wanted to signal its constant determination toward progress and modernity. This official Party call led to the creation of the Soviet "heroine of labor" whose most powerful and progressive symbol was the female tractor driver. I analyze how these persistent images of female tractor drivers serve to refashion the new Soviet woman from a backward peasant tied to the land to the technologically empowered heroine from Eisenstein's Marfa Lapkina to Grigorii Aleksandrov's Mar'ana Bazhan (*The Tractor Drivers* 1939). This obsession leads to the creation of new culture which fashions itself in a feminine idiom. The potent fusion of the female body and machine projected onto the image of the woman at the tractor wheel riding into the bright future becomes the ultimate symbol of transformed Soviet technocratic society.

In the 1920s and 1930s, artists along with medical scientists were trying to build a new life, make new people, remake the aged and sick that could live and adapt to their time and

ideology. Endocrinological therapist and a surgeon Aleksei Zamkov and sculptor Vera Mukhina were a couple that worked on creating a modern Soviet subject, each in their own right. Zamkov was already well-known in the 1920s while Mukhina's became prominent in the 1930s. Not incidentally, the success of their carriers reflected the ideological and cultural concerns of these two decades. In the mid-twenties, Zamkov developed "gravidan," a substance that treated various illnesses and was utilized in rejuvenation therapy. Gravidan was obtained by extraction from the sterilized urine of pregnant women during different stages of pregnancy and was used as a treatment for the elderly, soldiers, and sick until the late nineteen thirties. Naiman asserts that while the hormone treatment narratives that followed Steinach and Voronov's methods emphasized physiological improvement, the narratives that hailed Zamkov's technique focused on "psychological and emotional transformation; they depicted the attainment of the ideological enthusiasm and general merriment that the press portrayed as a defining feature of the Soviet subject."[64] Zamkov's patient workers also claimed their strength improved significantly, they could sleep better and work long shifts without stopping. Among Zamkov's famous patients were Klara Zetkin, Maxim Gorky, Marietta Shaginian, Viacheslav Molotov and other Kremlin officials. Vera Mukhina reported to have regularly injected gravidan during her long shifts while she was casting her famous sculpture *Worker and Kolkhoz Woman*. Zamkov was the representative of the twenties culture that celebrated experimental medical research and worked on improving the body from the inside, technologizing it with serums, hormones, and animal glands.

[64] Eric Naiman, "Discourse Made Flesh: Healing and Terror in the Construction of Soviet Subjectivity," in *Language and Revolution: Making Modern Political Identities,* ed., Igal Halfin, London: Frank Cass, 2002, p. 296.

Vera Mukhina became interested in sculpting after a personal tragedy that happened when she was twenty-two. She had an accident that changed the course of her life. This is how she narrated it:

> The catastrophe happened in 1911 during Christmas break. We went sledding… I hit a tree… A twenty-two-year old girl who dreamt of great life, great art, and great love was left without a face (ostalas' bez litsa). I think that my scull cracked, and my nose was completely cut off. My first feeling was that I don't want to live anymore and that I need to move away from people. I wore bandages for a month. I wasn't allowed near mirrors. I looked at my face in the scissors. The right side of my face was larger than the left… In half a year I had seven plastic surgeries.[65]

Multiple reconstructive surgeries both in Russia and France, including the complete restoration of the nose, which involved inserting metal screws and sheet implants into her head, gave her back her face, but also made Vera Mukhina into a "cyborg." Her face was altered so significantly that she couldn't recognize herself after the bandages were removed. Mukhina recounts that she was a beautiful girl before and the accident turned her into a woman with a male face ("u menia muzhskoe litso"). After surviving the initial shock, Mukhina decided to change her life, claiming that she is grateful for what happened to her as "the catastrophe has determined the future course of my life."[66] She went from painting to sculpture. Sculpting, casting, and making bodies and faces became her preoccupation. The process of producing massive metal bodies helped her overcome her trauma. While Zamkov was treating the bodies from the inside, Mukhina was making them strong from the outside. She rose to prominence in the thirties, especially after her

[65] "Fantomnye boli: Vera Mukhina i Aleksei Zamkov", dir. Tat'iana Malova, Moscow, 2005 at http://fishka-film.ru/fantomny-e-boli/ (last accessed May 2, 2019)
[66] Vera Mukhina, *Avtobiografiia*, at http://vivovoco.astronet.ru/VV/ARTS/MUKHINA/AUTO.HTM (last accessed May 2, 2019)

stainless-steel sculpture *Worker and Kolkhoz Woman* was exhibited in 1937 World's Fair in Paris. Her monumental style, the ethos of grandiosity and overcoming of the flesh, celebration of fertility and the mass-body, reflected the Stalinist culture of the thirties.

Zamkov's and Muhkina's professional and family history is similar in so many ways. They met in a hospital during WWI where Mukhina volunteered as a nurse and Zamkov was working as a doctor saving wounded soldiers. Both of them were exposed to disfigured bodies and death that made them determined to change the future by means of their professional work. The fascination with bodily enhancement, health, and enthusiasm corresponded with building Socialism and new Soviet man. However, the change of ideological concerns and interests in the early thirties affected the life path of the Zamkov-Mukhina's family. Zamkov's work was no longer supported, he was sent to voluntary exile in the late thirties and died from a heart attack in 1942. The interest in experimental endocrinology and biology diminished with the beginning of Stalin's Great Terror, the time when many scientists fell out of favor and were labeled as enemies of the state. Stalinist culture continued with its focus on the body, but through industrialization and collectivization drive. Instead of medical solutions, 1930s promoted the enhancement of physical strength through engagement with heavy industry machines. This was the time for Mukhina's grandiose sculptures that showed Stakhanovite men and women made by the Party. This was also the time when the hyper- masculinist culture of the twenties was dying out and the culture that celebrated female ethos and emancipation as markers of progress under Stalin was emerging. My project tells a story of the transition from male to female cyborgian cultures of the early Soviet period.

CHAPTER 1

Redeeming Life: Immortalization Technology in Boris Pil'niak's Prose

Boris Pil'niak, whose work has been undeservedly understudied in contemporary scholarship, incorporated technology in his oeuvre and assigned a significant role to machines in his poetics. In Soviet literature, Pil'niak emerged as a fellow-traveler author (*poputchik*) who generally accepted the revolution but was not a party member and did not actively participate in propaganda. In his *Literature and Revolution* (1923), Lev Trotsky writes about Pil'niak's early novel *The Naked Year* (1922) and criticizes his understanding of Bolshevism. Trotsky's analysis articulates points that would be frequently repeated in literary criticism: "He doesn't turn his back on revolutionary Russia; on the contrary, he accepts it and even praises it in his own fashion. But he merely says so. He cannot acquit it artistically because he cannot grasp it intellectually."[1] Labeled as a gifted but, nevertheless, incompetent author as far as the revolution is concerned, Pil'niak's rich and multifaceted prose was characterized as monotonous: "the general impression is always the same —a restless dualism" (Trotsky 82). Both Russian and western scholars echoed Trotsky's views by furthering the claim of dualism. In his seminal work *Red Virgin Soil*, Robert Maguire writes: "instinct versus intellect, nature versus civilization, chaos versus logic. It remained Pil'niak's theme, no matter how intricately he embroidered it."[2]

Starting with his first novel *The Naked Year*, Pil'niak was criticized for his depiction of the revolution as an elemental force embodied in images of blizzard and instinct that was "reenacted [as] the sex drive on a grand scale" (Maguire 108). Gary Browning claims that: "the revolution appeared to Pil'niak as spontaneous, rural, anarchic peasant rebellion."[3] He further

[1] Lev Trotsky, *Literature and Revolution*, New York: Russell & Russell, 1957, p. 80.
[2] Robert A Maguire, *Red Virgin Soil: Soviet Literature in the 1920's*, Princeton: Princeton University Press, 1968, p.102.
[3] Gary Browning, *Boris Pilniak: Scythian at a Typewriter*, Ann Arbor: Michigan: Ardis Publishers, 1985, p. 81.

asserts that in his later prose Pil'niak emphasizes culture and reason in opposition to barbaric impulses to represent the "liberating and ennobling features of civilization, often facilitated through the material abundance that advanced technology affords" (81). It is Irene Masing-Delic who contests the uniform picture of *pil'nakovshchina* in her analysis of Pil'niak's novel *The Volga Falls into The Caspian Sea* (1930), in which she demonstrates that Pil'niak's prose exposes a more complex worldview than merely a dualistic one that bounces between instincts and reason. She argues that Pil'niak's prose is heavily influenced by Trotsky's views on progressing toward the *Übermensch* (*sverkh-chelovek*), who is liberated from his instinctual desires and works to harmonize the earth and male-female relationships: "ultimately, his Revolution was not about copulating without restraint, nor about trapping wolves in circus-cages—although he shows both alternatives— but about "harmonizing" man and nature."[4]

In my analysis, I examine a less explored side of Pil'niak's prose, that which is considerably invested in technology and the remaking of the new Soviet man. From the beginning, Pil'niak was often characterized as a difficult author whose convoluted works lack plot and a central idea. Trotsky writes: "something is lacking there that would tie these bits together from within" (Trotsky 81). I want to propose a reading that ties the bits together by focusing on Pil'niak's layered understanding of technology and its foundational role in Soviet society. I argue that in order to construct his improved man, Pil'niak does not look only into the future imaginings of the new human, but also goes back into the past and draws from Russian philosophical sources. His idea of progress, which translates as solving the body-mind problem, is closely tied to Nikolai Fedorov's teachings about the resurrection of dead fathers. I show that Pil'niak takes Fedorov's writings for his literary foundation, on which he builds his idiosyncratic

[4] Irene Masing-Delic, "Boris Pilniak's *The Volga Falls to The Caspian Sea* as Trotskyite Sophiology," *The Slavic and East European Journal*, vol. 52, no. 3, 2008, p. 436.

worldview. In Pil'niak's prose, technology assumes various manifestations and is understood broadly. Pil'niak's technology is never divorced from mind and flesh transformation, and as such, it is cyborgian. Technology stands for actual factory machines; for techno-science that breaks the atom and liberates atomic energy that never consumes itself and is utilized for life prolongation; for the preservation of the human body in order to achieve immortality; and finally, technology is also an immaterial category that applies to the mind that improves itself through labor. While he needs modern technology to enhance the body, Pil'niak works on the mind by melding Soviet ideology with Fedorov's mystical utopianism. It is the alliance of technology with Soviet-Fedorovian discourses that alters the mind and body. Such a reading goes beyond interpreting Pil'niak's work as monolithic, in which the central theme is dualism between instincts and ratio.

It is important to emphasize that Bolsheviks unofficially showed interest in Fedorov's mysticism and teachings on technology. Fedorovism was appealing to the Bolsheviks because of its discussion of immortality. For Boris Groys, the problem of immortality was very important for the communists as it offered liberation from private property: "we can renounce all other private property, but are left with the private property of time. We own a particular piece of time. We are life-course owners…"[5] As long as each individual still owns time, there is an obstacle for forming a true communist society. Groys argues that, "from the moment of becoming immortal, we become capable of losing, let's say, the last portion of private property.…All attempts to form a true communist society are impossible as long as men are not immortal. Men have to become immortal first, which then creates a "material base" for communist society of immortals" (Ibid.).

[5] Boris Groys,"On Early Russian Transhumanist Ideas" at https://www.youtube.com/watch?v=CoQ1adCEMas (last accessed May 6, 2019)

While Groys tries to provide a materialistic explanation for Bolshevik interest in immortality, Dmitry Shlapentokh asserts that the Bolsheviks sought to further legitimize their power by mythologizing the revolution, for which Fedorov seemed to be a good fit: "it was not surprising that it was the Soviet regime (especially in its Stalinist period) that provided the most fertile socio-political setting for Fedorovism."[6] Many thinkers of this period regarded Fedorov "as a philosopher who prophesied the imminent resurrection of the dead as a result of the revolution. In this view the Bolshevik Revolution becomes sort of an occult phenomenon which bestows upon mankind the secret forces necessary to master nature" (Shlapentokh 434).

Fedorov was materialistic enough for the Soviets because he did not believe in immortality beyond the body and thought that technology of the future will be able to render the body immortal. The technology of the future was Soviet technology that could achieve material resurrection by means of science. Pil'niak himself never explicitly said that he was interested in Fedorov's teachings, nor did he call for the resurrection of the dead; however, the imagery and symbols that he used as leitmotifs throughout his oeuvre, such as the *kamennye baby* (the stone women), museums, Egyptian mummies, restructuring of nature, genealogy and family trees, abolishing sleep, the problem of extending life expectancy, and working on immortality point to Fedorov's philosophy and are tied to the resurrection of the ancestors.

Machines and Wolves **(1925)**

The title of Pil'niak's novel *Machines and Wolves* (*Mashiny i volki*) emphasizes the centrality of technology in this work. At first glance, it suggests dualism between culture and nature; however, the conjunction in the title accentuates the connection between the two rather

[6] Dmitry Shlapentokh,"Bolshevism as a Fedorovian Regime: Fedorovism in the Context of the Russian Culture: The Problem of Interpretation," *Cahiers du Monde russe*, vol. 37, no. 4, 1996), pp. 432, 434.

than their separation. The typical Pil'niakian plot features various characters that face the feat of regulating their lupine/instinctual nature into a controlled, self-disciplined and reason-governed identity. Regulation is a key Fedorovian term that implies not annihilation, but conversion of chaotic and blind energies of nature into rational and controlled forces governed by the human ratio. The title of Pil'niak's novel is gesturing toward a technological regulation that represents the sine qua non of communist society.

In *Machines and Wolves*, Pil'niak depicts the lives of several engineers that find themselves caught in the political whirlwind of the early twenties, immediately after the revolution. All of them are linked to the factory that stands out as the centripetal force in the novel. One of the oldest engineers is Kuz'ma Ivanovich Kozaurov. From the moment Kuz'ma is introduced in the novel, the narrator portrays him as a peculiar man. Namely, his birth and his life are entirely devoted to the factory: "Kuz'ma Ivanych was born and will die in the factory."[7] Kuz'ma is a Fedorovian type of a character in several ways. His home/factory is located at the very same place where his grandfather was "tilling the soil" (73). Besides blood lineage, Kuz'ma is additionally connected with his male ancestor by means of the liminal factory-space that functions as a palimpsest of the past and harbinger of the future. The fact that Kuz'ma's grandfather was engaged in the task of soil regulation and that his grandson works in the factory, which now represents the upgraded version of that primitive soil-work, is the first Fedorovian link in the novel. In Fedorov's *Philosophy of the Common Task*, the connection with deceased ancestors is the most important relationship that a son develops with his forefathers. Fedorov envisions this active relationship as the ultimate proof of love and a pledge to the resurrection of the dead. The fact that Kuz'ma's grandfather was working the soil is not insignificant. According

[7] Boris Pil'niak, *Mashiny i volki*, Munich: Fink Verlag, 1971, p. 73. (Reprint of the 1925 Leningrad edition.) All translations are mine unless noted otherwise. Any awkwardness in English translation is deliberate and serves to reflect Pil'niak's convoluted style.

to Fedorov, the active relationship of the sons who are engaged with working the soil, and thus preserving the dust of deceased ancestors for future resurrection, as well as their regulation of the earth, represents admirable patterns of resurrecting behavior. Given the fact that the factory is erected on already prepared soil points to the sanctity of the factory space and its connection with the dead and the past. An interesting claim appears in Trotsky's evaluation of Pil'niak's prose when he states: "Pil'niak's philosophy of history is absolutely retrogressional. This artistic 'fellow-traveler' reasons as if the road of the Revolution leads backward, not forward" (84). Trotsky rightly notices, but with different implications in mind, that Pil'niak's tendency is to maintain a strong relationship with the past.

Pil'niak is very careful when naming his characters and shows preference for telling names. Kuz'ma's nickname is cuckoo (*kukushka*), whose symbolic meaning is traditionally linked to the world of the dead through the sound *ku-ku*, which is customarily associated with mourning. This nickname reinforces the link with the dead ancestors. L. V. Borisova asserts that

> in Russian cultural tradition, the cuckoo represents the soul of the deceased. In the funeral laments to the dead person they are addressed with the words: "Fly as a cuckoo to me, cuckoo your will to me" (*prokukui mne svoiu voliushku*). In the cuckoo, they see a messenger from the other world or an intermediary between "that" and this world, and through the bird they learn the news from the other world about their loved ones as they give them orders and requests.[8]

[8] L. V. Borisova, "Otrazhenie natsional'no-kul'turnikh osobennostei mirovospriiatiia v konnotatsii leksichkikh edinits," Materialy Mezhdunarodnoi nauchno-prakticheskoi konferentsii, Kazan', October 4-6, 2016, p. 67 at http://dspace.kpfu.ru/xmlui/viewer?file=108152;ryilvtm2016_66_68.pdf&sequence=-1&isAllowed=y (last accessed May 6, 2019)

Additionally, Kuz'ma's name originates from the ancient Greek word for cosmos[9], another link with Fedorov who imagined outer space to be populated by the resurrected ancestors. Ku'zma models his ascetic lifestyle on Fedorov's, as he sleeps on a wooden chest (*sunduk*)[10] and lives on tea alone.[11] Although Kuz'ma is illiterate, he thinks he knows how to spell some words that are directly connected to his ancestry, such as his last name "famelii mogu" (73).

The most intriguing thing about Kuz'ma is his relationship with machines. He is a proud author of a mysterious book titled *Sem'eometria-Sekret,* a title that directly associates family (*sem'ia*) and seed (*semia*), science (*metria,* measuring) and certain secret knowledge (*sekret*). The book is described as "his own secret *Sem'eometria-Sekret*, invented by him, created by him; it is uncertain how it is written by him who is illiterate—the pride of his life, *that* which only he knew, *that* what was told to him by the factory and the machine—only to him" (74). Kuz'ma holds the keys to the unique knowledge of machines that is revealed exclusively to him. Just like the cuckoos carry messages from the dead in the folk tradition, Kuz'ma mediates messages and secret knowledge between his machines and the dead ancestors. He talks to machines in the factory and knows how to bring them to life: "He, Kuz'ma Kozaurov, knew the secret of the birth of machines, which nobody else knew in the factory…Kuz'ma Ivanovich knew the secret, that remained mysterious for the engineers, he believed that the soul lives in a diesel like in a person, he knew how to, by means of sorcery, breathe (*vdut'*) the soul into the machine" (74).

[9] Ancient Greek noun *kosmos* (Κοσμάς) translates as order, orderly arrangement, while the verb *kosmein* means to prepare. The basic etymology related to Kuz'ma's name associates Fedorov's concept of regulation and preparation for the resurrection.

[10] The archaic meaning of *sunduk* is also coffin (a place for preservation), which makes Kuz'ma, who guards the coffin with his body by sleeping on it, some sort of a protector of the dead.

[11] The parallels between Kuz'ma and Fedorov are striking. Like Kuz'ma, Fedorov refused to sleep in a bed and preferred to sleep on a wooden board instead. His diet consisted of tea and some fish.

The belief that the machine possesses a soul was very popular in the twenties. Konstantin Tsiolkovsky[12], the most ardent disciple of Fedorov, developed a theory of panpsychism, according to which all inanimate entities have life and represent a significant part of the cosmic body. Kuz'ma appears to have mastered the mystic knowledge of machines. He knows how to repair any machine, especially those that troubled other educated engineers. In one instance Kuz'ma approaches a malfunctioning diesel, and after consulting his book of secret knowledge, like a priest (*sviashchenodeistvenno* 74) waves his hand and brings the machine to life. Once the machine is born, Kuz'ma immediately christens it by naming it after some famous engineer or scientist. Not incidentally, most of his machines are named Fedor.

In his machine-devoted existence, Kuz'ma is completely detached from Soviet ideology. His life has remained secluded in the factory untouched by outside political circumstances:

> Kuz'ma Ivanovich considered the factory to be his own, he adapted to it like a mite, and has spoken miraculous things about machines in the inn. Kuz'ma Ivanovich did not read newspapers…he was not interested in politics…Kuz'ma Ivanovich did not want to know anything besides the factory: cuckoos are those who give birth to machine (75).

Kuz'ma seems to be modeled on non-Soviet premises. His relationship with the machine is pseudo-scientifically grounded and his *Sem'eometria-Sekret*, full of "scribbles, X-s and lines" (74), reveals Kuz'ma to be an engineer of Fedorovian provenance. It is interesting that this type of innately-gifted engineer, who maintains a sacred relationship with technology and is entirely disengaged from politics and ideology, frequently appeared in the prose of this time. Another such engineer who shares the life-style and philosophy with Kuz'ma appears in Fedor Gladkov's novel *Cement* (1925). Gladkov's Brynza never leaves the factory and has a special, mystical

[12] Konstantin Tsiolkovsky was a Soviet rocket scientist and the pioneer of astronautic theory, famous for his work *The Will of the Universe: The Unknown Intelligence* (1928).

relationship with machines. Like Kuz'ma, he too claims machines are animate entities that require proper human treatment. Brynza says to his childhood friend Gleb Chumalov: "Do you know how machines live? No, you don't! You would go mad, if you really saw and felt it. But who knows this? I know it—only I."[13] Brynza also claims to possess exclusive knowledge of machines and believes they have a secret existence. Like Kuz'ma, Brynza is not interested in political life and sees the machine as his only religion. When Gleb tries to explain the new political reality, Brynza remains completely disinterested: "Are you trying your agitation and political meetings? You won't get me on that, brother. You're among the engines now, and not at a public meeting" (17). The sanctity of the machine-space is emphasized by the use of pagan imagery where diesel machines are depicted as "black marble idols" that "like altars [are] demanding their sacrifice" (15).

The Soviet critics didn't criticize the veil of machine-mysticism that accompanied characters like Kuz'ma and Brynza, and their unusual techno-spirituality only accentuated their dedication and sacrifice to the machine. Aleksei Gastev's collection *Poetry of the Worker's Blow* (1918) also cultivates the mystical relationship with machines and workers "equating the production of technological miracles by means of labor and suffering with a miraculous change in the worker's own being."[14] The workers in Gastev's poetry also possess the secret knowledge of the dead ancestors that need to be resurrected by their sons: "We go! We cannot but go; the gloomy shadows of recently defeated warriors have stood up; there have arisen the living legends of the past—the fathers, felled with a wound. We go after them. Right ahead, both stronger and braver than we, stride off young fighters arrived into life."[15] The frequent occurrence of these

[13] Fyodor Vasilievich Gladkov, *Cement*, trans. A. S. Arthur and C. Ashleigh, Evanston: Northwestern UP, 1980, p.17.
[14] Hellebust, *Flesh to Metal*, p. 28.
[15] Quoted in Hellebust's *Flesh to Metal*, p. 61.

naturally-gifted engineers and workers in the twenties points to the popularity of characters who possess the genius for transforming the environment and themselves solely by their innate talents. Anindita Banerjee asserts that the peasant-engineer, or *samorodok* (the self-born), was a popular type in science fiction prose and "represented the synthesis of sophisticated scientist and peasant magus."[16] The *samorodok* type populates the prose of Gladkov, Pil'niak, and Platonov, offering the possibility of what Banerjee calls "multiple Russian modernities" that deviate from or collide with the grand Soviet narrative by advancing the literary re-imaginings of the new man.

Besides Kuz'ma, there is another subtype represented by those characters who are successful in gradually achieving the feat of transformation into the new man by melding the mystical and rational relationship with technology. Engineer Forst is, like Kuz'ma, entirely committed to the life of the factory and machines, and is depicted as a Fedorovian type of visionary:

> If the soul of engineer Forst is compared to a waistcoat—he, Forst [compared] to a knitted, warm, brown waistcoat, then in the main pocket side-by-side are positioned man and labor, Man with a capital letter, who hurled his thought into interplanetary regions (*prostranstva*), man who created diesel, who decomposed the world not only into seventy two elements according to Mendeleev, but also decomposed nitrogen and imbedded his romanticism into the times of Egypt and Judaea (67–68).

This convoluted description contains the seeds of Fedorovism. Action, that is, continuous labor, is a prerequisite for transformation. Masing-Delic asserts that for Fedorov, "the fact that the Task demands that all people dedicate all their lives to constant effort and labor without ever

[16] Anindita Banerjee: *We Modern People: Science Fiction and the Making of Russian Modernity*, Wesleyan University Press, 2012, p. 168.

being allowed the luxury of "pausing for breath" demonstrates, in its absolutism and "Bolshevik maximalism," how serious an obstacle to salvation Fedorov deems passivity to be."[17] According to Fedorov, the man of the future, or what the narrator in *Machines and Wolves* says of engineer Forst, "Man with a capital letter," has already successfully populated the universe with resurrected ancestors. Engineer Forst appears to be initiating the thought about regulating the universe after he has remade himself. George Young emphasizes that for Fedorov the goal is "transformation of both humanity and cosmos…transformation is to be both inner and outer, spiritual and physical, microcosmic and macrocosmic."[18] This idea seems to be central for Pil'niak's characters. The engineer Forst, the image nearest to the future man, appears to be an admirable worker who regulates the earth and never loses touch with the past and his forefathers, here alluded to the past traditions of Egypt and Judea. Fedorov especially valued ancient traditions such as the Egyptian, for "in Egyptian culture, man turned to the art of preserving the dead, embalming their remains and placing them in pointedly vertical buildings."[19] In a riddle-like style, Pil'niak weaves around his main engineers the network of Fedorovian symbols and lexicons that govern their thoughts and actions. Like Kuz'ma and Brynza, Forst is not politically engaged: "He is not a politician, engineer Forst, he knows, of course, that the machine creates a world greater than god…and the machine will conquer the world, only the machine" (157). His main preoccupation is his fascination with technology, which is compared to religious devotion: "Forst was a priest of Moloch[20]-machine" (159). For him, technology embodies the unified will that masters both micro- and macro- cosmos:

[17] Masing-Delic, *Abolishing Death,* p. 87.
[18] George M. Young: *The Russian Cosmists: The Esoteric Futurism of Nikolai Fedorov and His Followers*, Oxford University Press, 2012, p. 80.
[19] Irene Masing-Delic, *Abolishing Death*, p. 89.
[20] Moloch is a solar deity to whom child sacrifices were given in the ancient Middle East.

> One, single machine, a single will. Of course, metaphysics, of course mysticism, even the priest contemplates how the machine masters the world by means of labor. The priest grasped his detachment from flowers and earth, and plowmen; the priest knows his orphanhood (*sirotstvo*) before the agency of the machine set in motion by him; the priest conquered the will to death under the flywheel (160).

Forst acknowledges machine mysticism and the machine's direction toward earth regulation, which requires distancing from the forces of blind nature. Even though Forst appears to be a more sophisticated and science-oriented type of engineer, he too maintains the mystic-*samorodok* relationship with machines.

Banerjee argues that before and during the twenties both the mystical and rational poles of interpreting electricity represented the mainstream of imagining new technologies. She asserts that mystical or cathodic representation of electricity, which was inspired by Galvanism and Mesmerism, and rendered as essentially romantic and feminine, actually represented literary imaginings and phantasies that proliferated due to the lack of electricity in the country. At the same time, the anodic representation of electricity, depicted as masculine and rational, coexisted and oftentimes merged with its cathodic representation.[21] I suggest that Banerjee's interpretation of electricity can be extended to technology in general, and that cathodic and anodic metaphors can serve as productive ways of looking at machines in Pil'niak's novel. Namely, both the innate-scientist Kuz'ma and the officially-trained engineer Forst cherish a romantic or cathodic relationship to machines. Furthermore, the notion of orphanhood further fortifies Forst's mystical interpretation of technology. The state of orphanhood or non-kinship (*sirotstvo*), evoked in this passage is the key Fedorovian term that represents the metaphor of mortality, or death drive, which is being mastered under the power of the machine. Fedorov believed that *sirotstvo* came as

[21] See Banerjee, *We Modern People*.

a result of exhaustion of bodily life-energy due to a pronounced sex drive that consumes mankind and leads to death and universal orphanhood.[22]

Forst's relationship to nature is very pragmatic. In order to abolish death, according to Fedorov, the sons need to reject their servile attitude to nature and instead turn to technology and science, which will resurrect their deceased fathers. For Forst, the project of harnessing nature becomes the ultimate imperative of an engineer. While watching thunderstorms in the evening, Forst asserts: "Nature—what an imperfect machine. How many trillion kilowatts it wastes for nothing. If we were to gather that energy.… And this energy, this machine we will collect and organize, we, the engineers" (107). Forst emphasizes the need to convert the unharnessed electrical storm into an organized machine, that is, electrical energy. His scientific side forces him to organize and collect the unrestrained energy and direct it into a controlled, productive relationship between man and nature.

The unusual mix of science and mysticism united in the machine, now envisioned as a new deity that transforms humanity and life both on and beyond the earth by scientific means, has an undoubtedly Fedorovian flavor. Scientific-mysticism of machines appears to be very potent in *Machines and Wolves*, so much so that entire lyrical passages are devoted to this theme. Like a refrain in a poem, the lyrical panegyrics to machines and technology function as a cohesive narrative tissue in the novel. The factory acts as a vital force. Portrayed like a life-building giant, the factory stands for the new machine-genesis, the coming into being of the new man and new world. Its might is revealed through its performance in reordering the world, reinforcing the skies, replacing the sun with electricity, and producing mighty machines:

[22] For Fedorov, orphanhood (*sirotstvo*) meant literally being alone or lacking family, but it also meant forgetting about the ancestors.

> The factory became powerful, one of Russia's giants, it grew out of steel, iron and stone, enclosed by hundreds of fences, a mathematical formula, smokestacks bolstering the skies, smoldering the skies, dynamo-machines threw light in the night brighter than the sun, the steel gnashed with iron, the smokestacks howled, the factory, the steelmaking, machine-building. Over there, behind the factory walls—the smoke, soot, fire, bustle, clank, shriek of iron, twilight, electricity in lieu of the sun…" (22).

Steel and iron are treated as alchemist stones that forge new beings through the metallization of human flesh. According to Hellebust, the base metals such as iron and steel serve to "prefigure a human transformation, represented as a process of hardening or crystallization, thus anticipating the spiritual tempering of the Bolsheviks."[23] The steel and iron imagery in *Machines and Wolves* forge the image of a cyborgian worker: "the black hand of a worker—five spasmodically compressed fingers, black, in soot made of steel, like muscles—that hand, like a machine, took Russia and the Russian snowstorm by force: nobody in Russia understood the romanticism of that hand—no one realized that this hand had to be the enemy for life (*vrazhdebnaia, vragom na smert'*)" (44). The mighty metalized hand of a worker, that is, the machine-hand, is constructed in order to abolish death (vragom na smert'), thus acting as Fedorovian machine par excellence. The peculiar cyborg mysticism merges with Bolshevik ideology yielding an unusual alchemist-proletarian man. The narrator further elaborates on the nature of the machine:

> What is a machine? And what is a proletariat? Of course, the machine is metaphysics, and of course, the machine creates the world better than God… But somewhere in the turbine where the dynamo is (one in ten oilers will perish throwing himself into the flywheel allured by its rotation, hypnotized, anesthetized into death, like a boa's gaze) a man, an engineer pulls a lever and the entire factory trembles, breathes and lives: from

[23] Hellebust, *Flesh to Metal*, p. 24.

> the nail in a pulley to a diesel carburetor—one, one machine, one will. Of course, metaphysics, of course mysticism, where the priest is an engineer and the workers are god's servants. And he who grasps the detachment from flowers and earth, and plowmen, he who feels his orphanhood (*sirotstvo*) before the agency of the machine set in motion by him-will *conquer the will to death under the flywheel,* —he who absorbs and internalizes all this into himself, he is the proletarian!… He who has brought the machine into the world that has become stronger than his will, black in soot, in oil, if he knows about astrologers and alchemists, he understands that he is their brother, since machines like god don't have blood. (95, my emphasis)

The narrative voice assigns ontological status to machines. Metaphysics is primarily concerned with fundamental questions of being and its very etymology (beyond nature) points to immaterial existence. The machine in Pil'niak is both material and mystically immaterial, exerting an influence on workers. It is in this idiosyncratic alliance of the occult (machine mysticism and alchemy) and Soviet ideology that the cyborg is created. Pil'nak's machine-man is the proletarian who is able to master the death drive and internalize all the properties of the metaphysical machine. This untypical blend of Soviet ideology and Fedorovism is telling of Pil'niak's symptomatic understanding of the direction in which Soviet politics needs to develop, and this is why Trotsky criticized him for not grasping the revolution intellectually. Pil'niak's emphasis on one will that combats death is a trope that in the twenties represented the immortalization narrative. The idea of one will represented a "vision of an 'earthly paradise,' where death has been vanquished by research, labor, art, and a fusion of millions of wills into One Will, willing the demise of death" (Masing-Delic 19).

Authors such as Nikolai Setnitskii, who propagated Fedorov's ideas in the twenties by assigning them a socialist twist, didn't see the conflict in merging Fedorov's teachings outlined in the *Common Task* with Soviet reality. In his work *On the Ultimate Ideal* (*O konechnom ideale*), Setnitskii brings together the materialism of Fedorov and that of the Soviets by emphasizing their mutual concern for the advancement of science that goes in the direction of achieving immortality: "in fact, if one thinks a little about the direction of modern science, one needs to admit that the science follows precisely along those paths that the author of *The Philosophy of the Common Task* has pointed out (*predukazal*)."[24] Moreover, Setnitskii asserts that Fedorov's ideas permeate every aspect of Soviet life: "One can confidently say that in the contemporary USSR, be it in secrecy or openly, there is no, or almost no sphere or activity (*deiatel'nost'*) where the ideas of N. F. Fedorov do not exist."[25] Setnitskii emphasizes the role science plays for both Fedorov and the Soviets. Fedorov expected a great scientific breakthrough that would, by means of sophisticated technology, lead humanity toward achieving material resurrection. However, Fedorov's expectations and descriptions of the future-technological-advances seem rather obscure, as he never elaborated what kind of sophisticated technology he had in mind, supplying the absence of description of technological details with vague explanations. Even Fedorov himself expressed doubts that the *Task* is realizable in his lifetime: "I have no hope that in our age of unthought and inaction the problem of the universal task, of the regulation of nature by human reason and will, can possibly attract attention to itself."[26] Setnitskii maintains that Soviet science is ready to achieve these goals as it has already advanced far enough to realize what once was considered impossible.

[24] N. A. Setnitskii, *O konechnom ideale*, Kharbin, 1932, p. 81.
[25] Ibid.
[26] Quoted in George M. Young: *The Russian Cosmists: The Esoteric Futurism of Nikolai Fedorov and His Followers*, New York: Oxford University Press, 2012, p.73.

Pil'niak must have been familiar with ideas of Setnitskii, who published his work in Kharbin, China where Fedorov's teachings were enthusiastically advocated in the intellectual cliques. In 1926, on his diplomatic journey to Japan, Pil'niak visited Kharbin in an official capacity, where he must have met Setnitskii personally, as Setnitskii's duty was to welcome diplomats travelling from the USSR to China and Japan. Shlapentokh asserts that in the early 1920s, Soviet views on technology,

> had strong occultist overtones, where handling of technology by the "right" people was decisive. This certainly focused attention on the side of Fedorov's teaching which emphasized the importance of technology. In this context, "technology" was "metaphysicized," so to speak, and viewed as the essential element in enshrining humanity's victory over nature. And here, it is Anatolii V. Lunacharskii who should be credited with infusing metaphysical overtones, actually "Fedorovism," into the thinking of young Soviet technocrats…Those who work for the immortality of mankind should work for the victory of socialism on earth. According to Lunacharskii, immortality could not be achieved by those who were outside the socialist movement.[27]

It is in Pil'niak's *Machines and Wolves* that the ideas of merging Fedorovism with Soviet premises made its earliest literary appearance. The mighty machine-man, or the proletarian-black metallic hand, the strange alloy of mysticism and science, ideology and philosophy, are able to undo death and orphanhood (*sirotsvo*) by restoring Fedorov's utopian society of the future. In the novel, these ideas are spoken by Andrei Volkovich, who acts as the author's mouthpiece and expounds his views on the ideal future:

[27] Dmitry Shlapentokh, "Bolshevism as a Fedorovian Regime: Fedorovism in the Context of the Russian Culture: The Problem of Interpretation," *Cahiers du Monde russe*, Vol. 37, No. 4, (1996), pp. 438, 440.

> And there came the scientist, the genius, armed by everything that culture gave him; and he invents ways to feed humanity mechanically by way of the factory; potato, bread and meat, proteins, carbohydrates and fat will be made in the factory; he [the scientist] will make a little factory where proletarians will come! And two thirds of the entire population will liberate themselves from their bond to the soil, two thirds of the entire population will liberate themselves from work, mankind will secure leisure time, emancipated labor will come to the city, it will build, create, produce, it will find its own way… Emancipated labor will dig the canals, even out mountains, spread the news about itself on Mars. This all will be created by genius, culture, and proletariat. Humanity is freezing in polar circles— the reservoirs will be made that will preserve the heat, and the heat from the Sahara will heat the entire globe. But this is not all… (87).

In this passage, Fedorov's fantasies about earth regulation merge with similar dreams shared by the communists. In addition, Pil'niak praises the role scientists play in such an organized Fedorovian-Socialist society. Proletarians emerge only after the scientists have performed the task of restructuring the earth, producing food by means of absolute mechanization, and populating the universe.

The structural plan of reorganizing life is reminiscent of Tsiolkovsky's stages in the progression of Soviet society. Following Fedorov, Tsiolkovsky advocated that emancipation from the dependence on earth, a harmonized relationship with the external world, and a change of consciousness, represent a platform for the complete metamorphoses of humanity.[28]

Pil'niak's Andrei Volkovich additionally evokes Fedorov by asserting that "half of human life is wasted on sleep and resting—a chemical factory of the future that will produce powders [against sleep] is going to be erected and mankind will become liberated from sleep"

[28] Banerjee: *We Modern People*, p. 134.

(87). For Fedorov, sleep and inactivity are intrinsically linked to death by virtue of the horizontality of the position people take while resting, and abolishing sleep was another important step toward becoming immortal. The medical powder mentioned in the passage is a technologized synthetic drug that will help overcome one aspect of mortality. Another important step is life prolongation. As he further elaborates on the ideal vision of an imaginary utopia, Andrei Volkovich adds: "one more thing: mankind will double its life expectancy. Man will live 200 years… This all is the metaphysics of the proletariat. And I am together with the communists-engineers (*s kommunistami-mashinnikami*)" (87).

For Pil'niak, the conflation of the techno-minded scientists with Fedorovism is directed toward achieving immortality, the last step, according to Groys, needed to form a true communist society freed from all private property. The novel ends symptomatically with an image of communists-engineers who lead "the machine and world revolution" while laying the remains of Lenin's embalmed body into a temporary mausoleum. Lenin's glass sarcophagus is not his grave but an entryway into immortality. He was prepared to be "the first to be made to rise by scientific means" (Masing-Delic 16). In the *Common Task*, it is Fedorov who first formulates the idea of placing dead bodies in the cities' centers for the purpose of scientific study. Fedorov argues that the "corpses shouldn't be discarded behind the limits of inhabited places [cemeteries], no matter how hypocritically respectful this might appear. On the contrary, the corpses need to be placed in the very center of each settlement for the purposes of research of a completely unknown phenomenon called death."[29] This passage uncannily prefigures what is going to be a resting place for Lenin in Red Square in the center of Moscow. Masing-Delic writes that some members of Lenin's funeral's committee, including those who actively

[29] Nikolai Fedorov, *Sobranie sochinenii v 4-kh tt*, vol. 1, eds., M.A. Kolerov, A. G. Gacheva, and S. G. Semenova, Moscow: Progress, 1995, p. 257.

participated in embalming the body believed in scientific resurrection: "Several members of the Commission for Immortalization of the Memory of V. I. Ulyanov believed that resurrecting the dead by reconstructing them was feasible, notably Leonid Krasin, who at the funeral of L. Ya. Karpov in 1921 had stated that he was looking forward to seeing his old friend soon, since science was about to master the art of recreating dead organisms" (15). The scientific preservation of Lenin's body in Pil'niak's novel is accompanied by the background sounds of machines coming from "factories, steel, concrete, railway ties" that sing a triumphant song about immortality. Machines are "victoriously celebrating and vladimiring (*vladimirstvuia*)" the ultimate victory of life "over death, through death, since there is no death" (184).

The mystical cyborgs that achieve bodily transformation via machines figure in Pil'niak's novel in unexpected forms, varying from Lenin's technologized body to characters who reject their traditional bodies altogether. The latter type of characters usually belongs to an engineer-scientist category that shows machine expertise and is well aware of the machine's potential to alter human beings. Their final resolution is to transform their physicality by literally throwing themselves into factory machines. In *Machines and Wolves*, engineer Andrei Roschislavskii represents this type of engineer who accepts communism based on Fedorov's premises. Andrei's noble lineage keeps him in contact with an old Russia that is symbolically represented by Maria, who functions in the novel as the embodiment of the past. Andrei is always drawn to machines that appear in his dreams, such as in the scene in which he comes in direct contact with the flywheel:

> The first thing I heard was the whistle and then afterwards silence…Then I saw the flywheel… So, there I, I myself, creep into the flywheel… The flywheel hypnotizes me, I grow numb, I am powerless, I don't remember anything, and I cannot do anything: in

> front of my eyes there is the steel flywheel in oil, rotating endlessly, appearing and disappearing from behind the bars, unconditional in its motion, rigid in its motion, categorical like death, powerless in its motion, powerless in its immobility—the flywheel, only the flywheel, there is nothing else in the world besides it. I make a move toward the bars, my movements are also involuntary like the involuntary motion of the flywheel. I lift my leg onto the bars…" (89)

The presence of the mystical flywheel in the dream exerts an enormous hypnotizing influence on Andrei. The machine has the attributes of a lethal demonic force as its terrifying presence creates an atmosphere of some otherworldly entity that cannot be resisted. No matter how alarmed he gets in the presence of the machine, Andrei cannot resist the pull of the flywheel. The sounds he hears in the machine bring him back to his childhood. It is not insignificant that Andrei remembers his late father while entering the flywheel. The machine and the memory of dead fathers are inseparable elements of the Fedorovian immortality-equation. Precisely at this critical moment, Andrei is saved from death by his surrogate father figure, engineer Kuz'ma, who moves him away from the machine. Andrei knows that only Kuz'ma can help him since he knows all the secrets of the machine and he knows more about Andrei than Andrei himself can imagine: "he knows about me that which I myself don't know" (85). Kuz'ma explains to Andrei that his condition is caused by machine anxiety: "Your illness, Andrei Egorovich, is called dread. So, dread. Before the soul of the machine" (99). Kuz'ma suggests an unusual treatment therapy by saying that Andrei needs to sleep regularly under the flywheel until he fully internalizes the soul of the machine. Andrei describes this mysticism as a new beginning: "this is the birth of a new life, I don't know what kind of life, but certainly life without wolves and forests, but rather with gardens and menagerie" (99). This new technologized life is about to enfold after Andrei

manages to convert his biology and natural instincts, symbolized by wolves and forests, into a different hybridized life epitomized by gardens and menagerie.

Andrei is then drawn to the past represented by Maria the sorceress, who lives in the forest and has the secret knowledge of herbs that she uses in her sorcery. For Andrei, Maria possesses mythical energy that has a similar effect on him like the flywheel. He says: "I am bewitched by some elemental force (*stikhiinaia sila*) and grace, as if she is a Scythian woman..." (79). Fedorov wrote on several occasions about the stone or Scythian women (*kammenye baby, skifskie baby*),[30] claiming that these ancient gravestones are remnants of the past that tell of the oldest attempts at the resurrection of ancestors:

> The stone woman, holding a vessel in her hands containing the ashes of the burned, made in the likeness of the deceased, was put in the very same place where the dead person was burned. According to the belief of people practicing the fire burial, [the deceased] will be resurrected... Therefore, the stone images are pagan evidence of resurrection, coming from antiquity, and if not directly from our forefathers, then from our countrymen, who lived here in ancient times.[31]

The fact that Andrei is attracted to Maria, who is compared to a stone woman that epitomizes the first technology of resurrection is another Fedorovian pull that leads Andrei in the immortality direction. When he visits Maria he feels as if he returned to the mythical stone-age (Andrei literally describes Maria's life-style as belonging to the stone-age) and his romantic longing for the ancient times inspires him to be intimate with Maria. Andrei temporarily becomes immortal by sexually merging with a Scythian woman, the ancient resurrector. After this experience Andrei decides to enter the flywheel of the same machine he is so terrified of:

[30] Fedorov uses both terms interchangeably.
[31] Nikolai Fedorov, *Sobranie sochinenii v 4-h tomakh*. Vol. 3, Moscow: Traditsiia, 1997, p. 165.

"his eyes saw the invisible... the person Roschislavskii was gone, instead there was a piece of red flesh, thorn skin, and bones that came out, and that piece of flesh dragged around the working flywheel" (107–108). Andrei rejects his old body and decides to fuse with the machine by entering it. The machine devours Andrei's body by grinding it to pieces and decomposing it. Andrei ends up deconstructing his body to merge with the flywheel, choosing a bizarre version of transformation of his physical form. The apocalyptic cyborgism represents Pil'niak's eccentric twist to the resurrection narrative. He pushes Fedorov's demand of remaking the body into the task,[32] which means eliminating all the instinctual, unregulated, and degrading in the flesh, to the utmost extreme. The theme of the apocalyptic cyborgism will repeat in his next prose piece "Ivan Moskva."

"Ivan Moskva"

Two years after publishing *Machines and Wolves*, Pil'niak wrote his short story "Ivan Moskva" (1927), in which he directly engaged with the problem of immortality. The story opens with a quote by Frederick Soddy, the Nobel Prize winner in chemistry, who is credited for his contribution in harnessing atomic energy. The quote illustrates Soddy's thoughts on energy: "The second law, that of availability of energy, is sufficiently accurately stated for present purposes by saying that the same energy is available for useful work but once. To obtain useful work from any source of stored-up or potential energy, it is necessary to transform it into new forms, which are kinetic, and by which something is made to move."[33] The idea of the permanency of energy invoked by Soddy functions as the central motif in Pil'nak's story. The

[32] Fedorov says that "our body needs to be our task" (nashe telo dolzhno byt' nashim delom). In *Sobranie sochinenii v 4-kh tt*, vol. 1, eds., M.A. Kolerov, A. G. Gacheva, and S. G. Semenova, Moscow: Progress, 1995, p. 82.
[33] Pil'niak translated Soddy's quote into Russian. For the original English reference see Frederick Soddy, *The Interpretation of Radium: Being the Substance of Six Free Popular Experimental Lectures Delivered at University of Glasgow*, third edition, New York: G.P. Putnam's Sons, 1912. (Quoted in Michel Finke, "The Agit-Flights of Viktor Shklovskii and Boris Pil'niak" in *The Other Shore*, I, 2010, p. 30).

protagonist Ivan Moskva is a scientist who opens a research institute in the Urals in order to investigate radium atomic energy. Frederick Soddy devoted his life research to radium and atomic disintegration that "demonstrated that the radioactive emissions of elements such as radium, thorium, and uranium occurred in conjunction with the spontaneous transmutation (change) of individual atoms of one chemical species into the atoms of another."[34] Soddy's concept of transmutation frames the narrative of Pil'niak's story. For the protagonist, radium research opens up a new realm in the possibility of permanent existence and the annihilation of death. Ivan Moskva believes that energy as such never ceases to exist, but only acquires different forms through transformation. His scientific research, which others perceive as pure alchemy, aims at altering human existence: "the radium atom releases energy and it does not die. I release energy and I die. I want to live, I must live."[35] The quest for immortality by harnessing atomic technology becomes Ivan's obsession.

Pil'niak's story fixes the atomic research to the Russian soil and gives national exclusivity to the immortality quest. The influence Soddy exerts on Pil'niak goes beyond opening the story with his thoughts. In his work, Soddy writes about the prospects of radium research that would enable earth regulation and the creation of an earthly paradise: "A race which could transmute matter would have little need to earn its bread by the sweat of its brow. . . . [S]uch a race could transform a desert continent, thaw the frozen poles, and make the whole world one smiling Garden of Eden. Possibly they could explore the outer realms of space, emigrating to more favorable worlds."[36] This very Fedorovian utopian thought, that must have attracted Pil'niak to Soddy in the first place, emphasizes the exclusivity of race. The race Soddy

[34] Richard E. Sclove, "From Alchemy to Atomic War: Frederick Soddy's "Technology Assessment" of Atomic Energy, 1900-1915," *Science, Technology, & Human Values*, vol. 14, no. 2, 1989, p. 165.
[35] B. A. Pil'niak, "Ivan Moskva," Sobranie sochinenii v shesti tomakh, vol. 4, Moscow: Terra-knizhnyi klub, 2003, p. 32.
[36] Richard E. Sclove, "From Alchemy to Atomic War," p. 174.

has in mind, however, is the human race. But in "Ivan Moskva", the question of race, or more specifically, ethnicity, is ambiguous. The theme of Scythianism, which was popular in the first half of the twentieth century in Russia, where the Russian revolutionary masses were often times equated with Scythians whose Eastern otherness was thought to be invigorating for an already old and morally-disintegrating Europe, is also frequent in Pil'niak's oeuvre. Pil'niak elaborates on the theme of otherness in *Ivan Moskva* as the eponymous protagonist originates from the Komi people and is rendered as the *other*. Here however, being the other, non-Russian, is not considered a positive quality. Ivan begins his true existence only by becoming a "real" Russian and by assuming the Russian name "Ivan Moskva": "Ivan did not inherit the name Moskva [Moscow] by his birth right, rather he stole it: but he loved Moscow, like a mother, Moscow which gave him the right to his biography" (36). And further: "Ivan Moskva … in Moscow entered into being (*vyshel v bytie*)—and on the ruins of the past he began to build his, his own brain's and his own class's future, leaving his body in pre-existence (*v do-bytii*)" (20). In order to begin his quest for immortality Ivan undergoes a transformation of his former self, from the alien *other* into a new self with Russian marking. Undoubtedly, Soddy's ideas of a special human race that will liberate humanity appealed to Pil'niak and received nationalistic underpinnings where the old narrative of Russian exceptionality reemerged, enhanced with Fedorovism.

Technology as a primary agent of change in the story catalyzes the body-mind transformation. In "Ivan Moskva," advanced technology converts atomic energy into permanent energy and this process opens up new prospects for Ivan who wants to construct his new self: "I create a plant and excavate radium so that I can, by the sole power of my mind, break away from myself, from the past, from everything into the future—the future that I design" (29). It is Ivan's frail and diseased body that prompts him to search for other forms of existence in which he can

become permanent. Ivan Moskva has a decaying body that carries hereditary syphilis: "Ivan's grandfather and father were ill, his grandfather was noseless; Ivan was twenty when he discovered that he had inherited syphilis from his ancestors" (20). Male ancestry is evoked in order to point to the vulnerability of the body that holds Ivan captive. His body is so weak that he cannot consummate physical love with Aleksandra, who works as his assistant at the Institute and is in love with him.

Together with Soddy's passage, the story begins with an epigraph taken from Heinrich Heine's well-known poem *Asra* (1846)[37]:

> And I stem from the tribe of Asra,
>
> From those who, when they love, they perish.

In the context of "Ivan Moskva", these lines read as a realization of Fedorov's warning against sexual love that leads to the demise of humankind. Ivan Moskva refuses to perish and refrains from being intimate with Aleksandra. However, physical love with a woman happens to Ivan in a completely unexpected scenario. Once Ivan arrives to Moscow, he encounters a genuine Egyptian mummy that was sold from hand to hand due to the strange emission of unpleasant rotting smells. Everybody who gets a hold of the mummy reacts the same way: "The mummy is alive! The mummy phosphoresces" (8). When Ivan meets the mummy, he takes off her gauze and starts embracing and kissing her. Since the mummy is the symbol of the ancient attempts at resurrection, she is the only woman Ivan can be with[38]: "the man kissed the mummy, her eyes, lips, cheeks" (47). In "Ivan Moskva" the female mummy is the reminder of the task of immortality, the same way Maria, the Scythian woman, was for Andrei in *Machines and Wolves*.

[37] *Der Asra* is Heine's well-known romantic poem, in which the young slave falls in love with the sultan's daughter and perishes from lovesickness.

[38] Ivan has his first sexual encounter with an ill woman who was dying from typhus in the Civil War. All the women he meets including Alexandra are described as having an Egyptian face.

And like Andrei, Ivan too decides to physically merge, if only temporarily, with ancient resurrection technology. The mummy in the story stands for what Banerjee calls cathodic representation, that is, the mystical, romantic pole of technology. Ivan represents the anodic, masculine and rational pole, and their love embrace symbolically creates the electrifying circuit path to immortality.

However, Ivan's sick body stands in a way of his complete transmutation: "he found the strength to realize that his body is only a prison for his brain (*tiurma ego mozga*)" (20). The parallels between Ivan's and Soddy's ideas about the physical body are striking. Writing about immortality, Soddy asserted that: "the real part of man is not his bodily organism, which is continually wasting away and being as continually renewed, nor the physical energy at its command which is derived entirely from the inanimate world, but is the personality resident in the body and in control of it."[39] What Soddy considers real is that which is immortal. Ivan's thought of the mind carrying immortal properties echoes Soddy: "the inner-atomic energy is not only produced by the radium ore, but also by human will (*chelovecheskaia volia*)" (20). Human will, or *volia*, which is the sine qua non of Fedorov's *Task*, is rendered here as Soddy's immortal personality. It is union of the will (mind) and the flying machine that gives Ivan a proper physical body: "the airplane, that wonderful machine that carries a man into the air, and hurls man and his will (*volia)* beyond the clouds" (22–23). The choice of the machine is more than telling as of all technology, Fedorov admired airplanes most. Banerjee asserts that "Fedorov valorized airplanes not for their mechanical potentials but because aviation was an unprecedented form of uniting the machine with the human in the formidable isolation of the

[39] Frederick Soddy, "Immortality or the Conservation of Personality" in *Science and Life: Aberdeen Addresses*, New York: E. P. Dutton and Company, 1920, pp. 152-53.

open sky."[40] Pil'niak himself was, as Michael Finke asserts, "air-minded" and was fascinated with his flights to Japan, which he described in his 1926 travel memoir "Roots of the Japanese Sun." Pil'niak had a sensation of eternity while aboard the airplane: "I know the ecstasy of flight; the higher you go into infinity, the more calm is your blood, there is no sound and there is an inexpressible pleasure from flight."[41] "Ivan Moskva" ends with a scene of such a union of man with machine in an open sky, as the protagonist perishes in an airplane crash. Like Andrei in *Machines and Wolves*, Ivan gives his body to the machine to emerge as a peculiar apocalyptic cyborg. In light of Soddy's concept of transmutation of energy, the airplane accident represents Ivan's conversion into a different form of energy. The story ends with the positive image of one hundred and fifty young students who appear "instead of Ivan, in place of Ivan" (60) as a symbolic result of the circulation of the kinetic energy of youth that should take over the bright future.

"A Matter of Death"

Another short story, "A Matter of Death" ("Delo smerti"), written in the same year as *Ivan Moscow* and published in 1928 in *Novyi mir*, confronts the same issue of the permanency of energy and the need to break the vicious circle of death. The title *Delo smerti* references Fedorov's *The Philosophy of the Common Task* (*Filosofiia obshchego dela*,) where the noun *delo*, translated either as task, or cause, points to the quest of overcoming death that is explicitly addressed in the story's title.

In "A Matter of Death," a young research assistant Vel'iashov, who works at the Life Institute (*Institut zhizni*) (yet another explicit allusion to Fedorov), dies under mysterious circumstances in his thirties. The academician Pavel Ivanovich Pavlishchev tries to decipher the

[40] Banerjee: *We Modern People*, p. 42.
[41] Quoted in Michael Finke, "The Agit-Flights," p. 25

reason behind such a sudden death for which he cannot find any biological cause. He digs through the notes showing Vel'iashov's family tree in order to find the reason for his unexpected death. It turns out that one side of the family, which dates back to the times of Peter the Great, showed a remarkable death rate predictability at a very young age, just like Vel'iashov. This adds more mystery to solving Vel'iashov's sudden demise and leads the academician Pavlishchev to conclude that Vel'iashov committed hereditary suicide. Like in "Ivan Moskva" where the protagonist inherits syphilis from his forefathers, Vel'iashov inherits a peculiar death drive from his family. It turns out that death resides both in the body, acting toward the degeneration of tissues, and in the psyche, acting toward the disintegration of consciousness. Both Ivan Moskva and the academician Pavlishchev, who in Pil'niak's system of literary types represent conscious scientists ascetically devoted to resolving the riddle of immortality, cannot accept the idea of death and actively engage in the battle against it. Like Ivan, Pavlishchev, too, believes in the permanency of life energy: "It is stupid, you know, to rot in the ground, to turn into lower forms of existence…there must be another way."[42] Pavlishchev thinks that science and technology can alter human nature. For Ivan Moskva, human life is nothing more than the expenditure of energy: "[human] vitality decreases over time. But vitality in radium does not depend on time" (31). Pavlishchev holds the same view: "A man—a form of pouring out life" (178). However, while Ivan wants to get rid of his body, Pavlishchev attempts to preserve the bodily form by perfecting it. In both cases, the body, like in Fedorov, becomes the primary task; *telo* becomes *delo*. For Pavlishchev, science and sophisticated technology play the most important role in restructuring the body. While Ivan Moskva develops the technological means of controlling the atomic energy of radium, Pavlishchev works on hibernation. He invents

[42] B. A. Pil'niak, "Delo smerty," *Sobranie sochinenii v shesti tomakh*, Vol. 4, Moscow: Terra-knizhnyi klub, 2003, p. 177.

innovative technology to conserve bodies at subzero temperatures that, once perfected, will put a halt to the degeneration of tissues until the science of the future finds the answer to immortality: "Humanity developed the methods of treatment by means of cryonics (*zamorazhivaniia*) and what follows is to do the cell transplantation. I think that the problem of immortality lies in cryonics research and resuscitation of a living organism, or at the least, cryonics gives the possibility of preserving the bodily form until science is ready (179). Pavlishchev decides to commit his own body to the cause and undergoes a cryopreservation procedure.

Masing-Delic reads "A Matter of Death" as a parody of Soviet body research and asserts that in his story Pil'niak offers his criticism "of those who believed that nature's 'code' must be radically altered."[43] She further asserts that, with his parody Pil'niak "denies the validity of such a mechanistic view of nature and man and implies that the research for physical immortality is futile" (291). As I have shown, I do not hold a view according to which "A Matter of Death" expresses a parodic attitude vis-à-vis Soviet life research. Throughout his oeuvre, Pil'niak addressed questions of scientific development and technology. Some scholars have argued that Pil'niak was against urbanization and mechanization and that he supported pre-urban views and a return to instincts and nature. However, in light of interpreting Pil'niak's attitude toward technology as being essentially founded on the mix of Fedorovian and Soviet premises, where the aim is to take an active relationship in resolving the issue of human mortality, I think that the machine in Pil'niak's prose serves a far more serious purpose. Technology represents a means of achieving immortality by regulating the earth, transforming the human body and consciousness. In my view, "A Matter of Death" stands out as one of the alternatives in achieving immortality by means of sophisticated technology. As I will argue in my analysis of *The Volga Falls into the Caspian Sea*, Pil'niak furthers and broadens his understanding of technology to include matters

[43] Masing-Delic, *Abolishing Death*, p. 287.

of consciousness (technologized psyche), which represents the final stage in the earth-body-mind transformation.

Perestroenie psikhiki or Technology of Selfhood

In *The Volga Falls into the Caspian Sea* (written in 1929, published in 1930), technology becomes even more sophisticated and expands its meanings onto several planes. First of all, technology is envisioned as a non-aggressive means of earth regulation. In the novel, the engineers assume a refined relationship toward nature: "hydraulics engineers know the force of water, and they know that one can fight this force not by disturbing or contradicting it, but rather by coordinating it."[44] The novel's plot revolves around restructuring the flow of the Moscow River, as well as diverting the Oka and Kliazma rivers to connect the Caspian Sea with Moscow. The two main characters are engineers Pimen Sergeevich Poletika and Evgenii Evgen'evich Poltorak. Throughout the novel they function as antipodes, Poletika being the ideal engineer and Poltorak representing the scientist struggling, as his name suggests (pol-sex), with a pronounced sex drive.[45] Their mutual differences add another layer of meaning to technology in *Volga*, the technology of selfhood. Donna Haraway writes that cyborgs are invisible as they are also about consciousness. The cyborg coalition blurs the difference between the mind, body, and tool and makes the boundary between physical and non-physical very imprecise (153). Pil'niak shows his protagonists in their attempt to engineer themselves and their consciousness. In the novel, technology penetrates and reconfigures nature, human perception, and labor: "Russia with the help of the machine recreated, for the sake of labor, mutual human relationships; relationship to work, relationship to nature" (353). The mutual goal of the earth-body-mind-alteration is

[44] B. A. Pil'niak, *Volga vpadaet v Kaspiiskoe more*, Sobranie sochinenii v shesti tomakh, vol. 4, Moscow: Terra-knizhnyi klub, 2003, p. 238.
[45] Another possibility of interpreting Poltorak's name is the meaning of the word "poltora"/ one and a half, which gestures to something extra in Poltorak's character (pronounced sex drive), or even something incomplete.

overcoming death: "the prolongation of life, because in this disorder of the living life (*zhivoi zhizni*), which needs to be put in order with the help of science by Mechnikov, Voronov, Lazarev,[46] and machines, everything has only one solution for the tragedy of death, the tragedy of man and humankind, and that is the prolongation of genus (*rod*) and blood" (371). All scientists-engineers in *Volga* work on immortality and life prolongation, and part of their task is to recreate their identities based on their understanding of the problem of death.

Poltorak is markedly depicted as a negative character in *Volga* as he pursues the deviant path of lust and sexual desire in his attempt to come closer to the secret of immortality. Pil'niak makes Poltorak a sort of a parody by portraying him as a follower of Solov'ev's philosophy; Poltorak cannot but err due to his manifest sexual drive. His ultimate plan is to set an explosion at the monolith (water project) and ruin the central water plan. Poltorak is haunted by a scene from Tolstoy's *War and Peace* in which Kuragin kisses Natasha Rostova. This scene makes Poltorak cry for Natasha's "desecrated purity" (289). However, Poltorak is a hypertrophied Kuragin and he acts worse than the literary character he despises as he ruins nearly every woman he comes in contact with. He is unfaithful to his wife Sophia (ironically unfaithful to the teaching of Solov'ev, whose central philosophical theme is based on the idea of eternal wisdom embodied in the image of Sophia) as he cheats on her with his sister-in-law Vera (Faith) and later with the promiscuous Nadezhda (Hope). The female names are more than symptomatic as they reveal Poltorak to be a parody of ascetic life and primarily of Solov'ev's platonic mystic union of man and woman.

[46]All three scientists Mechnikov, Voronov, and Lazarev are rejuvenators credited for their research in the study of aging and longevity.

Poltorak's sexual exploits in the novel are propelled by his fear of death. As he seduces his sister-in-law, the dying tubercular Vera, he reveals his dread of mortality: "All truths, all justice, and all ethics are nothing in the face of death, that is why death is nothing, zero—and anything multiplied by zero is zero… Before the zero of death everything else is nonsense" (305). Poltorak is terrified by the power of death as it renders all human effort futile. This is why he wants to wreck the monolith, which represents both a material and an abstract machine, as he sees no sense in the entire water enterprise. At the same time, he is fighting death by having a sexual encounter with a dying woman: "I want to kiss your hands, your eyes, your breasts so that nothing is left to zero… I want us to experience happiness, physical happiness, joy, pleasure with which we will fight death" (305). His understanding of death is different from other characters as he thinks that mortality can be overcome only temporarily in the moment of physical bliss. In order to suspend his fear of death Poltorak is on an anti-Fedorovian quest by sexually devouring women: "Poltorak was ill… affected by women (*khvoral zhenshchinami*) letting go of his instincts (*raspoiasav svoi instinkty*)" (301). In Pil'niak, sexual energy is rendered negative and all libidinal attempts at life-preservation are condemned as wrong and a waste of life-energy. Pil'niak mirrors Fedorov's ideas of chastity, which require elimination of sexual instincts in humans. Fedorov believed that at one point immortal humanity will not need sexual reproduction. Sexuality is only furthering death and is a distraction from the big Task. Poltorak sees death in everything, including "the stone women…which were Poltorak's illness (*byli bolezniu Poltoraka*)" (322).

The only woman who resists Poltorak's charms and refuses his advances is Liubov' Pimenova. Liubov' is a virgin, and as her name suggests (Liubov'=Love), she is the embodiment of uncorrupted love, "she considered love to be pure, an ultimate feat (*podvig*)" (314). Liubov'

Pimenova is the model image of the Fedorovian daughter who in her chastity and work engages in the task of the transformation of humanity. Liubov' rejects sexuality and instincts and devotes her life to the archeological research of the ancient stone women (*kamennye baby*.) For Pil'niak, the stone women or Scythian women are a direct reference to Fedorov's ancient resurrectors. Through her work on stone women Liubov' is connected to the past and is participating in the creation of the Fedorov's museum of dead ancestors. Fedorov imagined museums to be scientific laboratories, modern reworked cemeteries, in which all dead are gathered and studied for future resurrection. The museum was to serve as the archive of the dead, and its Russian version would showcase the stone women as the memory of the first resurrectors. Groys asserts that Fedorov

> proposed the establishing of a museum of all men who ever lived, where each one receives his storage space for archiving the body, a genetic code…At the moment when the technical and political conditions would allow it, these people could be resurrected. That is, the museum is not a cemetery but a waiting room for all the underprivileged and oppressed... This moment has political significance in Russia after the revolution.[47]

As Liubov' works on preserving the stone women from archeological gravesites (located at the monolith) she is directly participating in Soviet biopolitics by collecting the memory of dead ancestors. According to Masing-Delic, "resurrecting is a kind of restoration of an ancient statuette found in small fragments by archeologists and later put together in painstaking labor."[48] Liubov's enterprise is a workshop in which death gets obliterated: "Liubov' was digging into centuries so that she can contribute to the future" (314).

[47] Boris Groys, "On Early Russian Transhumanist Ideas" at https://www.youtube.com/watch?v=CoQ1adCEMas (last accessed May 8, 2019)
[48] Masing-Delic, *Abolishing Death*, p. 95.

In addition to her archeological work, Liubov' is uncorrupted by instinctual urges and represents Fedorov's ideal virgin. Woman's chastity was important for Pil'niak and he developed literary fixation on the issue of woman's immaculacy. Masing-Delic writes:

> The young Pil'niak apparently was obsessed with the idea that women should be virginal and chaste. His first serious relationship (with Nadezhda Pavlovich, in 1915) broke up, either because of her lack of commitment to chastity, or to motherhood, or both. Pil'niak planned to lecture on female virginity and chastity, after his separation from Pavlovich and was also devising a novel that would stress the need for women to be virginal until their first encounter with love and then to be chaste, i.e. faithful to their chosen mate. The subtitle of this planned novel was to be "On Virginity" ["O devstvennosti"].[49]

Liubov' is obviously modeled on Pil'niak's image of an ideal women and it is no surprise that she is the only one who resists Poltorak's sexual advances in *Volga*. Her understanding of love is completely non-biological and platonic and as such is considered a heroic *feat* (*podvig*). Her ideal male partner is Fedor Sadykov, a mirror image of her father Poletika. They do not develop a clichéd romance but rather become spiritual partners, a brother and a sister, toward the end of the novel. Not accidentally, she becomes gradually devoted to Fedorov's namesake whose last name Sadykov, in addition to the obvious symbolism of his first name, associates garden with soil (*sad*). Their non-physical relationship embodies the new male-female partnership that is being established in the new society as a vital segment in technologizing the self.

Liubov's father Poletika is an ideal scientist-engineer. Like other characters in *Volga*, Poletika too has a telling name (polet-flight) associated with the highest moral, philosophical,

[49] Irene Masing-Delic, "Boris Pilniak's *The Volga Falls to the Caspian Sea* as Trotskyite Sophiology," *The Slavic and East European Journal*, vol. 52, no. 3, 2008, p. 420.

and literal aspirations. Poletika is not presented as a character in development, rather, he is depicted as a ready-made scientist, the leading constructor of the water project and designer of the future. His philosophy revolves around central Pil'niakian ideas of reworking nature, the body and character (*lichnost'*), and achieving immortality. He is a man of "old and strict rules" (239), entirely devoted to science. Poletika advocates the development of technocratic reason and rejection of base biological, unconscious, and non-aesthetical impurities in men: "Pimen Sergeevich [Poletika] honored reason above all other things… Pimen Sergeevich considered biology, the unconscious, subconscious in man, all of that which is a remnant from animals, instincts, blood, heredity to be dark and unworthy of a man" (243). His wife "came as pure woman" (243) and ended up being a fallen one by cheating on him with his colleague engineer. Since then, Poletika remained alone, devoted to his "lectures, projects, plans, formulas—alone with his work" (244). He is the main proponent of the rebuilding of the psyche (*perestroenie psikhiki*, 286) in the novel that represents the ultimate step in the techno-evolution of man. His engineering enterprise involves reconfiguration through physical machines, but it also treats the mind like a machine that evolves to produce utmost efficiency. In order to technologize the mind, according to Poletika, both the body and the psyche need to be decontaminated from, what he calls, human pathology, which is a "digression from norms of dignity" (460).

In ancient Greece, pathologia was the study of the passions that was connected to suffering and diseases (*pathos*). Poletika's mind and body are sanitized from instinctual diseases and together work as a highly functional machine, whereas his antipode Poltorak functions as the embodiment of pathology and therefore acts as an immoral dysfunctional machine that does not produce but annihilates and turns everything to zero. Poletika's body is his *delo* (task), along with his mind: "mankind is summoned (*prizvano*) not only to rebuild the nature of things, to

reverse the flow of rivers, to uproot/overturn (*perekapyvat'*) the geology of monoliths, but also to rebuild a man. Humanity builds monoliths of ideas (*poniatii*) digging up history and the subconscious in building new relations" (463). Poletika uses the verb *perekapyvat'*, which means to dig up the soil in order to rework it and make it usable or fertile again. The verb choice here extends from its literal meaning of restructuring the soil to its connection with the dead ancestors that need to be resurrected, and to the reworking of the human psyche.

It is not surprising that his direct descendants, his daughter Liubov' and her ideal platonic partner Fedor Sadykov are to inherit Poletika's work. At the very end of the novel he chooses them to continue building the future: "I am already old, Fedor Ivanovich, dear…I will leave you my projects, maps, plans, designs, calculations… And Liuba will join you so that she can excavate (*vykapyvat'*) the centuries" (469). They are chosen by Poletika as the fittest for the task because they have already internalized the process of transformation. Fedor is not accidentally Fedorov's namesake, and he is someone who literally replicates Poletika by cherishing the virtues of reason and, just like his spiritual father figure, he, too, loses his wife to his engineer colleague. Liubov' preserves her love for the ancestors and through her archeological work ensures the preservation of the past into the future. The ideally envisioned Fedorovian daughter and son are united in a new model of being that carries out the feat of transformation. Their engineered marriage, the perfect human-machine, is now ready to perform the task of the future.

In *Volga*, technology is the process of altering the material world, as well as *techne* or the craft of reworking the body and mind. It is only when one practices the cyborgian triad as their life task that one comes closer to overcoming death. Technology in this novel is the ability to perform and create on multiple levels; it helps the preservation of the past by creating a museum

of techno-bodies; it perfects the body and mind by sanitizing them from imperfections; it reconfigures the concept of partnership which does not rest on procreation.

Pil'niak makes technology the backbone of his literary poetics. As I have shown, Pil'niak's elaborate technocracy was informed by Fedorov's philosophy that he, as he developed as an author, additionally enhanced with other philosophies that were essentially congruent with Fedorovism. In this context, the label *poputchik* suited him well as he did not completely conform to or discard Soviet ideology but rather reworked it through *The Philosophy of the Common Cause* to suit his literary and ideological needs. In Pil'niak's world, it is primarily male engineers who come in direct contact with machines and become entirely affected by their mystical properties. Liubov' Pimenova is one of the rare "positive" female characters in Pil'niak's prose, but he treats her as an ideal since she does not have real agency, simply being a follower of her father and Fedor. She is engaged in archeological preservation of the stone women and is not working directly with machines. Technology is simultaneously rendered as rational and mystical, such as the flywheel in the factory acting like a new material deity that generates other machines and alters humans.

In Pil'niak, an engineer-scientist develops both cathodic and anodic relationships with technology. Inspired by the machine, he perfects his rational qualities, regulates his instinctual urges, and actively works toward resolving the riddle of immortality. This undertaking includes reworking the body in addition to spiritual tasks. Ultimately, as a result of the successful conversion, humanity is rewarded with an entirely new understanding of human relationships that gestures toward some form of platonic love, some sort of brotherly-sisterly camaraderie purified from sexual attachments. The new man and the new woman in such a newly established union represent the perfect human-machine capable of completing the task of resurrection.

Obviously, for Pil'niak, the machine is the main agent of immortality, the ultimate catalyst of change on a grand scale, the mystical entity that exerts its powers on the world, leading the dedicated to the future utopia.

This dependence and reliance on the technology exerted its influence on Pil'niak's own writing. In his short story "Orudia proizvodstva" ("The Tools of Production," 1927), which reads as an autobiographical account of Pil'niak the author, the unnamed protagonist, whose main profession is writing, elaborates on the influence the typewriter has on his writing style and his creative life. The writer first needed to learn how to adapt his body to the machine: "one needs to sit down at the typewriter (*za mashinkoi*) like one would with the lathe, and place himself above it so that the hands could assume the same position like when playing the piano, at the level of the typewriter keys."[50] The narrator's experience with the writing machine (*pishushchaia mashinka*) makes him reeducate his body and bodily movements so that he can successfully connect with the machine. The typewriter exerts its influence on the body of the writer, who, under machine guidance, begins to learn a new mechanized body language. The cyborgian interaction with the machine enhances performance, in this case writing performance, while eventually this internalized-automated-corporeal existence in return rewards the author with a complete mastery over the machine: "To know how to control (*vladet'*) the machine is such a mastery as is the mastery of playing an instrument" (522).

Ultimately, the machine wields its influence on the writer's psyche as well: "The typewriter organizes my thoughts" (522). In 1882, Friedrich Nietzsche said exactly the same thing regarding his novel use of the typewriter: "Our tools are working on our thoughts."[51] This cyborgian machine-writer relationship results in the outmost intimacy with the typewriter: "I can

[50] Boris Pil'niak,"Orudia proizvodstva,"*Povesti i rasskazy 1915-1929*, Moscow: Sovremennik, 1991, p. 521.
[51] Quoted from Friedrich A. Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz, Stanford: Stanford University Press, 1999, p. 200.

write only on my own typewriter, I know its every key, screw, and its every lack…How many brains (*mozgov*) I spilled (*prolil*)—not à la Esenin—on that typewriter, thoughts that I never confided to anybody, neither to a friend nor to my wife—I revealed them only to myself by means of my typing machine, my faithful confidant (*verny tovarishch*), witness, and collaborator" (522).

The growing intimacy between the writer and his machine eventually results in an unusual love relationship. The typewriter is a feminine noun in Russian (*mashinka*) and, gendered as such, opens up room for a linguistic play that further enables a curious semantic twist. The narrator acquires a more modernized typewriter and needs to get rid of the old one, which he understands as an act of infidelity. The new typewriter lies on a divan (*novaia lezhit na divane*, 523) and invites infidelity by "her" alluring presence: "infidelity is life; that is life to go toward renewed, new, perfected …" (523). "The Tools of Production" reiterates the typical Pil'niakian scenario now situated within the context of text creation. The writing machine alters the psyche of the author, reeducates his body so that the writer can embark on a task of literary immortality and resurrection of words. Resurrecting in art becomes a fruitful metaphor in literature and scholarship of this period. Viktor Shklovsky writes his essay "The Resurrection of the Word" ("Voskreshenie slova") in which he invites the authors to resurrect (dead) words. Fedorov's resurrecting terminology penetrates Shklovsky's scholarly lexicon: "the task of futurism is to resurrect things…Now words are dead, and the language is like a graveyard…."[52] According to Shklovsky, "only the creation of new forms in art can restore to man the sensation of the world, can resurrect things and kill pessimism" (40). For both Shklovsky and Pil'niak, bringing technology to art meant revitalizing it for the purpose of restoring the sensation of genuine life to ordinary life, be it in its mortal or immortal limits.

[52] V. B. Shklovsky, "Voskreshenie slova," in *Gamburgskii schet*, Moscow: Sovetskii pisatel', 1990, p. 36.

Authors in the twenties utilized Fedorov's ideas from the past and fused them with contemporary Soviet technology, both real and imaginary, to work on life by saving it from death, prolonging it, and resurrecting it. Masing-Delic argues that

> literature offered an immortality program that should not be treated as "revelations of the mystics, nor intellectual speculation, nor artistic experimentation, but instructive texts propagating a solid bliss of knowledge of the "gnostic" type. They are to be seen as immortalization manuals, as opposed to texts of self-expression, entertainment…literary advocates of immortalization make clear that their suggestions are not artistic play or fanciful experiments, but knowledge of how to create eternal salvation (24).

Piln'niak created his own idiosyncratic salvation program that featured male cyborgs engaged in creating the immortal society. Andrei Platonov's prose was also going in this direction. Platonov's unique cyborgism also showcased the newly forged techno-body that liberated individuals from the claws of death.

CHAPTER 2

The Digestive Tract of the Universe: Andrei Platonov's "Antropo-tekhnika"

> Machine. What is a machine? It is a miracle, the first and the last miracle, the miracle of man's work. It is created by labor and it produces labor. Machine is not only our brother— it is our equal, our living, marvelous and exact image. (Andrei Platonov, *Hallowed Be Thy Name*, 1920)

In the 1920s, Soviet Russia embarked on a project of creating a super-science with the ultimate goal of achieving immortality. Scientists in Russia were more than enthusiastic about research that focused on creating new life forms, investigating life processes, pathology, cell division, aging, immunity, heredity, evolution, endocrine regulation, hormones, etc.[1] The revolutionary fervor of establishing a new social order took hold of scientists who were convinced that they are creating a new science and that "new discoveries would enable them to control not just human life, disease, and death, but human destiny, and perhaps even to fulfill the millennia-old dream of immortality."[2]

Science and technology were widely popularized in periodicals, magazines, brochures, and newspapers with the support of the Soviet government. Nikolai Krementsov writes that the popular press went into a frenzy when a young Moscow doctor named Sergei Briukhonenko presented to the Congress of Pathologists a severed dog head that stayed alive for one hour and forty minutes attached to a special apparatus that impersonated a mechanical blood circulatory system and pumped blood into the canine's head. These experiments showed that technology fused with an organic body can become a new natural phenomenon. The old idea of a living body as fragile and mortal was altered, and it was now possible to evolve the body and redesign

[1] See more in Nikolai Krementsov, *Revolutionary Experiments: The Quest for Immortality in Bolshevik Science and Fiction*, New York: Oxford University Press, 2014, p. 25.
[2] Ibid. p. 25

humans. Science embraced the cyborgian turn that celebrated new kinships and introduced the machine as a new body part.

Figure 5: The commissar of Enlightenment Anatoly Lunacharsky (left) and the pioneer of the technique of studying severed heads Aleksei Kubliabko (right) with the head of a dog attached to Briukhonenko's apparatus, ca. 1928. Taken from Nikolai Krementsov, *Revolutionary Experiments,* p. 63.

The Bolshevik regime showed its full support for such experimentation. They generously sponsored new Soviet science that would only fortify the image of modern Soviet society that had successfully dealt with abolishing religion and introduced a new faith in science based on materialistic premises. The government expended tremendous effort in bringing the new science to the masses by popularizing scientific research in all available media.

Literature soon caught up with this trend. The recurring theme in science and in fiction was the idea that there was no actual limit to human longevity. Developing technologies could bring aging under control and it was the Soviets who were on the brink of ending death. The manipulated biological cells and internal secretion glands became the Archimedean point in research and the hope of liberation from death. Inspired by experimental scientific and medical

research, male authors engaged in writing about sophisticated technology. Altering the human body via advanced machines, coupled with Soviet science, became a literary obsession for many authors writing in this period. Soviet scientific research, with its utopian thrust and reliance on technology, provided a particularly rich ground for Andrei Platonov, who responded to the venture to reshape human life by engaging in "antropo-tekhnika" ("anthropo-technology"—a literary attempt to overcome the problem of death.

In this chapter, I examine Platonov's fiction from the 1920s to the early 1930s, in which he fashions his avant-garde project of technologically manipulated ether depicted as a giant cosmic digestive tract that becomes the new immortal body of the future. The notion of an ethereal-digestive tract appears to be a contradiction in terms. The ether is essentially an immaterial property of light, magnetism and electricity, while the digestive tract, with its gastric system of organs, functions as material entity par excellence. How do the two interrelate? I show that Platonov engages with Enlightenment's conceptions of the ether, and more specifically, Newton's understanding of ether as a foundational quasi-material particle that existed in all organic and inorganic worlds, from the soul (mind), to the body, all the way to the cosmos permeating all of outer space. Platonov also draws from the nineteenth century discussions of ether described primarily as a mechanical property, some sort of cosmic machine factory. Finally, he also takes from the early twentieth century, when ether was abandoned in science and accepted in art, to signify all things irrational and creative. The ether in Platonov is imagined as a body of the entire universe and, as I will show, is simultaneously biological, technological, and spiritual. The ambiguity between the immaterial and material properties of the ether creates an essentially cyborgian position that rests on a productive breach of the machine-organic border.

As a highly organized system, the stomach also has mechanical properties that Platonov fuses with the organic and treats as a unique source of life and creative energy. By going back to the classical ancient sources that celebrate the abdominal region as the center of the universe (axis mundi), a source of fertility (the Song of Solomon), ascribe divine status to the stomach seen as the universe and nature (in Brahman teachings), Platonov brings the notion of life to his story in an unusual techno-gastric hypostasis. In Platonov, the union of technologized earth (nature) and ether yield the eternal reservoir of life. This productive interconnection of the cosmic ether and digestion ultimately leads to the formation of the Soviet cyborg that in Platonov's prose attempts to reach immortality.

It is worth repeating that early Soviet efforts to redeem life were a part of the broader trend in the West, as it is equally significant that Soviet authors were in dialogue with both Western and Russian historical cultural heritage. Like Pil'niak, who turns to Fedorov and revisits his *Philosophy of the Common Task* for purposes of constructing his own peculiar version of communist society, Platonov, too, goes back to the past to draw from ancient mystical teachings, the philosophy of Enlightenment and their discussions of the man-machine that will shape later Western notions of the cyborg. Fedorovism also significantly informs Platonov's ideas of immortality, which, as opposed to Pil'niak's, has already been acknowledged in critical literature. This chapter analyzes how Platonov extends his idiosyncratic world of ethereal-digestive existence first onto the Earth, and then onto the human body, making it immortal (antropo-tekhnika). The bizarre cosmic-gastric constellation mirrors the human abdominal machine (stomach) that holds the secret to eternal life. The digestive tract of the universe and anthropo-technology are essentially the same project of abolishing death and generating a new body and consciousness. As far as I am aware, this aspect of Platonov's prose has not been

analyzed in critical literature. Most of the scholarly accounts have rightly stressed Platonov's apprehensions about the mind-body split that resulted in fluctuation between utopian and antiutopian impulses in his prose. Thomas Seifrid asserts that Platonov's struggle resulted from the uncertainties of the ontological status of consciousness within the material world. I contribute to the existing scholarship on Platonov by arguing that his cyborgian project overcomes the (Cartesian) mind-body split, which ultimately leads to resolving death. Platonov proposes a peculiar constellation of the universe and creates his male cyborg, that not only harmonizes the tension between the organic and inorganic but supersedes the dichotomy in a vision of fusion with technology.

"Efirnyi trakt" ("The Ethereal Tract" 1926-1927)

This novella (povest') chronologically follows the lives of three scientists in search of the ethereal tract, a project that would save the planet from hunger and prolong human life. I analyze their visions of the present and future in order to show the stages of reaching the techno-utopian society of the future. First, I introduce another important theme in Platonov's prose, the subject of germophobia, from the same novella, which is closely related to his life prolongation and immortalization narratives.

The scientist Faddei Kirillovich leads a reclusive life in his Moscow apartment and is ascetically devoted to his scientific research. In the novella's opening, he continuously scratches himself while being engaged in a lively dialogue with certain living entities. It is not entirely clear who exactly are Faddei's conversation partners: "Faddei Kirillovich always imagined his room to be populated by silent but attentive interlocutors. He injudiciously recognized these silent things (veshchi) as living entities (zhivye sushchestva) resembling himself."[3] Faddei

[3] Andrei Platonov, "Efirnyi trakt," *Sobranie sochinenii*, vol. 2, Moscow: Vremia, 2009, p. 11. (All translations are mine unless noted otherwise)

strangely addresses them as yellow citizens (zheltye grazhdane, 11) and keeps rubbing his skin while remarking: "microbes can be at ease, but I won't show them mercy, anyhow!" (11). When his landlady brings him breakfast Faddei replies: "Give me your tasty meal. We will breed decaying bacteria in the duodenum (v dvenadtsatiperstoi kishke), let them live in a crowded state (v tesnote)" (13). His agitated body language and his speech are symptomatically interwoven. He scratches his loins and notices wounds on his body probably caused by some fungal infection while he simultaneously communicates with microbes that make him anxious. Faddei compares himself to those "zhivye sushchestva" and calls himself "parshivyi vyrodok" (lousy degenerate.) He chooses the attribute "parshivyi" that in its stem contains the word "parsha," a skin condition caused by fungal infection that forms yellow patchy crusts on the skin (that he symptomatically addresses as "zheltye grazhdane").[4] It turns out that Faddei is in dialogue with microbes that he wants to destroy and that is why he promises to show them no mercy. In Platonov's prose of the 1920s there is a pronounced germophobia and fear of the unsanitized spaces that pose a threat to the human body.

It is important to emphasize the distinction that Platonov makes between the good and bad microorganisms, that is, those that can prolong human life as opposed to those that corrupt the body and disintegrate it. Whenever Platonov's characters sense the fear of the bad microbes they must be eliminated. In "Rasskaz o mnogikh interesnikh veshchakh" ("The Story about Many Interesting Things"), the protagonist Ivan Kopchikhov believes that he was contaminated by a love parasite since he started having sexual encounters with a local woman, Natasha. The "disease" was so contagious that other villagers became infected: "From Natasha Ivan contracted a nit (gnida) or a flea that jumped out and infected all men and women. But these nits are invisible and cannot be destroyed (perelushchit') by neither nail nor stone. Let them jump all

[4] This would probably correspond to favid or some form of mycosis (fungal infections).

over the world and then the end of the world will come."[5] The worried villagers invite a doctor to diagnose them, who says that they have contracted love bacillus (bacilla amore). Physical passion is negative in Platonov, so the medical terminology is employed to convey a sense of danger and threat from sexual contact. In the story, the narrator makes an editorial intervention in the text through a footnote in which he defines the word "microbe" in the following way: "an invisible louse (vosh') that gradually destroys the body and leads to death."[6] Platonov repeats the same scene in "Rodonachal'niki natsii, ili bespokoinye proisshestvia" (1927), and even adds a picture of love bacillus that resembles a mathematical graph or a table with empty contents.

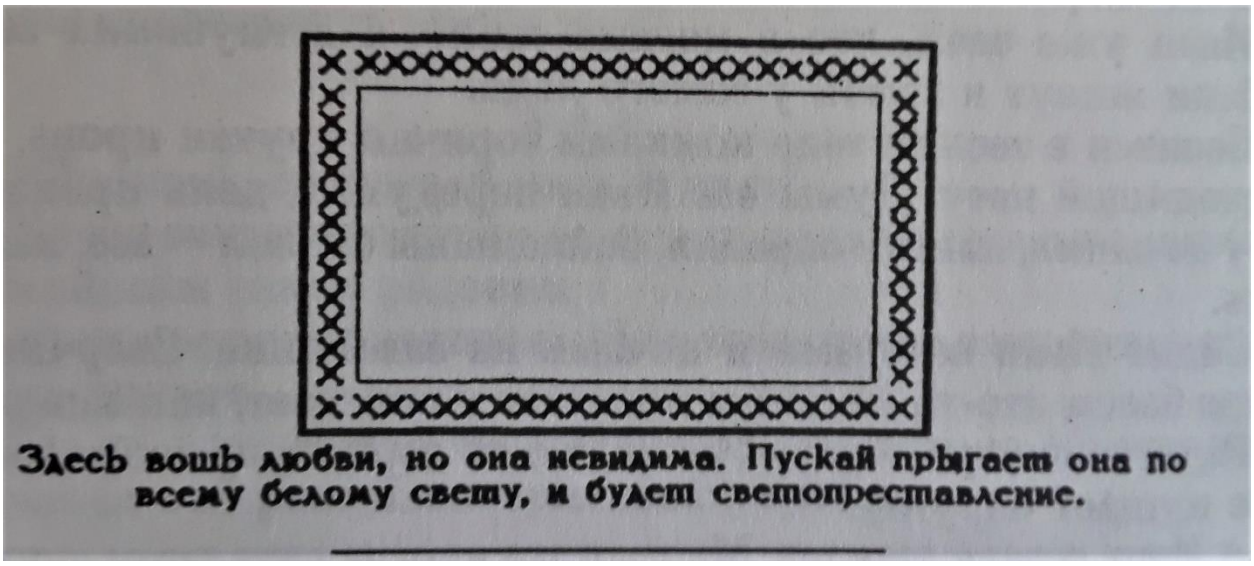

Figure 6: "Here is a love louse, but it is invisible. Let it jump all over the world and then the end of the world will come." (Andrei Platonov, *Rasskazy i povesti 1918–1930*, p. 194).

The fear of microbes poses a serious threat to mankind, but at the same time it is parodically treated by Platonov as an invisible entity that destroys life graphically, (non)represented in quasi-scientific table. This double attitude toward microbes, which is

[5] Andrei Platonov, "Rasskaz o mnogikh interesnikh veshchakh", *Sobranie sochinenii*, vol. 1, Moscow: Vremia, 2009, p. 356.
[6] Andrei Platonov, *Rasskazy i povesti 1918-1930*, Sobranie sochinenii v piati tomakh, vol, 1, Moscow: Informpechat', 1998, p.176.

simultaneously serious and parodic, is symptomatic of Platonov's narratorial style that allows him to release the burden of utopian imaginings by playfully mocking his own characters and their idiosyncratic worldviews. The play with texts, that border between utopian and anti-utopian attitudes, is suggestive of the deliberately unstable stance Platonov assumes in his oeuvre.

Faddei Kirillovich, a germophobic scientist, advocates a new understanding of atoms and creates a scientific theory that will change our understanding of the world. Faddei sees life in purely physiological terms: "The atom, as it is well known, is a colony of electrons, and an electron as such is not only a physical category but also biological—an electron is the essence of a microbe, that is, a living body (telo)."[7]According to Faddei, electrons are carriers of life, they move, live, and breed, in other words, they are no different than biological cells. He asserts: "from now on, the study of atoms should be taken from physics and transferred to the discipline of biology. This study will lead scientists to learn how to breed (razvodit') iron, gold, and coal" (14). Faddei believes that biology and technology should work together to reevaluate the atom in purely biological terms. He travels to Rzhavsk to conduct his secret atomic research and gets a helper, a purely technical man, Mikhail Kirpichnikov, who in the course of the story becomes a scientist. Kirpichnikov is fascinated by the mysterious Faddei Kirillovich and on one occasion secretly reads his scientific notes that reveal the theory of the ether. In his secret notes, Faddei writes in detail about the ethereal tract theory, which represents one of the most potent bio-technological metaphors in Platonov's prose and will have its many literary hypostases in his later works. As Faddei elaborates in his notes:

> If an electron is a microbe, that is a biological phenomenon, then the ether (which I name "the general body") represents an electron cemetery. The ether is a mechanical mass of destroyed or dead electrons. The ether is a medley (kroshevo) of microbe corpses—the

[7] Andrei Platonov, "Efirnyi trakt," p. 14.

> electrons. On the other hand, the ether is not only an electron cemetery, but also a mother of their existence, as dead electrons serve as unique food (pishcha) to the living electrons. Electrons eat the corpses of their ancestors (ediat trupy svoikh predkov) (19).

There are several important themes in this passage. The first is the significance of conducting biological research on atoms that once belonged to the realm of physics. The electron is treated as a biological cell and, according to Faddei, should be studied as such. This is certainly a scientifically unfounded claim, but as a concept it is rather original and vital to an understanding of Platonov's literary project. Second, Platonov here introduces a peculiar vocabulary that is directly associated with nourishment: food (pishcha), medley (kroshevo), eating (eda, est',) ethereal motherly imagery. The ether is envisioned as a general body (telo) that has its own organizing principles, as it simultaneously serves as a graveyard for dead cells and as a feeding source for living electrons. Furthermore, the story is titled the "Ethereal Tract" ("Efirnyi trakt"), which immediately invokes the digestive system (pishchevaritel'nyi trakt.) Platonov portrays the ether as an intelligent organism that functions like a highly organized machine that needs to be further technologically manipulated for the wellbeing of humanity. Third, Fedorovian imagery of dead ancestors that serve as food, or more symbolically as nourishment, for their descendants is more than obvious. Fedorov writes that dead fathers nourish the living sons in transmuted forms: "the corpse does not remain to sleep in the grave, but enters the atmosphere in the form of miasma,[8] embryos, providing necessary conditions for life and even beauty (producing, for example, the blue color of the sky)."[9] In the story, the ancestors are dead electrons buried in the ether and serve as a reservoir of life for their descendants, the living electrons. This eccentric constellation of the universe represents an idiosyncratic realization of the Fedorovian scenario.

[8] Miasma was a vapor or mist filled with particles from decomposed organic matter.
[9] Nikolai Fedorov, *Sobranie sochinenii v 4-kh tt*, vol. 1, eds., M.A. Kolerov, A. G. Gacheva, and S. G. Semenova, Moscow: Progress, 1995, p. 257.

Platonov's simultaneous interest in biology and technology is conflated in the image of the digestive tract that brings together both vitalistic (cell, life, activity) and mechanistic (highly structured organism) impulses. The ethereal tract is a metaphor of nourishment as it is envisioned as a cosmic-scale digestion where the ether is utilized to propel the feeding of animate parts of the cosmos. Platonov upgrades Fedorov's ideas and brings them onto an entirely different level.

Allison Muri writes that already during the Enlightenment, the ether was considered a liminal material-immaterial property and was often brought into connection with the mind (soul). Thomas Willis argued that the soul was immortal and entirely ethereal. Isaak Newton insisted that the ether and the nervous function were essentially the same quasi-material mechanisms. He proposed the possibility that the ether was both the property of gravitation, electricity, magnetism, and light, but also of human will and vitality. In Newton's view humans were machines animated by the mechanical properties of the ether. Muri asserts that, "Newton, like Willis, surmised that the ether could comprise subtle but material bodies that permeated larger bodies, instigated both motion and vitality in living matter, and transformed bodies from one material into another."[10] Platonov's portrayal of the ether rests on the mechanistic-vitalistic tensions and closely echoes Enlightenment's reflections.

Nineteenth century physicists looked at the ether as a mechanical property to explain the phenomena of light, magnetism, and electricity. They tried to solve the riddle of the body of the ether and envisioned it as an elastic jelly stretching through a universe filled with wheels. The British physicist Oliver Lodge proposed his mechanical model of the ether consisting of tiny cogs and tubes and, "a reader [of Lodge's work] could almost feel the machinery in the

[10] Muri, *The Enlightenment Cyborg*, p. 61.

surrounding ether being cranked into motion when an electric current was started up."[11] This nineteenth century model of the ether was envisioned as a machine or a factory of the universe. Platonov preserves something of this mechanistic model in his "Ethereal Tract," as his ether is portrayed as a general body consisting of tubes that runs under precise rhythmic motion. In the scientific world, the idea of the existence of the cosmic ether was gradually abandoned after Albert Einstein introduced his Theory of Special Relativity to the public in 1916. However, the interest in the ether never fully diminished, as Konstantin Tsiolkovskii, the famous Russian cosmist and the follower of Fedorov, advocated the return of the ether into science.[12]

The twentieth century, however, brought another understanding of the ether. "For the broad public through World War I at least, the ether grounded the new, invisible realities of radiant energies and their suggestion of continuity between space and matter—a view supported as well by Henry Bergson's philosophy of flux."[13] This other strand supportive of vitalistic imaginings of the ether is also present in Platonov, as his model of the ether is also of a nourishing, life bearing organism. Bruce J. Hunt asserts that the ether "rose to a particular prominence toward the end of nineteenth century, when enthusiastic physicists hoped the ether would provide the key to "a theory of everything," and that by laying bare its hidden mechanical substructure they would be able to explain and literally link together everything in the universe.[14] After the concept of the ether was almost abandoned in science it flourished in literature precisely because it carried the potential to explain all that is irrational, hidden, distant and mediatory. T. S. Eliot's poem "The Love Song of J. Alfred Prufrock" (1915) sets the tone by

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[11] *From Energy to Information: Representation in Science and Technology, Art, and Literature*, Bruce Clarle and Linda Dalrymple Henderson eds., Stanford: Stanford University Press, 2002, pp. 106-107.
[12] See more in extensive notes to Platonov's collected works, I.I.Matveeva, "Efirnyi trakt," Sobranie sochinenii, vol. 2, Moscow: Vremia, 2009, p. 519.
[13] "Ether and electromagnetism" in *From Energy to Information: Representation in Science and Technology, Art, and Literature*, Bruce Clarle and Linda Dalrymple Henderson eds., Stanford: Stanford UP, 2002, p. 97.
[14] Bruce J. Hunt, "Lines of Force, Swirls of Ether" in *From Energy to Information: Representation in Science and Technology, Art, and Literature*, Bruce Clarle and Linda Dalrymple Henderson eds., Stanford: Stanford UP, p.99.

invoking a patient etherized upon a table. In her essay "Isis Unveiled," Elena Blavatskaia proposed that the ether represents the daguerreotype of human actions and named it a world soul.[15] Platonov has an essay under the very same title "Dusha mira" ("The Soul of the World") where he tries to solve the riddle of the universe. These notions of the ether are especially important for Platonov.

For Platonov, the ether operates according to bio-technological principles. It is both mechanical and vitalistic. The ether embraces everything and its porous liminality opens room for merging together disparate ideas. That is why the ether can be simultaneously a carrier of life and a cemetery for dead electrons. Platonov sets in motion this liminal position of the ether and proposes a new bio-mechanical digestive model of the universe. According to Platonov's Kirpichnikov, the ether is a common technical body of the world that is "all generating and all interpenetrating"[16] In his study of the ether, Joe Milutis rightly notices that "what is clear about ether is that it is a mediating substance between technology, science, and spiritualism.[17] For Platonov too, ether becomes a merger-signifier where biology, technology and philosophy interconnect. Milutis theorizes the ether as bodiless technology, a "machine disgorging from its innermost organic recesses, that is capable of ... developing a brain on its own" (p. xxii). Platonov's ethereal tract is similarly depicted as some sort of cosmic brain in development.

In "Ethereal Tract", Faddei's greatest technological endeavor is to speed up the "tempo of electron life" (19) in an essentially inert ether and in this way propel electrons to propagate. Faddei sets himself the task of perfecting the "ethereal tract" of the universe. This is the period in Platonov's prose in which he is fascinated with the cosmos and its regulation, and most of his

[15] See more in Ian F. A. Bell, "The Real and the Ethereal: Modernist Energies in Eliot and Pound" in *From Energy to Information*, pp. 114- 117.
[16] Andrei Platonov, *Efirnyi trakt*, Sobranie sochinenii, tom 2, Moscow: Vremia, 2009, p. 48.
[17] Joe Milutis, *Ether: The Nothing That Connects Everything*, Mineapolis: University of Minnesota Press, 2006, p. xi

fantastic stories ("Satana mysli"/"A Satan of the Mind", "Lunnaia bomba"/"Lunar Bomb") and their protagonists are either in search of a new place for human life in the universe[18] and/or are planning to remodel it like Faddei. However, "Ethereal Tract" also represents a transitional story where the cosmic digestive project is tested out on Earth.

Faddei's work is inherited by Mikhail Kirpichnikov,[19] who after Faddei's death becomes an electrical engineer working for the department that studies biology of electrons (kafedra biologii elektronov, 26.) Mikhail is also in search of how to technologically perfect the ether, and begins his preparations in Nizhnekolymskaia tundra in Siberia. He introduces a project of warming up the earth by digging vertical tunnels (earth's symbolic bowels) through which electromagnetic energy (it was believed that electromagnetism is essentially an ethereal property) will change the way earth atoms behave and produce the warmth necessary for creating life in the polar areas. Kirpichnikov literally recreates the ethereal digestive system of the universe on Earth. It is not by accident that while digging a tunnel Kirpichnikov finds six corpses from an ancient civilization and a book that contains a detailed description on how to scientifically resurrect living beings. Scientific resurrection is conducted in sterilized conditions (here the motif of germophobia is implicitly present) by means of electromagnetic waves that are the property of ether.

The ethereal scenario is repeated, but this time it comes from below; from the underground and from the ancient past. The book contains a detailed description on how to resurrect an animal:

> An account of the principles of one's immortality in the light of exact sciences; the book describes experiments of death elimination of a certain small animal… The living

[18] Faddei says "Eh, the Earth! Don't be my home—spin me with a spaceship to the heavens (22).
[19] His last name Kirpichnikov is a telling name, as kirpich means brick in Russian. Symbolically, Kirpichnikov is another building block in the temple of new Soviet science.

> circumstances (sfera zhizni) of the animal (nutrition, atmosphere, the body, etc.) were subjected to continual exposure to electromagnetic waves, whereby, every single type of wave was designed to eliminate specific destructive microbes in the body of the animal. Therefore, by exposing the experimental animal to a sterilized electromagnetic field, one may succeed in increasing its life span one hundred times. (28)

A very similar scene is encountered in "Rasskaz o samykh interesnykh veshchakh," but the experiments are conducted on humans. Kirpichnikov's idée fixe to design the ethereal tract mirrors his own perception of human cognitive advancement. According to Kirpichnikov, the ethereal tract is a "cosmic brain in development." Similar to a physiological understanding of the cosmos, human progress is described in purely physiological terms. If the ether needs to be fed living electrons, the human brain too demands scientific nourishment: "the brain already developed and it obsessively needs sustenance (propitanie)… Kirpichnikov entered the epoch when the brain urgently needed nutrition (pitanie) that turned into an extremely impassioned craving similar to stomach hunger" (48). Platonov's use of digestive metaphors and literal organic imagery of developed consciousness show that all living cells, including the human mind, which is depicted with its biological counterpart the brain,[20] behave according to a digestive model of existence, that is strictly organized and structured. In his essay "Pitomnik novogo cheloveka" ("The Nursery of a New Man" 1927),[21] Platonov expounds on the special type of brain, the socialist-biological brain:

> Our man needs to be biologically better equipped (biologicheski luchshe oborudovan)… that is, he needs to have a better brain in the straightforward physiological sense…he

[20] In his essay "About love" ("O liubvi," first published in 1988) Platonov uses the same organic imagery to portray human thought: "The thought was born, the *new organic function of life* and victory…This new *organ* of life (organ zhizni) needs congruence, equilibrium with the world" (Andrei Platonov, *Rasskazy i povesti 1918-1930,* Sobranie sochinenii v piati tomakh, vol. 1, Moscow: Informpechat', 1998, p. 203, emphasis added).
[21] First published in the journal *Oktiabr'*, no. 2, 1999.

> must move in a direction of cultivating (vyrashchivanie) of his own brain.…In this I see the inner biological aftermath of the October Revolution.…Socialism represents a demand on brain production.…What makes the new socialist man? Undoubtedly, brain growth, that is, the change in the brain in the direction of its enforcement and the organic shifts related to it (i sviazannye s etim organicheskie peremeshcheniia)."[22]

Platonov analyzes the October Revolution in biological terms, the time-space coordinates are biologically determined, and in this sense the Revolution comes as a result of Darwinian determination, as a consequence of evolutionary struggle and development. "Man as a creature survived (vyzhil) because he gave birth within himself (rodil v sebe) and put into action a new living organ of the body—the brain" (*Fabrika literatury*, 637). This strong biological bent in Platonov receives massive attention, from the atoms seen as inherently biological entities on the micro level, to time-space categories on the macro level. The Darwinian narrative of struggle and selection reflects itself in Platonov's interpretation of the biological cell as one that can be manipulated and further developed like the ether.

The highest manipulation of the ether would lead to its new technological understanding as an essentially bodiless mind of the world. The concept of bodiless technology is new in Platonov and it reappears in his short prose works. In the "Efirnyi trakt," a scientist Matissen is working on a bodiless technology, the wireless ethereal machine that works by converting human thoughts into action. In 1920, Leon Theremin invented an instrument called the termenvox (also known as theremin) that produces sounds without human physical engagement. As the musician moves his or her hands in the air, the theremin responds by producing what is described as eerie music. Interestingly enough, Theremin first named his instrument "etherophone," an instrument that plays ethereal music. In his biographical account, he claimed that he first came to the idea of

[22] Andrei Platonov, *Fabrika literatury*, Sobranie sochinenia, vol. 8, Moscow: Vremia, 2011, pp. 639–40.

creating the etherophone when his close young female friend died and he believed that he could resurrect her by bringing ethereal music to earth.

Figure 7: Leon Theremin playing the Theremin, 1927.

These ethereal-avant-garde projects reflected the direction in which young Soviet scientists and artists envisioned the development of modern consciousness. They strove to create bodiless technology that could fundamentally change human life. In "Ethereal tract," the scientist Matissen designs an apparatus that translates human thoughts into specific waves that influence the events in the actual physical world. Here the organic, physiological imagery of the human brain is reactivated showing the inexhaustible power of the human mind. "Matissen's brain was a mysterious machine that gave new composition (montazh) to the depths of the cosmos, and the device sitting on his table put this brain (etot mozg) into action" (64). His technology involves almost no machines, as Matissen strives to physically engage human thoughts and put them into action; the brain is a machine that controls the universe. With this ethereal technology Matissen sinks a ship in the Atlantic Ocean and kills hundreds of people, among them the scientist Kirpichnikov. Matissen also sets off an explosion in the Milky Way and changes the way the solar system works. These apocalyptic scenarios serve to accentuate the magnitude of potential

that bodiless machines assume rather than prognosticate the development of future human actions.

In a similar vein, Kirpichnikov's death is not to be interpreted as tragic. As his name suggests, he is just one of the building blocks on the road to solving the problem of immortality. He is succeeded by his son Egor Kirpichnikov, who finally solves the ether riddle. Egor integrates all approaches to the ether, including Faddei Kirillovich's theoretical basis, the ancient book on resurrection and his father's findings:

> Egor introduced himself to the work of Popov [Faddei Kirillovich], rare ancient literature, and to all current hypotheses on feeding (vykarmlivanie) and breeding (vos*pitanie*) of electrons. There was no doubt that electrons were living entities. The study of electrons was already established as a discipline of microbiology. Like his father, Egor purposefully chose the ultimate solution of the universe to be the theme of his life and was in search of the primordial belly (pervichnoe chrevo) of the world in the interstellar realm, among the mysterious life of electrons that form the ether (78).

Egor deciphers the ether riddle in his laboratory by merging biological and electro-technical approaches to the problem of the ether. For Egor, praxis becomes the most relevant aspect of scientific work as he primarily deals with "the challenge of turning scientific theory into real technological achievement."[23] Because Egor is secretive about his findings, a newspaper reporter sneaks into his lab and discovers the ether-producing machine that is able to magnify any object or entity by means of feeding the electron cells with electromagnetic waves. He encounters an enormous body of an electron that was fed with ether. The electron turns into a three-foot-tall monster with large jaws, black teeth, and short paws, standing on its tail. The terrified journalist

[23] Christopher W. Harwood, *Human Soul of an Engineer: Andrei Platonov's Struggle with Science and Technology*, PhD Thesis, Columbia University, 2000, p. 87.

comments that “this strange and terrible creature is formed very quickly and creates the impression of a living piece of metal.…This is undoubtedly an artificially fed and raised electron” (89–90). The anxiety about new technology mediated through the image of the journalist is parodied in this description. The manipulated electron is envisioned as a threatening monster that is hidden in the laboratory run by a crazy scientist. In the 1920s, newspapers and magazines were excited about new technology, but likewise expressed anxiety about it by inventing similar stories to this one. Scientific experimentation was imagined to be potentially threatening to human kind and as a result, similar stories were populating Russian print media. Platonov was aware of the journalistic imaginings of the new Soviet science and parodically treats this phenomenon in his story. The “Ethereal Tract” ends with Egor’s death. He dies in Buenos Aires from an infection caused by malaria parasites. The narrator ends the novella the way he starts it: with parasitophobia.

“Antropo-tekhnika” or the Creation of the New Man

The biotechnological manipulation of the universe is replicated on humans in Platonov’s 1923 short story “A Story about Many Interesting Things” (“Rasskaz o mnogikh interesnikh veshchakh”) where he presents an essentially eugenic project called “Antropo-tekhnika.” The story takes place in the Institute of Anthropo-technology run by a scientist who calls himself “Prochnyi chelovek” (Durable Man). Prochnyi Chelovek writes a book *About the Construction of a New Man* (*O postroike novogo cheloveka*) in which he expounds on the major principles of his philosophy. He believes that the essence of civilization is chastity (tselomudrie) that leads to a creation of a different human being: “The time of an utterly chaste man has arrived; he creates great civilization, he assumes (obretaet) the Earth and all other planets, he connects with himself

all the visible and the invisible, he will finally turn time and eternity into a force and will outlive both Earth and time. For that reason… I founded the science called Antropotekhnika."[24] In his later story "Rodonachal'niki natsii, ili bespokoinye proisshestvia" (1927), Platonov elaborates on the exact same Fedorovian ideas about chastity and creation of a new civilization: "Chastity is a way of preserving that inner powerful bodily force that is used in production (proizvodstvo) of posterity; what is needed is conversion of this force into labor, into invention, into creation of ability to better the existing potentials or creating that which never existed before.[25]

In "Rasskaz," the principles Fedorov's philosophy, of refraining from sex, mastering the planets and the cosmos, and ultimately achieving immortality are explicitly laid out. What follows in the story is completely a Platonovian twist of how these goals are achieved. Prochnyi Chelovek gathers individuals who want to become either rejuvenated or immortal and conducts experiments on them that fight against the invasion of microbes in the human body. He invents a device similar to the ethereal machine based on the manipulation of electromagnetic (ethereal) waves that destroy microbes and preserve good cells in the human body. The scientist develops his research, which is triggered by the invasion of microbes (nashestvie mikrobov, 378). Prochnyi Chelovek has two workshops that represent two steps in achieving immortality. The first workshop, called the Workshop of Durable Flesh (masterskaia prochnoi ploti), extends life expectancy by converting sexual energy into creative energy. Like in "Antiseksus,"[26] Platonov writes about the conversion of the libido into what he considers to be more productive energy that leads to the creation of a new communist society. "Human flesh (prochnaia plot') is made

[24] Platonov, "Rasskaz o mnogikh interesnikh veshchakh," p. 378.
[25] Platonov, "Rodonachal'niki natsii,"p. 101.
[26] "Antiseksus" (written 1925–1926) plays with the idea of converting libidinal energies into creative energies by the invention of sex machines for both men and women of all ages. In the story, which is a parody of Platonov's own ideas about sexuality, the seller of the sex toys humorously invites people to regularly engage in sexual acts with his sex-machine in order to convert their sexual instincts into working potential. Even very old men whose libido has diminished over the years are advised to apply this routine regularly.

lasting by means of chastity, where the released sexual force is turned into a talent for invention" (379). This is, according to Prochnyi Chelovek, the first step in achieving eternity. The experiment in the second phase is conducted in the Workshop of Immortal Flesh (masterskaia bessmertnoi ploti) where an already prepared and rejuvenated chaste body is turned into an immortal body by means of ethereal electromagnetic waves.[27] In the late nineteenth century, scientists believed that the ether consisted of electromagnetic waves,[28] and here in this story, these ethereal waves are utilized to promote immortality. His machine and the special food he feeds his immortals are situated in a highly sanitized room:

> They are immortal and healthy and enduring like camels….The food that keeps them sated, and the air that they breathe is free from pathogenic microbes. Weariness, anger, misfortune, sickness, dreams, death and everything else that interrupts life occurs due to the presence of certain microbes that appear instantly in the body and consume it. The human body fiercely fights against these microbes by producing specific useful microbes. Nevertheless, these lethal microbes defeat the useful ones and consequently, man dies. I contemplated, selected, and succeed in producing these electromagnetic waves, each of which destroys specific kinds of pathogenic microbes. The first type kills typhoid microbes, the second crushes those microbes that cause fatigue, the third type destroys those that attack the nerves and the brain, the fourth type extinguishes microbes that appear in bowels due to food decay, and so on. (381)

[27] N. Malygina states that "In "Rasskaz," Prochnyi Chelovek carries out a program of overcoming death. His methods of improving people's health in "the Workshops of Durable and Immortal Flesh" are based on the actual experiments conducted by A.L. Chizevskii at the beginning of the 1920s. Chizhevskii studied the effects of electricity on the human body and Platonov obviously knew about it." N.M. Malygina, *Khudozhestvennyi mir Andreia Platonova*, Moscow: Uchebnoe posobie, 1995, p. 31.

[28] Arndt Niebisch asserts that "in the nineteenth century, ether was assumed as the medium in which light and electromagnetic waves would propagate—a hypothesis that was rejected by the theory of relativity." "Ether Machines: Roaul 'Hausmann's Optophonetic Media,'" *in Vibratory Modernism*, Anthony Enns and Shelley Trower eds, Basingstoke:Palgrave Macmillan, 2013 p. 162.

Similar to the ether, which is manipulated by directing electromagnetic waves into dead electrons in "Efirnyi trakt" in "Rasskaz," the anthropo-technology maneuvers ethereal waves and directs them onto the mortal human body. This newly immortal human being, however, needs a completely germ-free environment in order to live. By leaving the immortality issue not entirely solved in his utopian system, Platonov opens room for further narratorial adventures that allow him to be self-parodic, anti-utopian, and playful. After he completed his work on the "Efirnyi trakt," Platonov writes about his preference for staying playful with his ideas in a letter to his wife. "My ideals are monotonous and constant. I cannot be a writer if I only expound on my unchanging ideas. Nobody will read me. I need to vulgarize (oposhliat') and vary (var'irovat') my thoughts in order to achieve satisfactory literary works."[29]

"Lunnaia bomba" ("Lunar bomb" 1926)

Varying his ideas about remodeling the Earth and the universe was indeed important to Platonov. Themes of the ether, digestion, and electromagnetic machines appear in many stories of this period, assuming various guises. In the short story "Lunnaia bomba," the young scientist Peter Kreitskopf sets himself on a task of designing a lunar bomb that will bring major changes to humanity:

> Kreitskopf hoped to discover on other planets new intact (devstvennye) sources of food (pitanie) for the Earth; he wanted to construct hoses springing from these planets onto the Earth and resolve all evil, burden and crowdedness of human life. And once the *infinite*

[29] Andrei Platonov, *Rasskazy i povesti 1918-1930*, Sobranie sochinenii v piati tomakh, vol. 1, Moscow: Informpechat', 1998, p. 580.

bowels of distant stellar spheres are discovered, the humans will be in greater need of each other.[30]

Kreitskopf devises a digestive technology of the universe in which the planet Earth is fed with "gastric arrangement" from other planets that are joined by the unique system of hoses that essentially functions like intestines. Before he undertakes this task, Kreitskopf unintentionally kills a five year old boy while driving his car. This event makes Kreitskopf even more determined to complete his project as he believes that his new technology will perform scientific resurrections. He makes an oath over the dead boy's body: "I will redeem you, my dear" (Ia iskupliu tebia, milyi, 224). After this accident Kreitskop again involuntarily kills his workers by experimenting on electromagnetic waves. The waves rouse the atoms to action and cause them to break down into a considerable amount of energy that proves lethal for his workers. Kreitskopf ends up in prison where he gets ill. Failure to further experiment on his digestive-cosmic project psychosomatically affects his own body and Kreitskopf contracts an intestinal disease (zabolel kakoi-to kishechnoi bolezniu, 226). It is as if the human body mirrors the cosmic body on a micro level, or as Thomas Seifrid argues, that the "preoccupation with the individual physical body [is] the direct experiencer of ontological conflict and even the primary site on which the struggle between universe's antinomies is engaged."[31] What follows is Kreitskopf's release from prison and his plans to undertake space travel with his lunar bomb. His plans are realized and he finds himself in the depths of the ethereal tract. While space travelling, Kreitskopf sends radio messages to Earth in which he reports on his findings. He perceives the electromagnetic field as music, poetry that incites powerful sensations in both the body and mind. He becomes hungry and thirsty while his thoughts are grandiose and uncontrollable: "the moon is continuously

[30] Ibid. p. 222, (my emphasis).
[31] Thomas Seifrid, *Andrei Platonov: Uncertainties of Spirit*, New York: Cambridge University Press, 1992, p. 36.

feeding me with keen, immaculate intellect" (235). In another version of this short story titled "Lunnye izyskania" ("Lunar Research"), Kreitskopf portrays the Moon as a physiological system with fibrous structures and nerves (eto konglomerat nervov.)[32] Kreitskopf decides to stay in the cosmos and invites others to join him: "Bring as many people as possible on interplanetary bombs[33]—here it is wonderful, terrifying, tense, and everything is so clear" (vse poniatno.)[34] Everything becomes clear and connected for Kreitskopf, who, when he kills the innocent boy in the car accident promises to resurrect him. In the moment of the car accident the boy is wearing a cap with the sign "Ocean." When in the cosmos Kreitskopf invokes the image of the ocean again that symbolically brings in the immortality theme: "I discovered an electromagnetic ocean[35] all around"[36] The discovery of the electromagnetic ocean enables scientific resurrection.

"Potomki solntsa" ("Descendants of the Sun" 1922)

In "Potomki solntsa,"[37] the engineer Vogulov sets on a task of reconstructing the Earth with the aim of changing its atmosphere. He initiates digging of the canals through mountains in the Carpathians and in Asia in order to create air ducts that would deliver air and consequently bring humidity or dryness to a given region. Vogulov wants to change the Earth's structure with an eye on the ether: "Electromagnetic radio waves whispered in the atmosphere the interstellar ethereal words of a working man."[38] Vogulov's task is not that different from Platonov's other

[32] Andrei Platonov, "Lunnye izyskania," *Sobranie Sochinenii*, vol 1, Moscow: Vremia, 2009, p. 137.
[33] In *Lunnye izyskania*, instead of bombs, Platonov uses bricks as a means of cosmic travel ("na kirpichakh" 135, vol.1), another of his favorite metaphors for building blocks of new science.
[34] Ibid. p. 135
[35] In the nineteenth century, scientists often envisioned the ether like an enormous elastic liquid entity. Here the comparison of the ether with the electromagnetic ocean evokes the classic ethereal imagery.
[36] Andrei Platonov, *Rasskazy i povesti* 1918-1930, Sobranie sochinenii v piati tomakh, tom 1, Moscow: Informpechat', 1998, p. 234.
[37] The story appeared first under the title "Satana mysli" ("The Satan of Thought")
[38] Andrei Platonov, "Potomki solntsa," *Sobranie Sochinenii*, vol, 1, Moscow: Vremia, 2009, p. 303.

engineers, as he too dreams of creating a nourishing system of canals by delivering oxygen to the inner body of the mountains.

Influenced by Aleksei Gastev and Aleksandr Bogdanov, Platonov writes about "remont" (repair, renovation, reconstruction) of the Earth. In this early period of his writing career, Platonov advocates violence on a mass scale in order to restore the Earth and ultimately eliminate its defects. In "Potomki solntsa," violence over nature and general *remont* of Earth reemerges with the invention of artificial digestion. After it has been manipulated, technologized, and refined through its digestive tract, the Earth becomes restored and rejuvenated. In his essay "Remont zemli" ("The Repair of the Earth" 1920), Platonov states that like the ether, the Earth is an unrefined system, a machine that needs intervention in order to work efficiently. In answering the question what is Earth, Platonov says:

> It's a means of production of bread, feeding grass for livestock, etc. That is to say, it is the same machine as a weaving loom, only this one produces material for feeding humans. Like any other machine, the Earth too needs repair, correction, renewal with fresh forces that it gives back to the production of plants.…If the Earth became tired, impoverished—we will restore, repair it (otremontiruem), and feed it (nasytim) with new forces.[39]

The food producing machinery of the Earth also requires nourishment. Platonov's vision of nourishment presupposes violence as a way of refinement and betterment. Vogulov sets a series of explosions that affect the entire planet, which then begins to look as if a doomsday has arrived: "And Europe was caught in flames, a hurricane swept away countries, lightning went furious in the atmosphere, and the Atlantic ocean started breathing water out to its very bottom, pulling out tons of water onto the islands.…Man rose up against the universe, armed not with his

[39] Andrei Platonov, *Fabrika literatury*, pp. 590–91.

imagination but with consciousness and machines" (305). In order to avoid repetitive scenarios, Platonov suddenly changes the story line and begins to "vulgarize (oposhliat') and vary (var'irovat')," so Vogulov eventually loses his mind and wants to set an explosion that would destroy the entire planet and with the help of ultraviolet electromagnetic radiation create a new planet. Vogulov invents a microbe of energy (mikrob energii) that induces such a tempo in workers that they begin to die of work exhaustion in a matter of days. "The microbe of energy made eternity unnecessary" as the workers are happy to die in an instant and "feel death as the fulfillment of a joyful instinct" (310). Here Platonov mocks his own ethereal utopian designs and develops a scenario in which he amplifies the catastrophic outcome for human kind and planet Earth.

Digestion

Platonov's theme of digestion and its significance in human and animal betterment was part of a broader trend in science in the early twentieth century. Ivan Pavlov conducted experiments on the digestive glands for which he was awarded the Nobel Prize in 1904. In his Nobel lecture, Pavlov talked about the mechanical, or technical properties of the digestive system:

> The digestive canal represents a tube passing through the entire organism and communicating with the external world….The physiologist who succeeds in penetrating deeper and deeper into the digestive canal becomes convinced that it consists of a number of chemical laboratories equipped with various mechanical devices. The mechanical apparatuses are formed by muscular tissue that is a constituent part of the wall of the digestive canal. They take care of the passage of the components of food from one

> laboratory to another, or detain them for a certain time in a given laboratory, or finally, expel them when they prove harmful to the organism; moreover, they participate in the mechanical processing of food, adding the mechanical action on it by thorough mixing, etc.[40]

According to Pavlov, the digestive system is composed of many technical laboratories, in which each laboratory works on a given mechanical task. Digestion is described as a complex machine that consists of tubular structures, intricate food passages, and one of its main functions is food processing, decomposition, and mixing.

However, to this very mechanistic description of the digestive tract, Pavlov adds another organic understanding of the gastrointestinal world:

> Food finding its way into the organism where it undergoes certain changes—is decomposed, enters into new combinations and again dissociates—represents the process of life in all its fullness, from such elementary physical properties of the organism as weight, inertia, etc., all the way to the highest manifestations of human nature. Precise knowledge of what happens to the food entering the organism must be the subject of ideal physiology, the physiology of the future. The first stage through which the food substances introduced from without must pass, is the digestive canal; the first vital action on these substances, or to be more exact and objective, their first participation in life, in its process, constitutes what we call digestion.[41]

According to Pavlov, digestion is the first vital action of any living organism; it represents life in all its fullness that reflects the highest cognitive functions of human nature. This vitalistic interpretation merges with the mechanistic view to produce a very vibrant image of the digestive

[40] Ivan Pavlov, "Physiology of Digestion" at http://www.nobelprize.org/nobel_prizes/medicine/laureates/1904/pavlov-lecture.html (last accessed May 9, 2019)
[41] Ibid.

tract—a powerful bio-machine. This understanding of human digestion is very close to Platonov's, who sees the ethereal tract of the universe as both mechanical and alive. Platonov envisions human digestion as the micro image of the large digestive tract of the universe. In his short story "Nevozmozhnoe" ("The Impossible"), the unnamed protagonist believes that human life is not of terrestrial origin: "Life is not a local, earthly phenomenon, life is forwarded to us through ethereal space from the other planets in the form of the smallest colonies of simple organisms….In the coldness of interplanetary space these organisms are carried in a petrified state (v obmershem sostoianii) where upon meeting the Earth they revive.[42]

These organisms are atoms, the carriers of biological life, according to Platonov's protagonist. The atoms (cells) are of the same origin and makeup, and therefore the structure of the universe is no different from the human organism. Cosmic digestion, that is, the life of the universe, works according to the same organizing principles as human digestion. In "Nevozmozhnoe," Platonov writes enthusiastically and at the same time parodically about the human stomach:

> The most ancient and genuine God in the world is the belly (puzo), and not a frail divine spirit. There is a great mystery in the swirl and combustion of bowels; in the growling of gases one hears sacred chants and senses a certain pleasant fragrance (blagoukhanie) and quiet conciliation (umirotvorenie). The stomach (zhivot)—is a temple (khram) of man, the stomach is the abode of joy and human goodness. The belly is the whirlwind of all deeds. Everything grows from the belly and makes its way into the faithful paths of salvation. Without the belly everybody would perish. The entire Earth is roused by the stomach, as when the intestines moan and groan, man becomes a miracle worker (chudotvorets) (289).

[42] Andrei Platonov, "Nevozmozhnoe", *Sobranie Sochinenii*, vol. 1, Moscow:Vremia, 2009, p. 293.

For Platonov, the stomach acquires divine status. It is presented in place of the Holy Spirit and covered in great mystery. The stomach is compared to a "khram" that here signifies the sphere of the highest spiritual values.[43] The narrator chooses religious vocabulary (blagoukhanie, sviatye pesnopenia, umirotvorenie, khram) to communicate the mystery of the stomach. Additionally, "zhivot" in Old Church Slavic and later Old Russian means life, and the stomach here is indeed a source of life on Earth. The organic abdominal imagery completely interpenetrates spiritual discourse and acquires new meanings. In the Song of Solomon 7:2, the belly has erotic connotations as it is a stomach of the beloved one compared to symbols of fertility such as wheat and symbols of Virgin Mary the lilies: "Thy navel is like a round goblet, which wanteth not liquor: thy belly is like an heap of wheat set about with lilies"[44] In Platonov, the description of the belly is also a fertile source of creative energy, as for the narrator, everything grows from it. In addition to these allusions, the naval of the world (pup zemli) or axis mundi (in old Greek omphalos, the navel) is the concept of the center of the universe, and here also functions as a very powerful mirroring image. Nikolai Fedorov also wrote about digestion and claimed that in the oldest Brahman teachings nature was perceived as stomach: "In the beginning there was a gastreia (stomach), and gastreia was in nature, and nature itself was a stomach (zheludok)." According to Fedorov, the stomach (gastreia) was "the forefather of all living beings, that is, the digestion organ, and the surplus of digestion served for reproduction purposes, it was the cause of struggle and, consequently of progress."[45] Platonov preserves this concept of the stomach as a life bearing organ (zhivot) when he says that the most ancient and genuine God in the world is

[43] In the imagery of khrams and workshops (in "Rasskaz,") Malygina sees the contours of utopian cities in the long tradition of Dostoevsky's Crystal palace, Gastev's tower imagery from the eponymous poem, Tatlin's monument to the Third International, etc. In N. M. Malygina, *Khudozhestvennyi mir*, p. 14.
[44] "Zhivot tvoi–kruglaia chasha, v kotoroi ne istoshchaetsia aromatnoe vino; chrevo tvoe vorokh pshenitsy. Obstavlennyi liliiami" Pesnia Pesnei.
[45] Fedorov, *Sobranie sochinenii* v 4-kh tt, pp. 280-81.

the belly. For Platonov, digestion in both its technical and organic hypostases symbolizes the essence of existence in the universe and human life. However, at the same time the tone of this passage is parodic and humoristic as Platonov needs to keep his authorial distance from the ideas his characters are expounding in these works.

Platonov's major prose works, *Chevengur* (written 1926–1928, published in 1978) and *Kotlovan* (*The Foundation Pit*, completed in 1930, published in 1987) belong to the period of the late 1920s when the theme of digestion (in all its guises) and the enthusiastic reconstruction of the Earth via sophisticated technology was either in decline or received a darker treatment. The characters are almost always hungry in both *Chevengur* and *Kotlovan*, and they constantly dream of and talk about food and even involuntarily vomit (symbolically reject digestion in *The Foundation Pit*). Technology is depicted in both works but with much less emphasis and significance than it has in Platonov's short stories. Technology is of interest to individual self-taught engineers (samorodok type) who invent various small-scale apparatuses, such as Zakhar Pavlovich in *Chevengur*. An unknown machine enemy (mashinal'nyi vrag) at the end of *Chevengur* kills the villagers. In *The Foundation Pit* machines are harmful and they drain the energy out of the workers who attempt to dig out a huge foundation pit and question the meaning of life and proletarian happiness (Voschev). The characters sleep in coffins (Nastia) and they eventually die. The attempt to reconstruct the Earth and humanity is silenced or questioned. Seifrid writes that *Chevengur* abounds in the anxiety of reducing the human being into pure matter. He illustrates this with Zakhar Pavlovich's dark vision of the human as an empty vessel without meaning. Zakhar "is troubled by the thought that man may have descended from the worm… because the worm is just 'a horrible little tube with nothing inside it but, empty stinking

darkness.'"[46] In similar manner, Seifrid notices that in *The Foundation Pit* Platonov expressed nostalgia for the spirit as the bodies are shown exhausted and without consciousness (149). In his early short fiction Platonov plays with utopian outcomes of his anthropo-technology, while his *Chevengur* and *The Foundation Pit* portray the darker, dystopian picture of the total reconstruction scenario. Besides the body-mind instability in the prose of this period, Platonov had the propensity to look with critical distance and self-irony at his own ideas ("I need to vulgarize (oposhliat') and vary (var'irovat') my thoughts"), which allowed him to deliver narratives that were completely diverse in various periods of his writing. Also, these works were written in the late 1920s, when it became clear that all life prolongation and immortalization enthusiasm that flourished in science and literature was being gradually abandoned and silenced.

Platonov's techno-utopian literary imaginings resurfaced, however, in his novel *Happy Moscow* (*Schastivaia Moskva*). In this novel, the techno-enthusiasm of his early prose was recast from the cosmic and outer bodily realms into the lower strata of the earth, the capital city, the underground (metro), and lower body (bowels). Bakhtin writes that the carnivalesque downward thrust symbolizes digestion (the earth devours, swallows up) and birth (fertile womb) that affirms birth and rejuvenation.[47] In *Happy Moscow*, Platonov penetrates the inner machine-anatomy of Moscow and descends into the world of the dead to search for immortality within the corporeal. The images of lack, decay, and death don't have tragic overtones as Platonov reverses them into a carnivalesque search for life. Bakhtin asserts that "death is a necessary link in the process of the people's growth and renewal. It is the other side of birth" (407). The original meaning of carnival stems from the medieval Latin *carne vale* (flesh, farewell), which in Platonov is realized as the attempt to cast off the mortal flesh and make it eternal.

[46] Thomas Seifrid, *Andrei Platonov*, p. 111.
[47] Mikhail Bakhtin, *Rabelais and His World*, trans. Helene Iswolsky, Bloomington: Indiana University Press, 1984, p. 21.

Schastivaia Moskva (*Happy Moscow* 1933–1934)

In *Schastivaia Moskva*, digestion imagery is very prominent and is reflected in both the characters and the city. The big reconstruction of the Soviet capital in the thirties proves very inspirational for Platonov, who uses the metaphor of *remont* for his own poetic ends. The city and the characters are often described as having open tubular bodies that are a part of a larger system. Keith Livers notes how "the image of the alimentary canal as that which connects the upper and lower realms is variously reprised throughout the novel."[48] The female protagonist, the parachutist Moskva Ivanovna Chestnova, develops an emotional connection with her own digestive tract.

> Then Moskva washed herself and was amazed by nature's chemistry that transformed ordinary scant food (and how many impurities had Moskva not eaten in her life!) into a rosy purity (chistota) and blossoming expanses of her body. Even when she was all by herself, Moskva Chestnova could observe her body as if being somebody else's and feast her eyes upon her torso while she was washing it. She, of course, knew that none of this was her achievement, but rather the accurate work of nature and of past times.[49]

Moskva admires her body's ability to transform raw food by grinding it, sanitizing it, and cleaning its impurities, into an elixir of health that revives her whole organism. She knows that this mechanism, which works as a strictly regimented independent system (tochnaia rabota), is larger than herself and this is why she is able to look at it as though it does not belong to her. Moreover, this awareness produces an estranged, experimental relationship with her body. During her last flight she sets fire to the parachute by trying to light a cigarette. She feels the complete freedom of her body in the open air and imagines herself as an open tube: "Moskva felt

[48] Keith Livers, "Scatology and Eschatology: The Recovery of the Flesh in Andrei Platonov's Happy Moscow", *Slavic Review*, vol. 59, no. 1 (Spring, 2000), p. 173.
[49] Andrei Platonov, *Schastivaia Moskva*, Sobranie sochinenii, vol. 4, Moscow: Vremia, 2010, p. 19.

she was a tube (pochustvovala sebia truboi), a wind tunnel, and she kept her mouth opened all the time so that she could breathe out the piercing wild wind" (20). She envisions her body as a large (digestive) tract and experiments with it by trying to smoke in these conditions, in the upper realms of existence. The experiment proves unsuccessful and Moskva is prohibited from flying. She then becomes a metro worker, symbolically descending into the lower realms, the underworld, wanting to participate in building the Moscow metro system. Obviously, the choice of her new profession is not accidental. Moskva feels the connection between her own tubular body and the earth's tubes that comprise the metro system. During her work, Moskva has an accident and hurts her right leg severely. At first she denies experiencing any pain and wants to walk, which proves unsuccessful, but at the hospital her leg gets amputated. Moskva's peculiar, estranged relationship with her body produces bizarre reactions in her. She calmly accepts the loss of her leg and demands to see it in order to personally examine it. To the surgeon Sambikin's surprise, upon hearing such an unusual request, Moskva peacefully replies "as a matter of fact, I am not my leg" (80). By perceiving her body as a tube that is part of a larger system, Moskva becomes empowered and overcomes her bodily lack with unusual ease. However, this image of a happy and strong heroine is rather complex and ambiguous. It is particularly striking that at the moment of the accident Moskva interprets the unfortunate event in the following way: "the coach cars ran into me and squeezed me into a dead end (slepoi prokhod)" (77). Robert Chandler has noticed the ambiguity of the "slepoi prokhod" expression. Moskva is forced "literally into a blind passage (slepoy prokhod); this fuses the terms for "anal duct" (zadnyi prokhod) and "large intestine" (slepaya kishka)."[50] It should be added that "slepaia kishka" (literally the "blind" intestine), or in Latin the "caecum," is the only unnecessary part in

[50] Robert Chandler's notes to *Happy Moscow* in Andrey Platonov, *Happy Moscow*, New York Review Books, trans. Robert and Elizabeth Chandler with Nadya Bourova, Angela Livingstone, Olga Meerson, and Eric Naiman, New York, 2012, p. 245.

the human digestive system as it has no function whatsoever, it is literally a dead-end in human digestive tract.[51] It turns out that the image of Moskva being forced into a "slepoi prokhod" at the moment of the accident has multiple implications turning her into human waste, an unproductive part of the digestive system of the city and society.

The city itself mirrors its female protagonist in many ways. The connection between the protagonist's name and the name of the capital is obvious. The city of Moscow is like its female counterpart Moskva portrayed as a tubular city. The metro system with its numerous underground tunnels allows the city to transfer and circulate its inhabitants through the city's system like food is distributed in a digestive tract. And like a digestive system, the metro also nourishes the city, accelerates and invigorates the life of the capital. In the thirties, the Moscow metro was often compared to bowels and Platonov plays with this digestion metaphor and expands it onto the entire city.

The apartment blocks are depicted similarly to the Moscow metro. The buildings are joined by canalization ducts, electrical installations are connected through numerous cables, all sorts of cisterns and pipes are set up in Moscow dwellings that resemble the intestinal structures of the city. In Moskva's apartment building, various sounds can be heard through these installations that are described as fundamental carriers of human life:

> Behind the third door of the sewage pipe began the regular sounds of copulation, the empty wall water tank in the toilet hissed with air, at times weaker at times stronger, representing the work of the mighty water pipe (vodoprovod)….The other rooms in the corridor also had their events—small but continuous, so that the night was charged with

[51] This fact proves important for Platonov's germophobia theme, as it is known that caecum contains useless bacteria that can be potentially harmful and cause severe inflammation (appendicitis).

life and activity equally powerful like during the day. Sartorius listened and understood how poor he is for having only a single torso closed on all sides (89–90).

Sartorius is a scientist who falls in love with Moskva and eavesdrops on her while she is with her lover Komiagin. Sartorius' name is telling as in human anatomy the sartorius muscle is the longest muscle in the body. Platonov's choice of the name emphasizes the organic aspect of Sartorius's world view. His comment on possessing a single closed torso is telling of his perception of the city as one large open body that pulsates with life energy. His organic inclinations, however, are peculiarly intertwined with his technocratic views. Sartorius is trying to create an apparatus that would work as a digestive tract transferring food from nature into humans: "He woke up satisfied and resolute to create and bring to perfection the technical reinforcement (tekhnicheskuiu armaturu) that would automatically transfer the indispensable everyday power of food out of nature into the human body" (59). Sartorius dreams of designing a super-technological construction, a mechanical intestine that would transform nature's raw food into vital nutritional components. In his enthusiasm for intestines, Sartorius assigns them a cognitive function. He believes that human bowels can think and feel pleasure, which, according to him, qualifies them to become the fundamental part of the super-nourishing machine: "the intestines are like the brain, their sucking feeling is completely rational and yields to satisfaction" (72). Here Platonov's early physiological depictions of the universe and Soviet society is reactivated. Similarly to Kirpichnikovs', Vogulov's, and Kreitskopf's cosmic attempts to create a digestive system of the universe, where the ether connected with the Earth by a system of hoses serves as food for humans, Sartorius is looking for ways to create the equivalent of a feeding system on the Earth. In his extensive commentary to *Happy Moscow*, Chandler notes that in the earlier versions of the novel the sentence where Sartorius expounds on his idea

was followed by the striking thought about his colleague Sambikin that Platonov later decided to remove: "like a worm that, by means of its own body, processes harsh dead ground into living softness—with the same patient passion, [Sambikin] was penetrating into the dark distance of the unresolved world."[52] Sartorius sees Sambikin through the prism of his own understanding of the world. Here, too, the conversion of dead matter into living, imbibed with Fedorovian undertones, merges with the image of organic, primitive soil digestion.

Of all the characters in the novel who fuse together organic and mechanistic thinking, Sambikin is the most peculiar one. He is a surgeon who works at The Institute of Experimental Medicine in Moscow (primarily associated with Ivan Pavlov who ran the institute for several decades experimenting on canine digestion.)[53] In his scientific enterprise, Sambikin is resolute to find "a cistern of immortality" (ia naidu etu tsisternu bessmertiia, 61) in the human body. As opposed to all other Platonov scientists, Sambikin's research is exclusively devoted to the study of the human body, as he believes that the body holds the key to immortality. Like many other characters in Platonov's oeuvre, Sambikin too despises pathogenic organisms and fears that they can spread everywhere. While performing a surgical operation on a boy, whose head had been severely infected with strep, Sambikin anxiously thinks of a widespread contagion:

> It was clear to Sambikin that the open, feverish, vulnerable body of the ill boy, with thousands of sucking blood vessels, was greedily sucking up streptococci from everywhere—from the air, and especially from the instrument that was impossible to sterilize. It was necessary to move onto electric surgery a long time ago—to penetrate the body and the bones with a clean and instantaneous dark blue electric arc—then everything that carried death would be itself killed; and any new streptococci that

[52] Chandler's notes to *Happy Moscow*, p. 242.
[53] Chandler's notes to *Happy Moscow*, p. 242.

> penetrated a wound would find a burnt-out desert and not a nourishing environment (ne pitatel'nuiu sredu) (34).

Like the Prochnyi Chelovek in "Rasskaz" who maintained the life of immortals by keeping them in an antiseptic electrical environment, Sambikin wants to work in the field of electro-biology where he would maintain life by applying electricity from an external source onto the living organism. It is interesting that in the 1920s, the scientists were not able to agree upon the unique definition of electricity. In *The Standard Electrical Dictionary* published in 1920, there are seventeen different definitions of electricity. What is common to all of them is the thought that no one really knows what electricity is. It is not an irony or humor on Platonov's part when Prochnyi Chelovek in "Rasskaz" says that he does not know what electricity is: "I don't know that and it gives me much trouble."[54] It is indicative that electricity was very often brought in connection to the ether. One of the seventeen definitions of electricity states:

> It has been suggested that if anything can be rightly called "electricity," this must be the ether itself; and that all electrical and magnetic phenomena are simply due to changes, strains and motions in the ether. Perhaps negative electrification… means an excess of ether, and positive electrification a defect of ether, as compared with the normal density (W. Larden).[55]

For Platonov too, electricity appears to be one of the ether hypostases and manifestations of the physical relation of the ether to the Earth. When Sambikin dreams of electrical surgery he visualizes the machine development with an allusion to dreams of utilizing the ether for the purpose of life prolongation. And indeed, if the ether is a graveyard of electrons, as it is suggested in "Efirnyi trakt," then Sambikin looks for this graveyard in death itself by doing

[54] Andrei Platonov, "Rasskaz," p. 382.
[55] *The Standard Electrical Dictionary: A Complete Manual of the Science*, by Thomas O'Conor Sloane, Arthur Eugene Watson, 1920, New York: The Norman W. Henley, p. 207.

research on human corpses. Sambikin regularly performs autopsies, but not to discover the reason of death, as it would be expected, rather he is looking for the living substance, the trace of life in a dead body:

> He wanted to obtain a long life, or perhaps an eternity from the corpses. A few years ago, while digging in dead human bodies, he removed thin sections from the hearts, brains and sexual gland secretions. Sambikin studied them under the microscope and noticed some weak traces of an unknown substance…he discovered that this substance contains the acrid (edkii) energy of life; but it only exists inside the dead, the living don't have it… The corpse turns out to be, or the corpse is, the reservoir of the most tense, acute life, even if only for a short time (44).

The cistern of immortality or reservoir of life is to be found in a corpse. Livers argues that "in his fiction of the latter half of the 1930s and particularly in *Happy Moscow*, Platonov seems inclined to view the body not as an obstacle to be overcome but as a repository of resilience, indeed, even immortality."[56] In his biotechnological narratorial endeavors, Platonov shifts the traditional paradigm that celebrates the living cell and makes the Fedorovian turn in the study of human biology. Bakhtin, himself writing in a Fedorovian fashion, asserts that "the body of the people and of mankind, fertilized by the dead, is eternally renewed and moves forever forward along the historic path of progress" (404). In *Happy Moscow,* Sambikin believes that it is the dead cell that needs to be studied in order to resolve the problem of death: "A fresh corpse is greatly permeated with traces of a mysterious substance and every part of a dead person preserves in itself a creative force for those surviving to continue to live. Sambikin intended to transform the dead into a force that would feed (v silu pitaiushchuiu) longevity and health of the living." (44) In *Happy Moscow*, the dead feed the living, like the ether feeds humans in "Efirnyi trakt."

[56] Livers, "Scatology and Eschatology," p. 168.

Platonov's cosmic project is now reenacted within the microcosm of the human body. Sambikin concocts his first medical serum from the dead body of the boy who does not survive the strep infection. He tests the serum on Moskva who is in lethal danger due to gangrene infection and she miraculously recovers from her leg amputation after she takes the serum.

Like other Platonovian characters who are fascinated with tubes, cisterns, ducts, bodily and city cavities, Sabikin acquires an obsessive attachment to human intestines. When Sartorius asks him to explain the mystery of human life, Sabikin invites him to attend an autopsy performed on a young woman. While opening up the female corpse, Sabikin has bizarre thoughts of marrying the dead girl, and he turns her body to examine her chastity and nutritional state (upitannost'): "Sambikin dissected the fatty lining of the abdomen and guided the scalpel down the intestine-line showing their contents: in them was a solid column of unprocessed food after which the intestines became empty. Sambikin slowly passed the empty section and reached the beginning of the feces where he stayed" (61). Sambikin opens wide the empty space between the food and the fecal matter and starts smelling it in amazement, claiming that the human soul (dusha) resides in that particular bowel segment. What Sambikin most likely observes is jejunum,[57] a part of the small intestine that is usually void of food after death. Platonov centers the soul in this digestive emptiness, he symbolically fills the physiological void with meaning and gestures toward an abstract understanding of the digestive tract, relocating it from the somatic to the spiritual realm that forges wholeness. It is the soul of the world (dusha mira) that keeps the whole together. Zakhar Pavlovich's apprehension in *Chevengur* about man being an empty vessel (worm) without any substance is overcome in *Happy Moscow*. Platonov here also symbolically echoes Pavlov's idea of the digestive system understood as a unique property that

[57] in Latin ieiunum intestinum means empty of food, hungry.

"represents the process of life in all its fullness, from such elementary physical properties of the organism as weight, inertia, etc., all the way to the highest manifestations of human nature."[58]

In this way, Platonov fashions the avant-garde understanding of the ether into a metaphor for a new existence that is simultaneously biological, technological, and spiritual. The ether is a cyborgian medium that hosts modern human consciousness in its new body. In his world of ethereal-digestive existence, Platonov extends the drama of the cosmic bio-technology unto human existence. The cosmic-gastric cure is mirrored in the human abdominal bio-machine that holds the keys to immortality. The digestive tract of the universe and anthropo-technology represent the same project of reconstructing the world on both macro and micro levels. The total *remont* of man and universe abolishes death and generates a new psychosomatic integration of the mind and the body amplified by technology. Platonov's literary project complements the revolutionary goals of a super Soviet biomedical science: to control life and reinvent the body and the mind of the Homo Sovieticus.

The first two chapters have looked at the two male authors engaged in writing about technology that redeems life. The parallels between them are many. Pil'niak and Platonov were friends and collaborators in the 1920s. They even lived together in Iamskoe Pole near Moscow. They influenced each other's work and at one point even wrote together. Platonov, like Pil'niak, also wanted to write a novel about the Moscow-Volga canal water project. Their visions of a genuine communist society rested on an amalgamation of Fedorovism, Soviet ideology, and Western philosophical traditions with modern technologies. By coupling experimental scientific and medical research, immortalization narratives, and technology, they were both engaged in constructing a new man who has consciously abolished death.

[58] Pavlov, "Physiology of Digestion."

In the 1930s a significant gender shift occurred. Women began to engage with technology in a different way from men. While the male authors were occupied with producing techno-utopian immortalist narratives in their works, women both physically and intellectually engaged with concrete machines. They took industrial machines to remake themselves, to promote their feminist politics, challenge the prevailing patriarchal attitudes in Soviet society, and speculate about technology through their art. The following chapter discusses the works of two such cyborgian women, the writer Marietta Shaginian and the film director Esfir' Shub.

CHAPTER 3

The Silence and Sound: Forging of the New Soviet Woman

In the 1920s, male appropriation of technology went toward creating immortalization narratives in which male cyborgs, who redeemed life by means of science and advanced technology, were featured as new model citizens of the future communist society. In the predominantly male avant-garde culture of the 1920s, women's role and access to technology were reduced. This situation shaped the development of early Soviet culture in the direction of fixation with techno-manliness and the creation of a highly masculinized society. In the 1930s, the situation changed and women instead of men began to have a privileged relationship to machines. This re-gendering shift in engagement with technology brought changes in several directions. Chapter three examines the vital role technology played in defining the new Soviet woman in the Soviet culture of the 1930s.

The shift in my discussion to the 1930s affects the methodology of this chapter, which is different from that of first two chapters. I begin my analysis by briefly introducing Stalin's industrialization drive and provide a historical discussion of how the change in political direction affected the arts and gender perception in this period. Then I move to my analysis of the two figures, the novelist Marietta Shaginian and the film director Esfir' Shub, both of whom contested the masculinist perspective on technology in their work and contributed to the re-gendering of culture in a feminist direction. Today Marietta Shaginian is undeservedly considered an obscure Soviet author and her work is understudied in both Western and Russian scholarship. However, in the 1930s, Shaginian was a prominent writer whose work significantly influenced the cultural shift from the avant-garde to socialist realism. Film director Esfir' Shub is another important figure who in her film work actively engaged in introducing techno-women on

screen. Her contribution to the development of Soviet cinema began to be properly studied and acknowledged in recent scholarship. Where appropriate, I touch upon her biography to illuminate how in her professional life technology played a decisive role in promoting new Soviet women in the film medium.

In this chapter I argue that both Shaginian and Shub appropriate machines in their lives and work and remap their bodies and consciousness to create their own feminist politics. Shaginian re-gendered the male-dominated machine world by actively working with heavy machinery. She opened the first weaving institute in Soviet Russia, working with industrial machines. She regularly repaired them and was a weaving machine instructor. In literature, Shaginian participated in the creation of the production novel (proizvodstvennyi roman), an original type of construction site fiction, which officially brought authors directly to construction sites and engaged them with machinery firsthand. In her novel *The Hydroelectric Plant* (*Gidrotsentral'*, 1931), Shaginian introduces the gender bending character Ryzhii, who contests the rigid patriarchal order of the site by turning it into a female techno-space. Deaf since childhood, Shaginian remade herself via her hearing aid and various other apparatuses by enthusiastically becoming one with machines, a "cyborg." Every aspect of her professional life was permeated by technology, including her collaboration and participation in Shub's 1932 film documentary *K.Sh.E.* (*Komsomol-Leader of Electrification*), in which she appeared as the herald of the new film sound technology. In Shub's *K.Sh.E.* and her film script "Zhenshchiny" ("Women"), female empowerment via machines is the main theme in which technology and the film medium play a crucial role in the remaking of Soviet women. In her documentary, Shub utilizes sound technology to make a woman's voice audible all over the country. In *K.Sh.E.* women workers enter into productive coalition with machines and their electrifying techno-

conversion is shown on screen. In "Zhenshchiny," Shub furthers her cinematic program of female techno-transformation and discusses women's emancipation through their engagement with heavy machinery. In her film script, Shub explicitly establishes her authorial position in the Soviet film industry by becoming a cyborg with a camera who actively fashions the new world.

The Party Call to Women

While in the 1920s women were persistently denied access to machines and technology, in the 1930s things gradually began to change. The shortage in labor during the first Five-Year Plan (1928–1932) initiated the integration of female workers into skilled work. The shortage in labor during the first Five-Year Plan (1928–1932) initiated the integration of female workers into skilled work. Wanting to show its constant determination toward progress and modernity, the Party issued a general call to women to enroll in various technical schools, to actively engage in machine work and forge their new identities. The pressure to demonstrate that the never-ending advancement under Stalin exceeded the revolutionary achievements of the 1920s led to the creation of the Soviet "Heroine of Labor."

Choi Chaterjee asserts that "the conversion of the *baba* (uncultured peasant woman) to a civic subject constituted a revolution of the unique social dimensions and was represented in propaganda as one of the most triumphant results of Stalinism."[1] Susan Reid emphasizes that the Soviets traditionally perceived women as the most backward element of pre-revolutionary society and that negative practice largely carried over into the twenties. In the thirties, the modernization of Soviet society was directly reflected in the emancipation of women and in female transformation, which "most vividly demonstrat[ed] the contrast between the old and the

[1] Choi Chatterjee, "Soviet Heroines and the Language of Modernity, 1930-39" in *Women in the Stalin Era*, ed. Melanie Ilic, Basingstoke: Palgrave Macmillan, 2001, p. 63.

new."[2] In 1935, at the Congress of Five-Hundreders, Stalin praised Soviet heroines of labor and enthusiastically asserted that, "there were not, nor could there have been such women in the old days."[3]

Along with this official rhetoric, the trope of refashioning the Soviet woman and re-gendering technology was thriving in the visual arts. Many artists took up the challenge and produced paintings and posters that featured women workers' active engagement with machines. The 1937 exhibit *The Industry of Socialism* gathered the most prominent artists of the time to celebrate the twentieth anniversary of the Revolution and the completion of the second Five-Year Plan (1933–1937). Analyzing the significance of this event, Reid states that the "commissioning, final selection, and hanging of *Industry of Socialism* established the iconographic and stylistic canons of socialist realism, which remained in place until at least the mid-1950s."[4]

For an event of such scale, Iurii Pimenov painted his famous work *New Moscow*, featuring a woman behind the wheel of an automobile:

Figure 8: Iurii Pimenov, *Novaia Moskva* (*New Moscow* 1937).

[2] Susan Reid, "All Stalin's Women: Gender and Power in Soviet Art of the 1930s", *Slavic Review*, vol. 57, no. 1 (Spring 1998) p. 137.
[3] Choi Chatterjee, "Soviet Heroines.." p. 63.
[4] Susan Reid, "All Stalin's Women..." p. 134.

The woman is shown with her back to spectators, driving through the city in her modern convertible. Such a perspective encourages the viewer to imagine the countenance of the new woman. Her face is not shown; however, her gaze points to the city and invites the viewer, who seems to be in the backseat, to look at Moscow through her eyes. In addition, the composition looks as if the entire scene is taken with a photo camera. Symbolically, Pimenov merges the camera eye with the gaze of his heroine and produces the effect of a technologically-gendered view of the city. The she-camera-eye shows the city in technological expansion with the newly erected buildings (she drives towards the House of Trade Unions [Dom Soiuzov]), the metro sign, wide streets, and a long line of automobiles. The painting suggests that like the capital with its new monumental architecture, the new Soviet woman is in constant development.

Another notable painter of this period who exclusively portrayed women at work is Aleksandr Samohkvalov. As early as 1934, at a Leningrad art exhibition, he presented a series of ten paintings titled *The Metro-Construction Girls* (*Devushki metrostroia*). Samokhvalov depicts women working with drills, concrete mixers, haulers, and cranes. All *Devushki Metrostroia* look very much alike; they are of gargantuan size, very muscular, but at the same time with pronounced female attributes. Similarly to Pimenov's decision not to show the face of the woman in *New Moscow,* in Samokhvalov's series, women's faces are not quite distinct as viewers need to imagine them. What is emphasized is their powerful bodily presence and their confident communication with machines.

Aleksandr Samokhvalov, *Devushki Metrostroia*, 1934

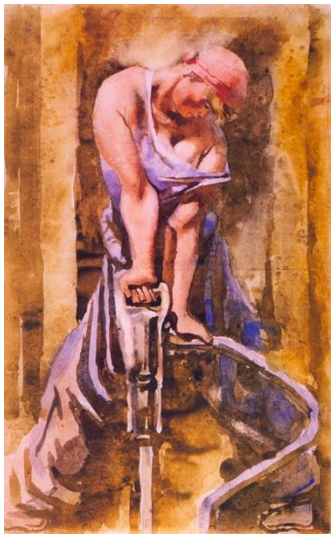

Figure 9: *Metro Constructor with Drill.*

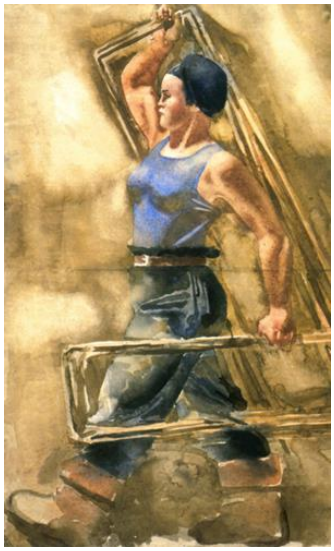

Figure 10: Woman *Carrying Armature* (*Nesushchaia armaturu*).

Figure 11: *Working with Crane* (*U krana*).

Figure 12: *Woman Carrying Shovels* (*Nesushchaia lopaty*).

While official rhetoric and visual arts promoted the industrialization drive by proposing a new image of the Soviet woman placed in nontraditional settings and assigned atypical roles, in actual fact matters were much more complicated. The regime undertook measures that were not in congruence with the emancipation call and women's rights. In January 1930, the Politburo liquidated the Women's Department (Zhenotel), stating that the woman question had been

resolved and gender equality achieved in the USSR. In 1936, the abortion decree denied the right to abortion initially granted by the Bolsheviks in the 1920s. Along with the abortion ban, women were encouraged to build their identity around motherhood and reproduction. This paradoxical situation, where women were simultaneously expected to become equal to men in industry and to raise children at home, is well-known under the rubric of the "double burden." At the same time, those women who enthusiastically wanted to become skilled workers were met with resistance at all levels:

> Male workers understood skill as a "male" attribute, the workshop and the machine as solely "male." The introduction of women upset their view of a "natural" order. Women were subject to innuendo, obscene comments, derision and physical molestation, sexual behavior consciously designed to maintain the gender hierarchy in the factory, to prevent women from advancing and to bar them from skilled work.[5]

Male workers objected to hiring women and felt resentful about their promotion. Those women who pursued a technical education and took training courses were not allowed near machines. They most often were assigned to do easier work, semi-skilled work, and cleaning jobs. The idea of skilling women and supporting female labor only furthered discrimination, abuse, and gender hierarchy. Wendy Goldman asserts that "unions, factory committees, local departments of labor and party committees not only failed to challenge male attitudes and actions, they tacitly accepted, overlooked or even supported gender inequality."[6]

Ironically, those women who wanted to refashion themselves through technology still depended on male authority and support from the regime. Although faced with almost impossible obstacles, many female workers and intellectuals were more than determined to overcome the

[5] Wendy Goldman, "Babas at the Bench: Gender Conflict in Soviet Industry in the 1930s" in *Women in the Stalin Era*, p. 85.
[6] Wendy Goldman, "Babas at the Bench," p. 77.

prejudices and both intellectually and physically engage with industry and technology. One of the better-known cases of such commitment was the first woman tractor-operator, Pasha Angelina. In the late 1920s she took tractor-driving courses, and in 1933 organized an all-female tractor brigade.[7] Many women artists like Mukhina, Ianovskaia, Lebedeva, and Zerneva are recognized in the late 1930s for their contribution to the development of socialist realism. In 1938, *The Exhibition of Women Artists* was held in Moscow to raise the status of women artists and to address the problems women in the arts were facing. Reid explains that "the exhibition was to consolidate women artists, raise their profile, and highlight their problems in order to demand greater recognition and support from the artistic organizations."[8] The exhibition was not successful. It was given little attention in the press and was considered a feminist whim and unnecessary as gender equality had already been achieved in Soviet Russia. "The official precepts that women were already equal and that 'there is no such thing as masculine and feminine art' meant that their success and very survival as artists depended on proving their capacity to conform to masculine norms" (Reid 171). These examples show that although women were officially invited to actively engage with technology in all capacities, they had to open the door themselves through difficult efforts and struggle. Women did gradually manage to enter the male machine-world in the 1930s, but this success did not come by the sole invitation of the state. Women seized this space by themselves, internalized it, and made it their own. One such woman was the writer Marietta Shaginian (1888–1982), whose entire life and work showed the path women had to undertake to refashion themselves through technology.

[7] Pasha Angelina famously invited women to start operating the tractor: "One hundred thousand female friends–onto the tractor! (Sto tysiach podrug–na traktor!)
[8] Susan Reid, "All Stalin's Women…," pp. 167-68.

Early Career

Shaginian began her career as a promising young Symbolist writer whose collection of poetry *Orientalia* (1913) had seven consecutive editions. In 1912, she was a frequent guest of the Merezhkovskii-Gippius salon where she discussed and exchanged ideas with other fellow-Symbolists. In the salon society, Shaginian met her future loyal friend Aleksandr Blok and began to write verses for Sergei Rakhmaninov's pieces. In 1914, Shaginian earned a master's degree in philosophy at Heidelberg University in Germany, and later received a doctoral degree in literature (1941). At the time of the revolution, she was already an established member of the Russian intelligentsia. Strongly influenced by the most prominent Russian Symbolists, she welcomed the revolution based on their premises. For the Symbolists, the revolutionaries ought to be religious as the revolution represented one step toward the apocalypse and the second coming of Christ.

After receiving harsh criticism for her unconventional understanding of the revolution and after her break with Gippius,[9] Shaginian began to refashion herself toward a more straightforward socialist worldview. Her inclination for mysticism and esoteric thinking gave way to strong enthusiasm and support for the Bolshevik revolution. In her words, the revolution gave her the chance to transform herself into a different person that she liked much more:

> When October came, I was already thirty and considered myself a very old, worn-out person (zamuchennym chelovekom). I saw myself as an old woman tired of life. I felt some sort of hopelessness. With the arrival of October, I've turned into, both physically

[9] Shaginian published a negative review of Zinaida Gippius's novel and Gippius decided to break all relations with her. This dispute symbolically marked the end of Shaginian's symbolist years.

and mentally (dukhovno), not merely a young person; I've turned into a girl with a strong inner drive to work.[10]

Although the trope of becoming younger as a result of the revolution was widespread, Shaginian's post-October rejuvenation claim meant that she was able to write again.

From 1923–1925, under the pseudonym Dzhim Dollar, Shaginian serially published her Pinkerton adventure-detective novel, *Miss Mend or Yankees in Petrograd*. It is possible that the re-gendering of her authorship was a move influenced by the negative reception of her previous novella "The Change" ("Peremena" 1923), with which Shaginian introduced her new course in literature. Symbolically named "The Change" and published under her real name, the novella announced a break with Shagininan's Symbolist past. In this work too, Shaginian experimented with the idea of the total transformation of personal identity. The novella follows the conversion of the bourgeois Aline into a socialist activist. Like Shaginian, who changed her penname to a male name, her protagonist Aline changes her French name to a gender-ambiguous Sasha after familiarizing herself with socialist propaganda ("ia raspropagandirovana," 150). She becomes a feminist and begins to resent patriarchy and her husband: "my new experience taught me that the most important feature in men is egoism....A man perceives things only in relation to himself, he acts as the sole lord (vladyka) of life."[11] Maxim Gorky reacted negatively to this work and labeled it a mishmash of Western bourgeois ideas: "for her novella 'The Change,' she [Shaginian] ought to eat a sandwich (buterbrod) with safety pins (s angliiskimi bulavkami)."[12]

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[10] Documentary "Marietta Shaginian: Vliublennaia molnia," by Vladimir Meletin, Russia, 2008 available at http://tvkultura.ru/brand/show/brand_id/28606/ (last accessed May 11, 2019).

[11] Marietta Shaginian, "Peremena," in *Sobranie sochinenii*, vol. 2, Moscow: Khudozhestvennaia literatura, 1971, p. 155.

[12] "Za ee roman *Peremena* ei sledovalo by skushat' buterbrod s angliiskimi bulavkami." in *Gor'kii i sovetskie pisateli: Neizdannaia perepiska*, vol. 70. Moscow: Literaturnoe nasledstvo, p. 180. In Russian, the name English pin (angliiskaia bulavka) credits the country where the first safety pin is patented. With this particular word-combination, Gor'kii ironically alludes to western products and values. Additionally, the Russian word for sandwich

Two years after, Shaginian published her novel *Miss Mend* under the assumed name Dzhim (Jim) Dollar, a fictional author of American proletarian novels. With her carefully chosen name, Shaginian ironically confronted Gorky and his negative evaluation of her previous work. Her literary revenge was complete as her *Miss Mend* became an instant success and in 1926 the eponymous film appeared on Soviet screens.

Write on-site

In the mid-1920s, Shaginian took a proactive approach and utilized her "revolutionary work drive" in an uncommon way. In 1926, on her own initiative, Shaginian traveled to the construction site Dzorages in Armenia to write about the building of the first Armenian hydroelectric plant. Shaginian was the first Soviet author to write about heavy industry in such a way. By visiting the construction site, Shaginian set the precedent for what Platonov, Pil'niak and other writers would do in the 1930s. Pil'niak and Platonov also traveled to building sites as they were planning to write about the Volga water project novels (Platonov never achieved this goal), but it was Shaginian who set the example to her fellow writers. It is only in the 1930s that the first official attempts were made to engage writers to go on-site and document their experiences. Shaginian was commissioned to write a booklet after this experience and to inspire other writers to go to the building sites. In her booklet she writes:

> It is important to remember that at that time the idea of embedding (vnedrenie) of an author to the construction site was completely new, not just new, rather it did not exist at

(buterbrod) comes from German (Butterbrot), a word adopted in the 17th century during the reign of Peter the Great, who introduced western values to Russia.

all. Therefore, it was very complicated to connect myself with it (sviazat' sebia so stroikoi).[13]

Shaginian thoroughly prepared herself for this venture. In 1926, she visited Gosplan (The State Planning Committee) in Armenia to study the history of the building site. She studied factory archives, read technical literature, learned about machines, concrete, and met with engineers:

It seems to me that in those years I bought, read and took notes from every single book published on concrete. I was interested in everything, from concrete as a building material to complex technological concrete constructions. I was curious to such a degree that at home they told me that I was head over heals with concrete (vtiurilas' v beton) (*Kak ia*, 18).

Shaginian's presence at the Dzorages building site disquiets the plant's administration: "I was asked what will I do there, what are the grounds for such action, where is the paperwork, who gave me permission, etc." (8). The workers think of her as "a parasite who needs food, drink, entertainment, and transportation" (22). Shaginian also writes how male colleagues treat other women and particularly remembers the case of a new woman worker who is immediately labeled promiscuous, with the workers spreading rumors "that she has syphilis." Remembering this episode, Shaginian ironically remarks that, "at Dzorages this is a universal way of defaming women."[14] Mary Nicolas rightly observes that "as a woman, she [Shaginian] stood out in the largely male hierarchy on construction sites. As a journalist, too, Shaginian would have made builders and administrators leery of her propensity to report inadequacies in the building projects."[15] However, Shaginian gradually asserted her presence at the site with her disciplined

[13] Marietta Shaginian, *Kak ia rabotala nad Gidrotsentral'iu*, Moscow: Profizdat, 1933, p. 8.
[14] Marietta Shaginian, *Dnevniki 1917-1931*, Leningrad: Izdatel'stvo pisatelei v Leningrade, 1932, p. 335.
[15] Mary A. Nicolas, *Writers at Work: Russian Production Novels and the Construction of Soviet Culture*, Lewisburg: Bucknell University Press, 2010, p. 79.

life-style, her admirable technical education, and her active engagement in work: "I participated in every event, from assembling machines, to the struggle for getting equipment, down to the very final stages of work."[16]

The actual physical work inspired her to write articles on production, essays about construction sites, and diaries that document her daily activities. At around this time, Shaginian began her work on a production novel that synthetized all her experience at the hydroelectric plant: "Everything that is described in the book I lived through (perezhito)….Thanks to this personal engagement I was able to finish *Gidrotsentral*'" (*Kak ia* 14).

***Gidrotsentral'* (*The Hydroelectric Plant*)**

Gidrotsentral' is an early example of a production novel that narrates the story of hydroelectric plant construction. The building of socialism through hard work and coming to consciousness are the two major themes in the novel. The work is heavily didactic as it strives to politically instruct the characters on their way to communist self-realization. Beside this straightforward didacticism, Shaginian plays with more ambiguous questions of identity. The novel features an intriguing protagonist, Ryzhii, who is not entirely a model socialist character. Beginning with his name ryzhii (red), which is an adjective and is not capitalized in the novel, his character is premised on numerous ambiguities. This orthographic peculiarity and the choice of an adjective that describes than names, is the first telling sign of ryzhii's mysterious character. A mix of German and Armenian, his face with his "Aryan nose over thin Asian lips"[17] signals his un-Russianness. Shaginian, herself Armenian, notes that ryzhii is a second version of herself.[18] Like Shaginian, ryzhii arrives at the construction site as an intruder and needs to win trust from

[16] Shaginian, *Kak ia*, p. 14.
[17] Marietta Shaginian, *Gidrotsentral'*, Leningrad: Izdatel'stvo pisatelei, 1931, p. 9.
[18] "Many times ryzhii spoke for me" (*Kak ia*, p. 31).

other workers. He is immediately perceived as suspicious because his vocation is unusual; he used to work as a female hairdresser and holds a doctoral degree in philosophy. Ryzhii's passing comments that he was a member of "a logging party" (lesoustroitel'naia partia, 20), which Mary Nicolas interprets as a veiled reference to forced labor or incarceration, are suggestive that ryzhii has probably, like Shaginian after her symbolist period, "undergone a process of reforging and emerged Ryzhii."[19]

Ryzhii is a worker and philosopher, speaks fluent German, eloquently discusses the Russian avant-garde, and is well versed in Viktor Shklovsky's theory of defamiliarization. He estranges himself in Shklovskian fashion: "the material is suggestive of the form. I am lying in bed, the blanket is removed and in it lies a fox snout" (46). The metaphors of the blanket as the cover for the body and the fox that symbolizes deception reveals ryzhii's awareness of his fluid form. His body resists gender labeling as it features both masculine and feminine attributes. His long legs, delicate fingers (324), white soft skin like in a girl (kak u devushki, 324), feminine smell (zapakh zhenshchiny, 326), "surprisingly soft walk" (9), and his body, covered in "amazon" attire that resembles "Muslim women dancers," provokes major distrust on the site. Ryzhii's detailed physical portrayal in the novel lacks the description of his eyes, and this is a telling absence. His gaze is symbolically concealed from the reader and from other characters, as his "small eyes are covered with large cracked eyeglasses" (9). The fact that ryzhii's eyes are hidden, and that there is a crack in the source of knowledge and the clarity of vision, leaves a confusion of who seems to be performing behind the concealed gaze. Shaginian's "protagonist" (and her alter ego) is actually a woman, who gains access to the construction site by cross-dressing as a man. Ryzhii's gender adjustment in the novel is used to sidestep the predominately male technocratic system and expose its flaws. "His" presence at the site undermines the sex-

[19] Mary A. Nicolas, *Writers at Work.* p. 92.

gender order and manipulates the patriarchy in ryzhii's own interest. There are numerous clues in the novel that hint at ryzhii's real gender identity. In addition, in her discussion on ryzhii, Shaginian emphasizes that she "decided to build his character on a detective siuzhet" (*Kak ia*, 32). The detective mystery is not in plot but in identity that revolves around ryzhii. Throughout the novel, Shaginian keeps "constant suspense" around it (*Kak ia*, 32) and never fully reveals ryzhii's true self.

By utilizing a female cross-dressing character, Shaginian disturbs the automatism of gender perception and facilitates ryzhii's access to the construction site. Symbolically, Shaginian cracks the vision of those looking at ryzhii's fractured lenses and forces them to accept him/her both as a writer and worker. Like Shaginian, ryzhii too works in the plant archive and collects archival material to write a novel about the site's history. The same way she re-enters Soviet literature under her male pen name Dzhim Dollar, Shaginian gives her female character a male mask to allow him/her access to technology.

Besides numerous biographical parallels between ryzhii and the author, ryzhii also serves as Shaginian's mouthpiece. In 1926, Shaginian writes of her plans to "engineer a new novel" (postroit' svoi novyi roman),[20] which will "eliminate the contradiction between physical and intellectual work" (*Kak ia*, 27). For Shaginian, writing a novel is the same as building a hydroelectric plant. To help her rethink the concept of labor, Shaginian introduces *eros* (romantic or erotic love), a philosophical category that links writing and physical work. For Shaginian, *eros* integrates the seemingly distinct and independent categories of human existence because "eros can be nested into anything" (*Kak ia*, 30). Moreover, the Russian word for both the novel and romantic love is *roman*. This hybrid-eros with its erotic dimensions is reflected in the desire for productivity and construction: "I want to infuse this love with love for construction (k

[20] Shaginian, *Dnevniki 1917-1931*, p. 315.

stroitel'stvu), with a powerful feeling of awareness of life when one is producing, participating in creative work" (*Kak ia*, 31). Working with machines is described as a transformative process and Shaginian sees the body in its symbiotic relationship with technology as a forged, tuned up body (naslazhivanie vsego organizma, 27). This relationship, portrayed as erotic, produces "a heightened sensation of life, lyrical stimuli (vozbuzhdenie, arousal)" and it "saturates the entire novel" (*Kak ia*, 30). The notion of eroticized labor begins to appear in other works such as in Samokhvalov's painting series *Metro-Construction Girls*, where there is an erotic tension between sensuously portrayed women and their tools. In the novel, Shaginian utilizes ryzhii "to introduce this idea" of erotic work as he is "capable of switching from one form into the other, from one system of thought into the other" (*Kak ia*, 31). With his open eroticized body and intellectual mind, ryzhii is refashioned through work. It is not a surprise that contemporary Soviet critics found ryzhii not real, too romanticized a character. A fellow writer criticized Shaginian for ryzhii's peculiar relationship to work: "one should not say that work is erotic (erotichen)" (*Kak ia*, 53); the same author continues: "when comrade Shaginian narrated ryzhii, it felt that she was in love with him, and that her heart was on fire" (49). Furthermore, the link between erotic love and work is literalized in the novel in a brief scene that Soviet critics never mention. Namely, ryzhii falls in love with a male worker, Agabek, and confides in another fellow: "you know, I love Agabek. I don't love anybody else on the construction site in such a way. I am obsessed with him, I think about him, I find that man handsome (krasivym nakhozhu)—at this moment I am being indecently (neprilichno) honest with you" (*Gidrotsentral'*, 327). In addition to his gender ambiguity, ryzhii is enamored with a man, and it is hardly surprising that the critics were reacting so negatively to him. In the novel's subsequent

editions, Shaginian was asked to rework ryzhii's character and make him more fitting to the socialist realist standard that was being established in the early 1930s.

Beside the gender-ambiguous ryzhii, the novel is saturated with female symbolism. The noun "hydroelectric plant" is feminine in Russian (gidrotsentral'). Chapter eight of the novel is titled "the Hydroelectric plant—the heroine of the novel." At the same time, like ryzhii, the Mizinges hydroelectric plant is described as gender uncertain. The chief engineer calls it a castrate (kastrat): "Mizinges was and remained a loner (odinochka), a kind of castrate (kastrat), damn it!" (302). This ambiguity makes the chief engineer uncomfortable and he engages in a dialogue with the construction site: "you, brother, are a freak (u*rod*ets, my emphasis), you're a lady (dama)" (302). The play with gender signification (in u*rod*ets[21], dama) is projected not only onto ryzhii but also on the entire construction site that turns out to be non-masculine. Shaganian not only shows gender bender ryzhii, but she re-genders the originally "male" construction site.

Shaginian fashions the construction site as feminized space, including the natural surroundings. The Mizinka River is depicted as a beautiful girl having a long green hair (zelenovolosnaia devushka, 211). The Mizinka is powerful, dynamic, in constant change of her watercourse, and this unpredictability induces discomfort in male workers. The engineer Fokin sees the river as a threatening woman who "seemed to stare at him with her green eyes from under a heap of sparkling foamy hair, with a glance of a tigress" (217). In order to fight this unsettling feeling, Fokin derives male power from his surrogate member showing her the phallic fig sign ("Fokin pokazal zelonoglazoi krasavitse kombinatsiiu iz trekh pal'tsev," 218). Shaginian uses the traditional image of coupling nature with women only to alter this outdated representation where both are understood as passive and backward. In her polemics with Leonid Leonov, Shaginian challenged the notion of nature as "eternal, unchanging, and static," and

[21] Russian word for gender is *rod*.

stated that "the solution to this topic requires reexamining the old system of ideas."[22] Nature in Shaginian's novel arises "at the turning point (v protsesse pereloma) with a sharp social dimension."[23] In *Gidrotsentral',* Shaginian introduces her understanding of female subjectivity as something dynamic, empowering, and on its way to total transformation. She uses the famous aphorism Panta Rhei,[24] "everything flows," attributed to Heraclitus to describe this moment of change: "In this impetuous race, the river is indomitable (neukrotimaia), irrevocable, like human time. As once sung by Heraclitus in his aphorisms, 'everything flows' and 'no one ever steps in the same river twice, for it's not the same river and they are not the same person' because she [the river] changes more quickly than in a moment" (221). For Shaginian, this is the revolutionary social moment in which the Soviet woman rejuvenates her old image and alters herself through technology. In her 1927 article, "Where the Dzoraget is noisy," Shaginian writes "the ancient world is in crisis (na perelome). Movement from the old to the new history is not a movement from being young to aging, but a movement from the old age to rejuvenation."[25]

That one of the first Soviet production novels celebrates women and their empowerment is also emphasized in the novel's dedication. Shaginian dedicates her work to her sister, Magdalina Shaginian, calling her the "Leader of the hydroelectric plant (Shef gidrotsentrali)." By naming her sister the leader of the construction site, Shaginian symbolically addresses and invites all women-sisters to become leaders in skilled work. The novel is primarily intended for a female audience and its empowering dedication reverberates in the novel on multiple levels. In addition, the title *Shef gidrotsentrali* evokes another documentary under a similar name

[22] Liudmila Skorino, *Marietta Shaginian, khudozhnik*, Moscow: Sovetskii pisatel', 1981, p. 254.
[23] Ibid.
[24] In his aphorism "Panta Rhei," Heraclitus invokes the image of Rhea, mother of Olympian gods, also called Cybele (Mother Earth) who was venerated by castrated priests. In the novel, the construction site is depicted as a castrate, while the river Mizinka is described as a young mysterious woman. Shaginian activates this ancient symbolism to render both the hydroelectric plant and nature feminine.
[25] Marietta Shaginian, "Gde shumit Dzoraget," *Sobranie sochinenii v deviati tomakh*, vol.3, p. 662.

Komsomol-Shef elektifikatsii (*Komsomol – Leader of Electrification*) made by Esfir' Shub in which Shaginian personally participated. Shaginian was well aware that most Soviet women were not familiar with technology and addressed this issue in her novel. One of the characters, the schoolteacher Anush Malkhazian, struggles to understand how the hydroelectric plant works and how electricity is produced. Anush organizes an excursion to the construction site so that she and her students can learn about technology:

> Ah, Anush Malkhazian's understanding of electric energy and hydroelectric plants was obscure and vague. This was her greatest weakness. With a sigh she recalled how she looked for specialized books everywhere, but they did not exist. She remembered how she asked the specialists, but they couldn't find simple words and imagery that she and her students needed (66).

By introducing Anush, Shaginian created a point of identification with her female readers who did not know much about technology and, like Anush, felt the urge to learn about it. With her novel, Shaginian was writing one such book that Anush dreamed of reading. Shaganian emphasized feelings, such as eros, to signal a new understanding of technology. In the end of the novel, the chief engineer tells Anush and her students that the creation of sophisticated technology springs from emotions: "hear me out if you want to understand what a hydroelectric plant is. The initial desire to erect a power plant does not reside in the idea (mysl') but in the feeling (chuvstvo), comrades" (453). For Shaginian, emotions forge a new bond between women and machines.

"I shall create my own world" (Ia sama sebe sochiniu mir)[26]

In addition to the erotic dimensions of skilled work, Shaginian links motherly feelings and technology to speak of the new women-machine alliance. As Chaterjee states, "the discourse on motherhood (reproduction) and maternalism (parenthood and the idealized relationship between parent and children) constituted an important element in woman's public identity in the 1930s."[27] Shaginian recasts this discourse and creates a new nurturing bond between women and technology. Her contemporary critics noticed this tendency: "Comrade Shaginian doesn't have a formal relationship with work, but rather she acts on it with special love, like a mother with her child" (*Kak ia*, 48). Shaginian's understanding of the body and technology as interrelating sites of transformation is cyborgian. Donna Haraway suggests that a cyborg "is a matter of fiction and lived experience that changes what counts as women's experience."[28] This is the connection that Shaginian is trying to achieve in her work, the fruitful coupling of her texts and her lived experience at various construction sites that have transformational power on her "feminine" experience. According to Haraway, for women in particular, the cyborg has historical significance: "the cyborg is our ontology; it gives us our politics" (Haraway, 150). In remapping her bodily experience by coupling it with machines, Shaginian blurs the distinctions between the animate and the inanimate, the male and the female, and challenges the strict patriarchal social order. Shaginian's experience is liberating as it creates the possibility of rewriting the old narratives of patriarchal domination by introducing new meanings to the Soviet cultural environment. Haraway writes that the cyborg is "about transgressed boundaries, potent fusions, and dangerous possibilities which progressive people might explore as one part of needed

[26] *Mirovozzrenie i masterstvo (avtobiografiia)*, in M. Shaginian, *Sobranie sochinenii*, vol.1, Moscow: Khudozhestvennaia literatura, 1971, p. 10.
[27] Choi Chatterjee, "Soviet Heroines," p. 59.
[28] Donna J. Haraway: "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the late Twentieth Century," in Simians, *Cyborgs and Women: The Reinvention of Nature*, New York: Routledge, 1999, p. 149.

political work" (Haraway, 154). This fusion is hence about changing not only the body but also consciousness, as it presupposes alternative forms of self-identification, interconnection, and allegiances. The Soviet female cyborg becomes a new source of mobility and empowerment. Women are no longer tied to the land and the home, they seize new industrial spaces that extend their sense of self. To be a new Soviet woman means to transgress the limits of the traditional body and to couple it with machines. This union, both fictional and lived, is perceived as liberating and electrifying. This is why Shaginian claims that her relationship with work is erotic, as it redefines traditional understandings of eroticism in new creative ways. This is also the reason why Shaginian advocates a new type of emotionality that emerges from the women-machine alliance.

The recasting of motherly feelings to technology introduces new possibilities of existence that are not necessarily strictly human-bound. Shaginian is the first woman to open a weaving institute in Soviet Russia. After completing a weaving course and becoming a professional instructor, Shaginian opens the institute at Rostov-on-Don and teaches women how to weave, knit, and use spinning machines. Shaginian calls this school her child, her creation (moe detishche).[29] Iakovlev writes that what Shaginian does in these years surpasses the expected as, "during the extremely difficult conditions of the post-war devastation Shaginian finds work locations, obtains machines, spinning-wheels, material, gathers instructors, travels with the party people (with her life at risk!), organizes meetings and demonstrations in weaving techniques."[30] Shaginian literally brings up this industrial child that in return transforms her experience in mobilizing her to expand her knowledge, become a skilled professional, and an active journalist.

[29] Shaginian, *Dnevniki 1917-1931*, p. 26.
[30] S,Ia. Iakovlev, "Tekstiln'nye ocherki" in *Tvorchestvo Marietty Shaginian, Sbornik statei*, Leningrad: Khudozhestvennaia literatura, 1980, p. 83.

At around this time, Shaginian initiates a new journalistic genre called the "textile essays" (tekstiln'nye ocherki), which are not limited to the textile industry. In these essays, Shaginian again links writing and physical work through a common topic of technology. She writes about her work in organizing a weaving cooperative (tkatskoe delo), analyzes machines, and workers (their education, lifestyles, and eating habits). Shaginian thoroughly prepares for the job:

> I learned the history of weaving, the history of sheep breeding, the history of the Don region, flax and hemp processing, wool production, and I can't even remember what else I learned. It took me five years to complete my studies in philosophy, two more years to study crystallography. However, I never knew history of philosophy and crystallography so thoroughly as I know textile work.[31]

She knows she is a woman who needs to show that she is qualified for the job and this pressure is present in her essays: "After a month, I had to confront (stolknut'sia) the specialists in the field …I was armed with a thorough, clear knowledge so that I could speak and argue with each one of them" (Kak ia byla, 621).

In her essays, Shaginian minutely documented the difficulties she experienced as a journalist reporting on industry. Her work was obstructed on multiple occasions and she was rarely taken seriously. During one of her business travels she almost got physically hurt: "I was almost beaten in front of the executive committee (ispolkom). An agitator (agitatorsha) sent by the Party committee wasn't so lucky. She got beaten up" (624). In another account, Shaginian writes how she got in a life-threatening situation in a Georgian mine because of a manager who refused to provide her with equipment that protected against toxic fumes. She recounted the

[31] Marietta Shaginian, "Kak ia byla instruktorom tkatskogo dela," in *Ocherki 1922–1936*, Sobranie sochinenii, vol. 2, pp. 620-21.

moment when she was in the mine shaft: "My heart started beating like a pump, my vision was blurred. It seemed to me that I was living my last minutes, I couldn't breathe, I thought that I was going to die in this dark, filthy hell….To work in those depths without proper ventilation is a crime." While descending into the dangerous mine tunnels on a slippery road, Shaginian recounts that the manager, "obviously wanting to frighten me, *or maybe something even worse*, suddenly began to whip my horse. The horse started speeding, but I rode well and managed to stay in the saddle."[32] On another occasion, someone stole her diary with her journalistic reports, along with the first draft of *The Hydroelectric Plant*. Obviously, her texts were perceived as potentially dangerous as they provided valuable insight on the state of heavy industry and issues related to technology and work conditions at various work sites. The critics harshly reacted to her writing and tirelessly questioned her job competency. I. Gagen evaluated Shaginian's essays in the following way: "It is good that we now have industrial belles letters (promyshlennaia beletristika). It is bad that this is done by Marietta Shaginian, who is not qualified for the given genre and not familiar with the material." Gagen saw in Shaginian's work "simplicity, superficiality, naïveté, formality, lack of essence, common places," and concluded that "she knows little about what she writes and this is why she cannot do it."[33] Haraway asserts that the "play of writing is deadly serious" as it is "about access to the power to signify; but this time that power must be neither phallic nor innocent. Cyborg writing is about the power to survive, not on the basis of original innocence, but on the basis of seizing the tools to mark the world that marked them as other" (Haraway, 175). Shaginian's industrial prose and essays were the means of this powerful signification, of enforcing new social relations, and reformulation of cultural stereotypes.

[32] Shaginian, *Dnevniki 1917–1931*, p. 242. (my emphasis)
[33] I. Gagen, "Marietta Shaginian: Fabrika Tornton, Nevskaia nitka." in *Knigonosha*, no. 28, 1925, p. 19.

In her textile essays, Shaginian portrays a new Soviet woman who transgresses the norms of social expectations and reworks herself from a wounded passive victim of the past to a strong, self-aware subject. One of these women is the worker Nastia, "a new type of woman who runs all the work in the factory; she is of peasant background, has a sharp tongue, a former Komsomol and now a Party member, she escaped from home, suffered many ordeals, she is not educated but is very smart."[34] Shaginian constantly emphasizes that women need to get a technical education (technicheskaia gramotnost'), learn skilled work, and actively work with machines. Being intimate with technology leads to female empowerment:

> If a modest shoe-maker, a Ukrainian girl from Chernigovo, now a deputy of the Supreme Council, Maria Ermolenko, didn't have industrial training in the Factory-and-Workshop School (FZU fabrichno-zavodskoe uchilishche) and didn't learn from her personal experience what it means when shoe-makers build their factory completely on their own…would she be able to master the conveyor system so thoroughly? Standing at the conveyor in the factory that she founded in Kiev, she noticed that the female workers began to outrun it....So Ermolenko accelerated the conveyor tape. She did not ask the factory mechanic for help but she herself, instead of the male mechanic, indicated how acceleration needs to be achieved.[35]

In her essays, Shaginian analyzes the effects of intensified machine-body relations and minutely describes the change textile-machines produce on women, their psychology, and their bodies. The body responds to this heightened connection to tools by recrafting itself into a new graceful, artistic body:

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[34] Marietta Shaginian, *Dnevniki 1917-1931*, p. 305.
[35] Marietta Shaginian, "O Stakhanovskom dvizhenii" in *Sobranie sochinenii*, vol. 4, Moscow: Khudozhestvennaia literatura, 1973, p. 398.

> Unhurriedly a female worker approaches the machine. Her shoulders and arms in smooth, calculated, graceful and precise movements easily slide over the machine, harmonizing her bodily rhythm with the machine rhythm; her fingers deftly and, I would even say, musically connect the two torn ends of a weaving thread… and now the thread again slides smoothly, running from her throat to the long-rippled pelvis. The grace (gratsia) of the female worker is so good and catching (khorosha i zarazitel'naia), not only because it is pleasing to look at it, like all grace. The grace (gratsia) produced in the factory is something entirely different. First of all, it is not accidental. This is not grace produced on the dance floor... This is the grace of the machine, that is, something inevitable, indispensable, necessary…[36]

In his 1793 essay "On Grace and Dignity," Friedrich Schiller elaborates on the concept of grace. Making a radical break with Enlightenment's privileging of pure reason, Schiller introduces the concept of grace, which harmonizes the body and the mind, reason and beauty as principal philosophical categories. Grace, according to Schiller, is born in a voluntary, conscious human movement and has both aesthetic and moral qualities. As a specialist in German philosophy and literature, Shaginian knew of this influential work. In her essay "The Neva Thread," she skillfully weaves Schiller's concept of grace into the woman-machine relationship. According to Shaginian, the machine recrafts the body and mind in industrial movement. In this cyborgian dance, when machine, body and mind are on intimate terms, the worker's grace (gratsia) is both ethically and esthetically (khorosha i zaraitel'naia) gratifying. The pleasure of this symbiotic relationship is described as erotic; the woman worker gently approaches the machine, her bodily movements align with the rhythm of the machine and the result of this sensual union is artistic

[36] Marietta Shaginian, "Nevskaia nitka" in *Sobranie sochinenii*, vol. 2, Moscow: Khudozhestvennaia literatura, 1971, p. 656.

work. Additionally, the blurring of machine-woman boundaries has ethical repercussions as it yields empowered consciousness:

> Textile work, like no other line of business, attracts a woman (pritiagivaet k sebe zhenshscinu). The textile industry creates a woman worker (sozdaet zhenshscinu-rabotnitsu), educates her (vospytivaet ee), and allows her to gain social experience… Thus, a woman appears in the working-class movement, and one shall witness in the future what authentic figures (samobytnye figury) against the backdrop of factory life emerge from these women weavers and spinners.[37]

According to Shaginian, this individual transformation affects the entire collective. Contact with factory machines has a profound impact on society as it creates networks in which an individual worker identifies with a larger group: "the worker raised by the machine (vospitannyi mashinoi) feels a part of the whole" (Nevskaia nitka, 684). The need to be a part of various groups and be around various machines and apparatuses stems from Shaginian's past.

The Cyborgian Silence

Since her early childhood, Shaginian suffered from hereditary otosclerosis, an abnormal growth of bone near the middle ear, which resulted in permanent hearing loss. In addition to her serious hearing problems, Shaginian had a severe form of myopia, an eye condition that has equally affected her functional abilities. In her first autobiographical account (1933), Shaginian writes how these traumatic experiences shaped her worldview:

> Imagine a child born with a difficult inherited disease−otosclerosis, dooming this very same child to a life with exacerbated deafness. Add to this that the child was born into an intellectual family that provided as Germans say "eine gute Kinderstube," that is, "a good

[37] Shaginian, "Nevskaia nitka," pp. 653–54.

> children's room."[38] As a matter of fact, this was an isolated upbringing, and like in that children's room, I was completely separated from real life…I was limited by my deafness and my early diagnosed nearsightedness. My childhood was within the walls of my room under my nanny's supervision, and later under my governess's; except for my little sister I didn't have any friends.[39]

The imposed limitations of both physical space and impaired senses created Shaginian's feelings of loneliness and isolation from the outside world. This had an enormous impact on Shaginian's adult obsession to belong to groups that aspired to change the status quo and to create a new outlook on life. Her condition also inspired her to explore alternatives in extending her body's reach in an attempt to recover lost functions. Shaginian writes: "In this isolated world, I was doomed to an idiosyncratic, abnormal expansion, that is, on pleasing my need for expansion (rasshirenie) in peculiar ways.…If the world did not come to my eyes and my ears, I decided to bring it closer to me and create my own world" (9–10). Her fascination with technology comes from this urge for an expansion/extension (rasshirenie) and alliance with something that is located outside the self and is very different from it. As Matthew Biro, writing about the Dada cyborg suggests, in such a case,

> who and what we are have no organic limits; instead the "self" extends into—and is distributed throughout the world. Our essential natures, according to this view, do not consist merely of our minds and bodies, but in addition, comprise the various physical

[38] Eine gute Kinderstube (literally a good room) is a German expression for good upbringing. Shaginian plays here with both meanings.
[39] *Mirovozzrenie i masterstvo (avtobiografiia)*, in M. Shaginian, *Sobranie sochinenii*, vol 1, Moscow: Khudozhestvennaia literatura, 1971, pp. 9-10.

> supplements through which we externalize aspects of our thinking, sensing, communicating, and acting.[40]

These supplements, prosthetic devices, and various machines allow the extension of the biological self.

Shaginian's relationship to her deafness is a rather complex one. She clearly remembers the moment when she completely lost her hearing in school: "I saw the lips of an eighth-grade student in front of me. These lips moved, they moved very fast, as with eating or chewing. But the sound did not come out of them. The lips moved deadly and silently. I stopped hearing."[41] The description of mechanically moving silent lips uncannily resembles Maxim Gorky's impressions upon seeing the Lumière cinema silent variety show in Nizhnii Novgorod in 1896:

> Their smiles are lifeless, even though their movements are full of living energy and are so swift as to be almost imperceptible. Their laughter is soundless although you see the muscles contracting in their grey faces. Before you a life is surging, a life deprived of words and shorn of the living spectrum of colors—the grey, the soundless, the bleak and dismal life. It's terrifying to see, but it is the movement of shadows, only of shadows.[42]

Shaginian experiences the hearing loss cinematically. Like on a silent film screen, her gaze meets the moving image of soundless lips. Unlike Gorky, however, who reacts negatively to the moving silence, Shaginian experiences catharsis upon the realization that she is deaf: "with a feeling of incredible relief, purification, and peace, I waited until she left, looking at me in surprise, and I fell asleep immediately, in a child's gratitude to god" (*Chelovek i vremia*, 107). This overpowering sensation of bliss and alienation turns into a false sense of psychological

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[40] Matthew Biro, *The Dada Cyborg*, p. 25.
[41] Marietta Shaginian, *Chelovek i vremia*, Moscow: Khudozhestvennaia literatura, 1980, p. 107.
[42] Maxim Gorky, A review of the Lumière program at the Nizhnii Novgorod Fair, as printed in the *Nizhnegorodskii listok*, July 1986, in Jay Leyda, *A History of the Russian and Soviet Film*, London, Unwin House, 1960, pp. 407-08.

safety that Shaginian learns to overcome in the following years. It is the enthusiasm of the October Revolution that brings the sense of hope that her condition can be improved and utilized to her advantage:

> I must say that until [the revolution] I was an antisocial personality (ia byla chelovekom antiobshchestvennym). Deafness prevented me from communicating with people, shortsightedness made me uncertain. I banged my nose at random things and was defeated in all personal enterprises... Meanwhile, the machine was the thing I needed most.[43]

The possibility of self-enhancement with technology created a new sense of identity. In the beginning, Shaginian still used her ear trumpet and only later acquired a hearing aid. When she visited Armenia she still didn't have one: "Imagine the following position. Hearing aids (slukhovye apparaty) did not exist at the time, my deafness was equally severe as it is now. I did not speak Armenian….Nevertheless, I felt great enthusiasm. To every orator I looked like a mass of tentacles (shupal'tsa) [laughs loudly]."[44]

The tentacle imagery, which Shaginian utilizes to describe how she imagines others perceived her, is a well-thought-out metaphor. Tentacles are elongated organs used for grasping, feeding, and may have some sensory functions such as touch, or vision. However, organisms with tentacles have no sense of hearing. Being very conscious of her problem, Shaginian imagines herself as an animal that relies on heightened bodily movements to make up for the lack of hearing. In Armenia, she gives many public speeches and the tentacle metaphor serves to illustrate her heightened hand-gesticulation. In addition to her hands, she is also referencing her ear trumpet which is funnel-shaped like in snails. Her trumpet-prosthesis functions as an

[43] Shaginian, "Kak ia byla," pp. 622-23.
[44] Documentary "Marietta Shaginian: Vliublennaia molnia," at http://tvkultura.ru/brand/show/brand_id/28606/ (last accessed May 11, 2019)

extension of the spiral cavity of her inner ear (cochlea)[45] which is directly responsible for registering sounds.

Figure 13: Ear trumpets.

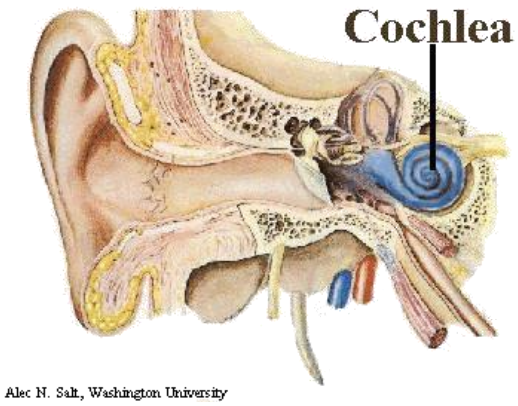

Figure 14: Cochlea.

If, as Haraway has suggested, the cyborg appears precisely where the boundary between animal-human (organism) and machine is blurred, then Shaginian's tentacle-self-image activates this liminal animal-human-prosthesis boundary that becomes a site of regeneration. In her essay *Cyborg Manifesto*, Haraway argues that people with disabilities "have the most intense experiences of complex hybridization with other communication devices" and that prosthetic devices become "intimate components, friendly selves" that provide new sensations of pleasure" (Haraway 187). Shaginian is enthusiastic about her tentacle extensions and is physically and mentally rejuvenated in the presence of various apparatuses. After her unsuccessful ear surgery in Armenia, Shaginian undergoes additional, experimental diathermy treatments that involve applying electrically induced heat or the use of high-frequency electromagnetic currents as a form of physical therapy.

[45] Cochlea translates from ancient Greek as snail shell with the exact same equivalent in Russian ushnaia ulitka.

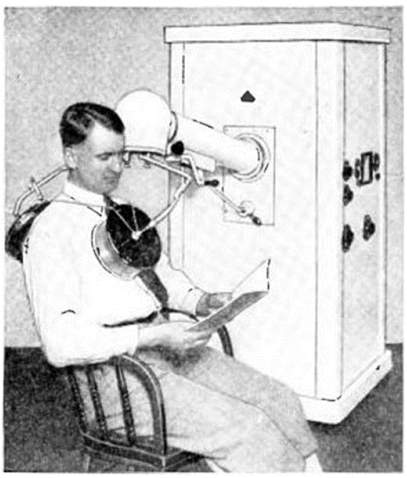

Figure 15: Diathermy machine, 1933.[46]

"Having realized that I am a malfunctioning machine," Shaginian writes, "I decided not to be scared and not to twitch/jerk (dergat') because this will not make the machine work any better. I decided to let the machine recover instead."[47] Once the Soviets began mass production of hearing aids, Shaginian recovered her lost sense by becoming one with her hearing machine.[48] She proudly showed her wearable cyborgian prosthesis to everyone.

Figure 16, **Figure 17:** Marietta Shaginian, documentary "Vliublennaia molnia" (frame capture).

[46] E. Schliephake, "Ultra-short waves in medicine" in *Short Wave* Craft, New York: Popular Book Corp., vol. 3, no. 11 (March 1933), p. 646.
[47] Marietta Shaginian, *Dnevniki 1917-1931,* p. 387.
[48] In Russian, hearing aid literally translates as hearing apparatus (slukhovoi apparat), where the emphasis is on the word apparatus and its technological, mechanical aspect.

Many of Shaginian's male colleague-writers made fun of her condition, her enthusiasm for technology, as well as her erudite personality. The poet Mikhail Dudin wrote the most well-known epigram about Shaginian:

The iron old lady Marietta Shaginian	Zheleznaia starukha Marietta Shaginian—
Artificial ear of workers' and peasants'	Iskusstenoe ukho rabochikh i krest'ian.[49]

This two-verse rhyme parodies Shaginian's personality in several ways. First, Shaginian is mocked for having a stern and strong character in her old age. In her nineties, Shaginian was still remarkably active, wrote every day, did her regular running exercises, took long walks along the beach in Koktebel, Crimea. The iron image here is a metaphor of her iron will that was a very ready Soviet flesh-to-metal metaphor. Second, Shaginian always emphasized a didactic strand in her writings. By invoking workers and peasants in the second line, Dudin mocks Shaginian's drive to instruct in her prose and essays. Third, Dudin connects this moralistic impulse with her hearing condition. He describes her ear with the adjective "iskusstvenoe" which means artificial, but the stem also contains the word art (iskusstvo). Dudin here implies that her art is not a genuine art, like her ear isn't a real ear, but a mechanical device. Furthermore, with her "false" ear she cannot be attentive to the needs of her audience.

This trend of mocking Shaginian began already in the 1930s when Aleksandr Arkhangel'skii published an epigram with a caricature drawing of Shaginian. Arkhangel'skii was parodying Shaginian's numerous interests by suggesting that she cannot know all and be good in all her enterprises.

M. Shaginian M. Shaginian

[49] Feliks Medvedev, *Moi velikie starukhi*, St. Petersburg: BHV-Peterburg, 2011, p. 40.

The breadth of her scope	Shirotu ee razmakha
Won't fit on one list	Ne ulozhish' v pischii list.
A poetess, lecturer, spinner	Poetessa, lector, priakha,
Wool specialist and a novelist	Sherstoved i romanist.[50]

Figure 18: Aleksandr Arkhangel'skii, A caricature of Marietta Shaginian, 1932.

Figure 19: Marietta Shaginian in her thirties, documentary "Vliublennaia molnia" (frame capture).

The caricature shows Shaginian dressed in an oversized work coat that covers her much smaller body, making her skirt, symbolically her feminine side, barely visible. She walks in her boots like a man with her hands in her pockets. Besides her unsophisticated bodily movements, she does not seem to be in a cheerful mood and her deliberately masculinized facial features, including the augmented nose, portray Shaginian as not feminine. Compared to how she actually

[50] Aleksandr Arkhangel'skii, Pochti portrety: Kukryniksy, Federatsia, 1932.

looked in the thirties (figure 19), Arkhangel'skii's intentions were far from sketching a witty portrait.

In her last autobiography, Shaginian refers to this frequent Shaginian-parody-production phenomenon as vulgarity (chern') and remembers that the satirists and humorists used to draw her as a winged witch flying in the air with a typewriter. In all these examples, the authors downplay Shaginian's professional achievements, make fun of her condition, her age, her looks, her gender, and her attachment to technology. However, Shaginian learns to ignore this negative commentary and uses her bodily issues to her advantage: "as far as my hearing problem is concerned, I was already used to it and even came to like my condition. My deafness is like a kitchen sieve, it separates the essentials from rubbish and saves me precious time."[51] Shaginian utilized her deafness as a site for telling political gestures. She frequently turned off her hearing aid during long Union of Soviet Writers and Central Committee meetings to express how she felt about these types of gatherings. Feliks Medvedev comments on this, writing:

> I knew of course that Marietta Shaginian was a legendary person in Moscow creative circles. Deaf, half-blind, with a decisive and strong character, she was not afraid of the Writers' Union superiors, and was constantly disagreeing with their critical remarks about her work. There were rumors that if necessary she used her illness in the following way: whenever she did not like something in conversations with the leadership of the Writers' Union or the Central Committee, she would simply turn off her hearing aid.[52]

Shaginian had a long history of disagreement with the Writers' Union. In 1934, she wrote a letter to the literary official Valerii Kirpotin to inform him of her intention to decline membership in the Writers' Union. In 1936, she formally resigned her membership, upon which

[51] Shaginian, *Chelovek i vremia*, p. 692.
[52] Feliks Medvedev, "Vizity k "zheleznoi starukhe" Mariette Shaginian," in *Moi velikie starukhi*, St. Petersburg: BHV-Peterburg, 2011. p. 40.

she received a harsh written reply from Sergo Ordzhonikidze, the person in charge of heavy industry, in which he explicitly said: "it's *our Union,* a SOVIET Union…Yet you call it 'pointless'…You are making a huge political mistake, and my advice is to fix it as soon as possible."[53] Having realized that she may be in potential danger, Shaginian wrote an apology letter in which she "admitted her fault honestly" and informed them of her intentions "to pay back her debt to the Party and comrade Stalin."[54] This scandalous move and her publication of *Bilet po istorii* (*The History Ticket*), a biographical account on Lenin's family in which she wrote about Lenin's Jewish origins, caused Stalin's harsh reaction. Shaginian was banned from publication in the following decade. Her later practice of turning off her hearing aid was her subtle act of resistance and subversion of the political system. She utilized her prosthetic device to unplug, to log out and preserve independence in times that did not favor individuality. Her hearing apparatus gave her the power to show her bodily protest, which infuriated many. Gennadii Krasukhin portrays a memorable image of Shaginian: "she walks with a huge hearing aid. Shouts, orders. If she doesn't approve of something (esli chto ne po nei), she immediately turns off her hearing device (otkliuchaet apparat.)[55] Like in the sieve metaphor, in the potent cyborgian fusion with her device Shaginian was able to filter the Soviet discourse and rework her vulnerable body into a site for resistance.

Esfir' Shub (1894-1959)

A person who wanted Marietta Shaginian's voice to be heard across the Soviet Union,

[53] Quoted from Mary A. Nicolas, *Writers at Work: Russian Production Novels and the Construction of Soviet Culture*, Lewisburg: Bucknell University Press , 2010, p. 115.
[54] Nicolas, *Writers at Work*, p. 116.
[55] Gennadii Krasukhin, *Moi literaturnye sviattsy: kvartal 2*, Ridero, 2015. (e-book, no pagination)

and who is inseparably connected with Shaginan via technology, is the Soviet film director Esfir' Shub. In her 1932 sound documentary *K.Sh.E.* (*Komsomol–Leader of Electrification*), devoted to the opening of the hydroelectric plant in Dzorages, one of the major industrial projects of the First Five Year Plan, Shub announces Shaginian's appearance in the film in the introductory intertitle. The title card notifies the audience that Marietta Shaginian will be delivering a speech about the hydroelectric plant, the same one that Shaginian wrote about in her novel. Shub gives a word, now coupled with sound, to the inspirational woman who appears on the screen as the herald of new technology. Shaginian informs the viewers about the importance of bringing electricity to the Soviet Union. In addition to this, Shaginian is introduced as the author of the production novel *The Hydroelectric Plant*. The significance of this title card is manifold. Shub's documentary begins by coupling the new Soviet woman Marietta Shaginian, her voice and image, and her authorship with technology via the technological medium of cinema. Shaginian, whose deafness prevents her from hearing her own voice in one of the first Soviet sound documentaries, is chosen to be a powerful new symbol of the union between women and technology.

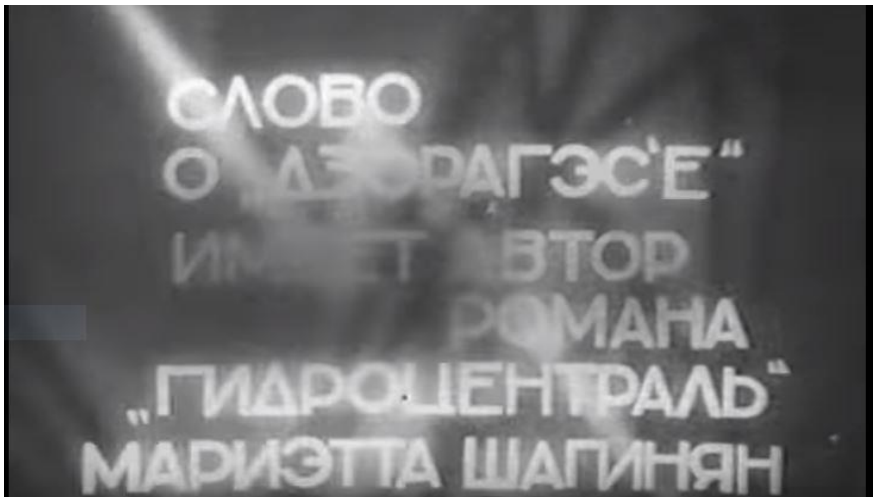

Figure 20: The introductory title card in *K.Sh.E.* (frame capture).

The intertitle, enhanced with light, images of electricity, and machine construction in the background, reads: “The author of the novel *The Hydroelectric Plant*, Marietta Shaginian, has a word on Dzorages.” Later in the documentary, Shub shows a recorded speech by Shaginian, who is more than excited to be assigned such a historic role in the documentary.

Figures 21, **Figure 22**, **Figure 23:** Marietta Shaginian delivering her speech in *K.Sh.E* (frame capture).

It is not only *K.Sh.E* that brings these two powerful figures together. What both Shub’s and Shaginian’s careers have in common is the struggle to assert their presence, each in their own respective fields, and introduce the image of the new Soviet woman in their art. Like Shaginian, Shub changed her life path many times and was always invested in personal transformation. She first began her career by enrolling in literature studies, then abandoned the venture to start working for Vsevolod Meyerhold’s theater. At the theater Shub collaborated with Vladimir Mayakovsky, Viktor Shklovsky, and Aleksandr Rodchenko; she regularly contributed to *LEF*, the most influential avant-garde journal. Her film work for Goskino began in 1922, when Shub started re-editing foreign films for Soviet release. During this period, she worked with Kuleshov, Pudovkin, Eisenstein, and Vertov. Martin Strollery comments on the role of an editor in this period in Soviet cinema:

> Shub’s transition to film was marked by ‘a number of false starts and refused applications.’ In 1922 she established herself as an editor, but the actual role of editor

> was less clearly defined and typically of even lower status in the Soviet film industry than in Hollywood during this period. Kristin Thompson refers to descriptions of Soviet editors' duties as resembling 'those of an assistant editor or cutter in the Hollywood studios: sorting shorts, splicing the rushes together, and eventually cutting the negative. The [Soviet] director makes the rough cut as well as polishing the final workprint version.' Fleeting references in memoirs and visual evidence from photographs taken in Soviet cutting rooms suggest it was often women who performed the auxiliary role of editor….The re-editing of foreign films for Soviet release which took place at Goskino was a partial exception to this pattern…Shub is the only woman recorded as having worked at what Yuri Tsivian describes as 'professional elites club' which acquired a certain reputation within the industry."[56]

Impressed with Shub's expertise in montage, Sergei Eisenstein decided to hire her to work with him on his film *Strike* (*Stachka*, 1925). She enthusiastically accepted the invitation and worked with Eisenstein in her capacity as an editor on the screenplay. Shub invested all her hopes in this project: "it seemed that my place in cinematography was being outlined. We worked together on *Strike* at my home for two months."[57] During the Moscow premiere in April 1925, Shub learned that her contribution to *Strike* was left unmentioned: "I was not credited as a member of the film crew…I was bitter that I was not listed as a film collaborator on *Strike*."[58] After the premiere of Eisenstein's *The Battleship Potemkin*, Shub approached him for the first time after the showing of *Strike*: "We hadn't seen each other for some time after the *Strike* was out. I was deeply

[56] Martin Stollery, "Eisenstein, Shub and the Gender of the Author as Producer," *Film History*, vol. 14, 2002, p. 95.
[57] Esfir' Shub, "Pervye gody v kinematografe (1922-1930)," in *Zhizn' moia- kinematograf*, Moscow: Iskusstvo, 1972, p. 82.
[58] Shub, "Pervye gody v kinematografe," pp. 82-83.

(vnutrenne) hurt. When I saw him it somehow happened that I approached him, took him by his hand and uttered unrelated words in excitement."[59]

In the late 1920s, Shub produced her well-known compilation films *The Fall of the Romanov Dynasty* (1927), *The Great Road* (1927), and *The Russia of Nicholas II and Leo Tolstoy* (1928). At this time, Shub encountered many obstacles as she was trying to assert herself in the business. She was denied authorship rights by Goskino for *The Fall of the Romanov Dynasty*. Ilya Trainin, one of the Goskino officials, said to Shub: "you only shot pieces (kusochki)—we could have done that as well."[60] It was Mayakovsky and Eisenstein who intervened for her in this dispute and helped her finally secure authors' rights and officially receive the film director title (poluchila zvanie rezhissera, 113). Another issue that Shub deals with was the status of the non-played cinema (neigrovaia fil'ma). In 1934, the film critic Katsman in his open letter to journal *Kino* criticized Shub for her involvement in the artistic non-featured cinema (khudozhestvennaia neigrovaia fil'ma).[61] According to Katsman, this genre did not reflect Soviet reality but rather corrupted it, and he urged Shub to work with *kinoocherk* or *khronika*. Katsman also called Shub a lost/deviant author (zabludivshiisia master) and doubted the success of her next film about Soviet women that she planned to shoot. In her response to Katsman, Shub defended the non-played (neigrovaia fil'ma) genre as well as her own expertise:

> First of all, I think that [comrade Katsman] needs to know and respect the creative path of a film director.…Many are sincerely concerned about me; they advise me to work on feature films, others suggest short films, chronicles or *kinoocherk*. I think that I have the

[59] Shub, "Nachalo slavy sovetskoi kinematografii" in *Zhizn' moia*, p. 99.
[60] Shub, "Vladimir Mayakovsky," in *Zhizn' moia,* p.113.
[61] Shub explicitly says that this open letter represents the views of the entire editorial board of journal *Kino* not just Katsman's.

right to decide for myself, and that I will be given the opportunity to work with the genre on which I spent years of creative effort, continuous training, and energy."[62]

Shub concludes her article with a resolute request: "Allow me to grow and develop myself within my genre; do not impose on me your own views… I want to work (*Khochu rabotat*', 291).

In 1932, with great effort Shub received permission to make her first sound documentary *K.Sh.E.* In *K.Sh.E.*, Shub's main objective was to show how the Komsomol works on the electrification of the country. She dedicates her film "to the countless Komsomol to clearly understand what electrification means in Socialist construction."[63] In her documentary, electrification stands for economic, social, and artistic progress. The USSR was becoming enveloped by the electric current in a circuit of other networks. Lenin's famous statement that "communism is Soviet power plus the electrification of the whole country," spoken at Eighth All-Russia Congress of Soviets in 1920, suggests that electricity is the means of spreading the light of Soviet ideology across the state. According to Lenin, total electrification was the sign of the final victory of Soviet technocratic society. Power stations and hydroelectric plants were employed to "make the masses electricity-conscious."[64] For Lenin, electricity was more than just a conversion of raw energy, it was also a conversion of consciousness. The Symbolists and the Futurists imagined electricity as an enigmatic phenomenon that could transform Russia in a gender–egalitarian direction. Additionally, in Russian cultural memory, electricity is also a metaphor for mysterious feminine energy. Banerjee claims that this phenomenon is not specifically Russian, as Italian Futurists and American writers also imagined electricity as an

[62] Esfir' Shub, "Khochu rabotat','" in *Zhizn' moia*, p. 290.
[63] Esfir' Shub, "Tema moei rechi," in *Zhizn' moia*, p. 281.
[64] *Lenin's Collected Works*, 4th English Edition, Moscow: Progress Publishers, 1965, vol. 31, pp. 461, 534.

essentially feminine force.[65] In *K.Sh.E.*, Shub draws heavily on these cultural associations. For her, the conversion of consciousness means a change in the status quo of patriarchal society; the woman question arose as an important agenda in *K.Sh.E*.

In the first scene, Shub shows Konstantin Koval'skii playing the theremin, introduced by a tittle card as an electric sound apparatus (elektricheskii zvukovoi apparat). At this time the instrument was also called the etherophone. For many Soviet authors in the late 1920s and early 1930s, the ether becomes a mediating substance that merged technology, science, and philosophy. Andrei Platonov creates an entire poetic system in his "Ethereal Tract" that is based on the symbolism of the ether, as I showed in Chapter Two. Lev Theremin, the inventor of the instrument, claimed that he created the etherphone in a moment of utmost despair, hoping to resurrect his young deceased female friend by means of this otherworldly music. In early Soviet culture, ethereal electric music is brought into connection with rejuvenation, femininity, and eternity. Shub utilizes this cultural heritage and opens her documentary with the images and sounds of the etherophone that announces the electrifying conversion of not only the country but also of Soviet women. This total transformation is tightly intertwined with the film medium, which fuses together the cluster of these cultural associations. As such, film becomes the quintessential catalyst of change in *K.Sh.E*.

Making the spectator aware of the power of the cinematic medium is vital for Shub. In the theremin scene, she emphasizes film's mechanical aspects by showing the sound engineer preparing the camera to record the music played by Koval'skii and his orchestra. As Kaganovsky argues,

[65] Banerjee writes that Marinetti "envisioned the future human being as an explicitly feminine" and Henry James described the electric generator as "an animated fecund machine that has replaced the sterile goddess of previous ages." In Anindita Banerjee, "Electricity: Science Fiction and Modernity in Early Twentieth-Century Russia," *Science Fiction Studies*, vol. 30, no. 1, 2003, p. 65.

> the film's opening shows us preparations for sound recording, an orchestra tuning up, a hand playing the theremin, and sound being recorded onto the sound track, shots all meant to underscore the materiality of the new sound recording equipment, as well as to capture what cannot be seen−what both John MacKay and Joshua Malitsky have called the "movement of energy" or the "movement of power"—electricity flowing between objects and making possible cinema itself (90) … not only is the opening sequence to *K.Sh.E.* a clear moment of baring the device—the uncovering of the work of the cinematic apparatus and the labor involved in the production of sound film—the prologue, and this series of shots in particular, are also drawing a direct connection between the film and the body, between energy and sound, foregrounding the haptic, embodied relationship of the new sound cinema and the spectator (92).[66]

Shub's ambitious intention is to show how technology, in all its hypostases, delivered by the film medium, plays a crucial role in the remaking of society, and, equally importantly, of women. The first women workers shown in the film are the telephone operators. Their voices are heard and the viewer witnesses their intimate bodily interaction with the telephones.

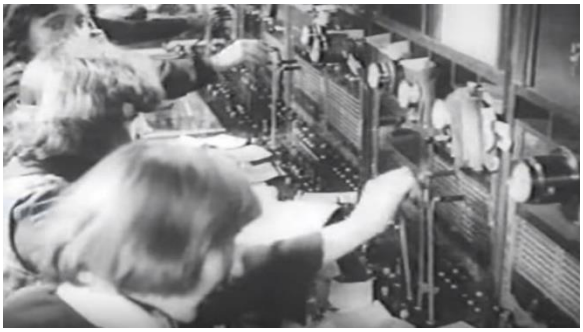


Figure 24, **Figure 25:** The telephone operators in *K.Sh.E.* (frame capture).

[66] Lilya Kaganovsky, *The Voice of Technology: Soviet Cinema's Transition to Sound, 1928-1935*, Bloomington: University of Indiana Press, 2018.

Women switchboard operators are creating the immediate technological link between people, they are promoting the new Soviet telephonic culture, and connecting the center of Moscow to the periphery by enabling instantaneous meetings on line. Merged with their apparatuses, women are delivering the rapid spread of the new type of oral culture.

Shub also shows an all-female brigade producing electric light bulbs (Il'ich's little bulbs, lampochki Il'icha). In one of the most aesthetically powerful scenes in *K.Sh.E.*, the images of the female brigade workers are intercut with the production of lightbulbs presented as the waltz of the lightbulbs. Shub is setting out to show via the waltz[67], which in its graphic representation most resembles an electric spiral, the revolution of the waltz dancers (the Komsomol members), and the transformation of the new Soviet women working with technology. Additionally, the etymology of the German verb *waltzen* indicates revolving, spiral musical movement that resembles Earth's revolution around the sun. The choice of the waltz for this scene symbolizes the revolution of the Komsomol women workers producing the electric light that in the 1920s and 1930s was called the new technological sun.

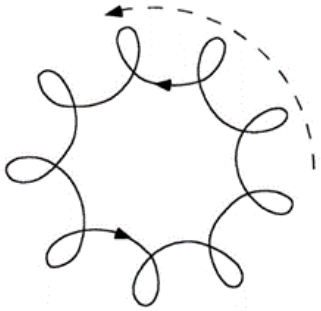

Figure 26: Graphic representation of waltz movements.[68]

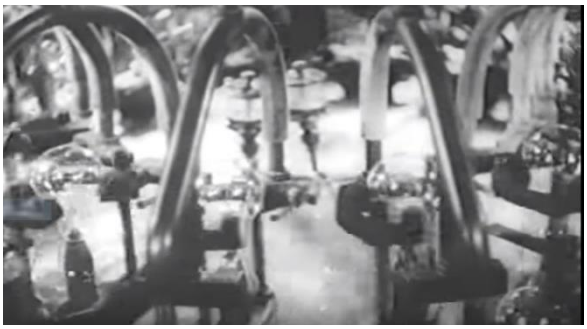

Figure 27: The revolving bulbs (frame capture).

[67] Gavriil Popov writes the score for *K.Sh.E.*, and the bulb scene Popov composes the waltz.
[68] Graphic image taken from Sevin H. Yaraman, *Revolving Embrace: The Waltz as Sex, Steps, and Sound*, Hillsdale, New York: Pendragon Press, 2002, p. 19.

Figure 28: An electric high-voltage conductor in *K.Sh.E* that resembles the waltz movement (frame capture).

Shub asserts: "All this lightness unwittingly results in a waltz. Popov saw this and it happened that he wrote a waltz that absolutely fitted with these segments."[69] Shub emphasizes the subjectivity and lyrical value of a scene that produces nothing but joy and lightness: "It could be that this is subjective, but this is my autobiography; this is how I understood it" (284). Like Shaginian, who consiously incorporates her life in *Gidrotsentral',* Shub also inscribes her autobiography in *K.Sh.E.* Shaginian's and Shub's personal investment in both works creates an identification point for all other Soviet women who can relate to and become inspired by the individual examples of change set by the authors.

In the waltz of the light bulbs scene, Shub interviews the group leader Katia Paramonova who is writing a manual on how to make electric bulbs. Through Paramonova, the viewers learn that now women not only work with technology, but they also write about it:

> Paramonova tells me that we are overtaking America in the light bulb production. We have mastered the technology, and she wrote a book on how to make light-bulbs. And now, she tells me, take a look at how we work…This is an absolutely stunning work

[69] Esfir' Shub, "Tema moei rechi," in *Zhizn'* moia, p. 284.

rhythm—the hands are flashing (mel'kaiut). She is smiling and even manages to speak. And all of this is so joyfull, simple, and easy.[70]

Technology inspires women into creative work that brings feelings of liberation and happiness. Shub comments that the waltz of the light bulbs scene as the only abstract scene in the film that she could not resist making (trudno bylo uderzhat'sia chtoby eto ne sniat', 282). The scene ends with a blurred image of light bulbs and women suggesting their cyborgian fusion.

The joy experienced in contact with machines is the leitmotif of *K.Sh.E.* Both men and women are smiling when around machinery, which has immediate effect on them. They dance, their bodies are vibrant and agile, and Shub emphasizes that she did not in any way influence these moments during the shooting: "it might seem to you that I remade this in a biased way, but as a matter of fact it did happen like that. At the factory, notwithstanding hard work, during breaks everyone is dancing and singing all the time" (283).

Figure 29, **Figure 30:** Workers smiling around their machines in *K.Sh.E.* (frame capture).

"I Want to Make a Film about Women"

It was vitally important for Shub to incorporate the theme of women into Soviet cinema. Strollery notices that "one could point to the relatively high proportion of women in *The Fall*."[71]

[70] Shub, "Tema moei rechi," p. 284.
[71] Martin Stollery, "Eisenstein, Shub and the Gender,"p. 95.

In the early 1930s, Shub made plans to shoot a documentary about women: "It's true that I wanted to work on a film dedicated to the Soviet woman already in 1930. I submitted the application to the film studio, but what followed immediately after was their persistent proposals to make a feature film that would include professional actors. Thereby the plan about the Soviet woman film fell away."[72]

In the same article, Shub mentions that she intends to make another documentary on the topic of women: "in 1935, I plan to entirely devote myself to filming pictures *Moscow-Volga* and *A Woman and News Reporter* (working titles)" (289). Again in 1933, she wrote about similar plans: "The next thing I want to do is a film about four women. I want to spend two to three months living with each of these women with my camera turned on. This will be a picture about authentic people. I want to tackle a very specific topic, but this topic is organically connected with all my previous work."[73] What Shub proposed here was for the time a very unusual and innovative idea. She intended to live with the subjects of her documentary and keep her camera on to record to examine the lives of Soviet women in a format that contains elements of today's reality TV. This Soviet-style "reality-documentary" would record unscripted life of unknown women who were not professional actors. Shub planned to capture on camera "life in all its daily contradictions, which in every single moment produces endless dramatic situations and solves them in unexpected and innovative ways."[74] Each of the four women would narrate their biographies, their life stories of how they remade themselves into modern subjects.

Unfortunately, Shub did not have much success with her plans as she was never granted permission to shoot these films. It is telling that the Gosfilm management did not show interest in producing films about Soviet women in the early 1930s. In 1933, at the First All-Union

[72] Shub, "Khochu rabotat'," p. 288.
[73] Shub, "Tema moei rechi," p. 283.
[74] Shub, "Ia khochu delat' fil'mu o zhenshchine" in *Zhizn' moia*, p. 286.

Congress of Kolhkozes and Stakhanovites, Stalin gave a speech, in which he addressed the woman question. He called for urgent advancement of women on collective farms and touched upon inequality issues:

> Now a few words about women, about collective farmers (o kolkhoznitsakh). The woman question on the collective farms is a big question, comrades. I know that many of you underestimate women and even scorn them. But this is a mistake, comrades, a serious mistake. This isn't about the fact that women make up half of the population. The point is that the collective farm movement has advanced a number of remarkable and capable women into leadership positions. Look at the congress, at its structure, and you will see that women have long since progressed from being backward to becoming advanced. Women on collective farms are a great force. To keep this force unutilized is a crime. Our duty is to advance women on collective farms and to put this force into action.[75]

To generate a positive reaction from Gosfilm and convince them that the woman agenda was a vital theme for the Soviet film industry, Shub referenced Stalin's speech: "After Comrade Stalin's address at the kolkhoz Congress, after his speech about kolkhoz women, I feel that the woman subject is important and needed today; this is the best stimulus for work and I want to work in this direction with extraordinary energy."[76]

The New Sphinx

And indeed, Shub worked on this project for the entire second half of 1933. In collaboration with the writer Boris Lapin, she completed the script for her film about women. Feeling empowered by the official call to work on the woman question, she hoped to start

[75] Stalin, I.V. *Sochinenia*, vol. 13. Moscow: Gosudarstvennoe izdatel'stvo politicheskoi literatury, 1951, p. 251.
[76] Shub, "Ia khochu delat' fil'mu o zhenshchine," p. 286.

shooting the film the following year. Shub's objective was to show the process of the formation of the new type of woman (novaia zhenshchina v protsesse ee stanovlenia, 291) in Soviet society. The script titled "Women" ("Zhenshchiny") is valuable as it provides a glimpse into Shub's cinematic imaginings of female transformation.

The script consists of two main segments. The first part shows the kolkhoz women in the village near the Volga region. Shub's film crew is situated in a car that functions as a mobile sound cinema-station (avtomobil'— eto zvukovaia peredvizhnaia kinostantsia).[77] Shub plans to record various tractor, car, and other machine sounds and noises to show the new technological landscape of the reconstructed village. The crew would follow daily lives of the three Ul'anov sisters. The oldest, Varvara, is religious and still follows the old ways. Varvara encapsulates the values of old Russia and serves to make the scene more dynamic (sdelaet stsenu zhivoi, 316). The other two sisters, Mariia and Aleksandra, are young communists who embrace modern Soviet values and lead active political lives in the village. As the scenario unfolds, Mariia takes the lead and shows up in most scenes. Shub intends to record Mariia's speech and show "the first film-interview (kinointerv'iu) with the new USSR peasant woman" (316). This would also be the first female equivalent of *Kino-pravda* made by a woman director. The interview would show the psychology and lifestyle of the progressive peasant Mariia. Shub emphasizes that she does not want a fake interview (fal'shlivoe), and therefore does not give the script of Mariia's speech beforehand. The voice plays an important role in the documentary as it conveys the speech that is ideologically appropriate. Mariia and Aleksandra speak briskly (boiko) while Varvara speaks shyly and dithers. Mariia runs regular party meetings and firmly asserts her authority in male company: "Mariia is active, sharp, concise. When she needs to show disagreement, she shows it, when she needs to give orders, she does not hesitate; she is equally authoritative to all. 'I don't

[77] Shub, "Zhenshchiny," in *Zhizn' moia- kinematograf*, p. 314.

want to speak to you, you don't understand anything. Bring your wife instead'– she says to a man (kulak)" (317). In the first part of the script, Shub draws from Stalin's speech at the First All-Union Congress speech and with her portrayal of Mariia shows one "remarkable and capable woman" who takes a leadership position in the kolkhoz.

The second part of the documentary would show women workers in Moscow factories. This part of Shub's script is in dialogue with Dziga Vertov's *Man with a Movie Camera* (1929). In his documentary, Vertov shows a Soviet workday from the male perspective in a chaotic way using elaborate quick-cut editing techniques. In Shub's script, the woman with a movie camera shows exclusively Soviet women at work interacting with their machines from dawn to evening. Although the script does not offer much detail about the camera and editing, based on Shub's sporadic comments, the pace of the film would be more sedate, it would leave room for undisturbed reflection and would not in any way mirror Vertov's dynamic documentary. Shub insists that everything needs to be "precise and focused" (tochno i skontsentrirovanno, 323) and observed with a camera in detail (protsess nabliudenia, 325). We observe (nabliudaem), we examine (my rassmatrivaem), we linger (zaderzhivemsia), and we peacefully record (spokoino snimaem) are some of the most repeated instructions for the cinematographer that indicate the overall rhythm of Shub's documentary.

While Vertov's documentary does not focus on a single worker in particular, Shub mainly centers her attention on one shock worker, Sofi'ia Barsukova. She wants to record Baruskova's regular workday at the factory. A worker's day in the dormitory begins in a very cheerful mood: "The [women workers] wake up joyful, make many facetious remarks, one of them tells a joke. Everyone laughs" (322). Shub shows Barsukova taking her morning shower, studying English, taking advanced political courses, being very sociable and a favorite among

other fellow-workers. At the factory, she makes ball bearing machine-elements[78] working with the Swiss-style lathe machine.

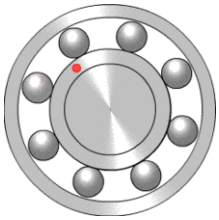

Figure 31: Ball bearing element.

The rotation of the ball bearing resembles the work of the movie camera and it is one of its constitutive components. Shub utilizes this visual compatibility between the two technological devices to create productive correlations and simultaneously blur the physical border between Barsukova's machine and the camera. Like Shaginian, Shub, too, wants to minimize the distance between physical labor and artistic work via technology. Barsukova, working with her machine is analogous to Shub filming with her camera. Baruskova produces roll-shaped bearings (roliki podshipnika) while Shub works with film stock (rolik kinoplenki). After establishing the connections between filmmaker and worker, the film apparatus and machine, Shub plans to shoot a scene where Barsukova is actively engaged with the lathe. Shub's description of the camerawork in the script matches the description of the lathe: "One cannot help but admire the precision and purposefulness of the lathe movements (tochnost' i osmyslennost')" (323). Barsukova mirrors the rhythm of her machine and in return the machine educates her bodily movements, which are also described as precise and fast (tochnie i bystrye, 323). Shub interviews Barsukova who joyfully comments on her machine: "My Swiss machine is very sophisticated and intelligent like humans"– she repeats this thought four times in a row [Shub comments in a script]" (325). The bond between Barsukova and her machine is organic, animate,

[78] The ball bearing machine-element reduces rotational friction in various apparatuses.

and porous. In the interview, Barsukova informs the viewers how her interaction with technology made her an educated and class-conscious woman (gramotna i soznatel'naia, 324.). Similarly, Shub writes about her connection with the film apparatus: "I am always attracted to the film medium, I gravitate to my cinematographer when working with the camera. My hands and eyes are always drawn to my editing desk."[79]

Coalitions that Shub creates do not end here. Not only does Shub link physical work with filming, she also shows Soviet women writers at the factory who are, like Shub, engaged in observing Barsukova. While Shub is filming Barsukova, writers are busy jotting down their reflections on the same subject matter. Shub again plans to record Marietta Shaginian along with two other female Soviet authors. In the script directions, Shaginian, Vera Inber, and Karavaeva, whose names appear in the intertitle, are seated while the camera records them working on their literature. Vera Inber looks at the camera and suddenly says: "I have been observing this woman for several days already—Inber informs us or the person sitting next to her. I have been observing her at the factory, during meetings, and at home. I want to write about her" (325). Through the medium of film, Shub brings together all the professions in which women are actively engaged in promoting the birth of the New Woman. After the factory, Shub shows that Moscow is also being reconstructed by these new women who are, for the first time in history, working as police officers, miners, flyers, parachutists, professional soldiers, street car drivers, and metro workers. The Soviet woman together with her machinery builds New Moscow and creates a new world.

Like Vertov in *Man with a Movie Camera,* Shub too visits the local civil registry office (ZAGS) and records a woman registering her newborn baby. She is being asked the usual questions about vital statistics and her responses demonstrate how independent Soviet women

[79] Esfir' Shub, "Iasnaia poliana," in *Zhizn' moia,* p. 241.

have become: "Who is the father of the child?—That is not important, the child is mine" (330). By putting her film in dialogue with Vertov's, and here in particular in the registry office scene, where everything is literally and figuratively a matter of life and death, Shub sends her cinematic message that she is officially registering her film child and it is no longer fundamental who cinematic fathers are or may be. Shub fortifies her feminist message when she visits the occupational therapy center (lechebno-trudovoi profilaktorii)[80] to interview former prostitutes who have become reformed shock workers. As Shub, this time completely on her own, records the interview, she encourages women, intimidated by the presence of the camera, to imagine their future after they leave the center. Here, at this symbolic conversion center, Shub clearly articulates her authorial position: "I am a woman film director. Men are not allowed here (Ia zhenshchina-kinorezhisser. Muzhchin my siuda ne pustim)," (337). In her script, Shub establishes her own authorial position in the film industry; she gives birth to the Soviet woman film director, a woman with a camera in her hands who actively creates the new world. With her documentary, Shub wants to show that female liberation can be achieved: "I want to make a film about women, because this theme with utmost certainty shows that only proletarian revolution, new work conditions, and new social practice have conclusively thrown off the 'woman question' from history accounts."[81]

It is ironic that Shub never received permission to realize her dream project. She ends her script with an important message in the form of a question:

> "Give us an answer what is a woman—this Sphinx, a riddle of the century?
>
> The woman worker of our country—she is the citizen of the Soviet lands. Before her all roads are open."

[80] In the Soviet context, these institutions offered "treatment" of social vices such as alcoholism, drug addiction, and prostitution through engagement in work.
[81] Esfir' Shub, "Ia knochu delat' filmu o zhenshchine" p. 286.

Shub is invoking the image of the Sphinx,[82] a mythical female monster with a head of a woman, the body of a lion, and wings of a bird. The traditional Sphinx is represented as a merciless creature who kills or devours all those who cannot answer her famous riddle: "which creature has one voice and yet becomes four-footed and two-footed and three-footed?" For Shub, the Sphinx myth has a fundamental value in creating the image of the Soviet woman. She is the Sphinx of the twentieth century, she is the hybrid between woman, animal, and machine. She, the modern remade woman is the answer to the riddle. The question in the riddle shows her the trajectory from a backward, symbolically four-footed peasant, to the two-footed woman whose consciousness is awoken, to the three-footed cyborg forged through technology. She has one voice, the film sound, which is both female and mechanical, like the medium itself.[83] The third regrown limb on her body is technology, which refashions her and takes her to the bright future. Harraway writes that "the regrown limb can be monstrous, duplicated, potent….We have all been injured, profoundly….We require regeneration, not rebirth" (181). Shub rewrites the Sphinx myth to subvert traditional patriarchal control. She does not need Oedipus with his male-made solution to the riddle that symbolically leads to her destruction. The Soviet woman regenerates herself in coalition with her machines. In this sense, Shub is creating a woman who is undoing the male myth, or as Haraway suggests: "perhaps, ironically, we can learn from our fusions with animals and machines how not to be Man, the embodiment of Western logos. From the point of view of pleasure in these potent and taboo fusions, made inevitable by the social relations of science and technology, there might indeed be a feminist science" (173). Shub gives

[82] Sphinx of the ancient Greek tradition.
[83] Shub consistently uses feminine gender for cinema: fil'ma.

us her cinematic vision of a liberated woman who deconstructs the old narratives and who, like Harraway, "would rather be a cyborg than a goddess."[84]

While women like Shaginian and Shub were tirelessly working in refashioning themselves in a techno-feminist direction, Soviet culture was gradually shifting from its hyper-masculine myths toward a new culture that linked progress of Soviet society through the proliferation of feminine narratives. This new obsession led to the creation of the Soviet heroine of labor, the female cyborg incarnated in the image of the female tractor driver riding into the bright future, which became the symbol of transformed Stalinist society.

[84] Donna J. Haraway: "A Cyborg Manifesto…", p. 181.

CHAPTER 4

Forging the Traktoristka Culture

In this chapter I argue that Stalinist culture of the 1930s began appropriating female reproductive power, the pathos of fertility, vitality, and happiness, and merged these traditional female attributes with the drive to technologize. The dynamic contradiction between feminine organic imagery and the industrial was embodied in the image of the female tractor driver (*traktoristka*), the new heroine of labor. The woman at the tractor wheel became a synonym for the country's progress, unifying Stalinist visions of technological abundance, the coming of plenty, and happiness on a mass scale. Culture of the 1930s began creating a new technologized female collective body that was taking the USSR into the bright future. I begin my discussion with an analysis of Stalin's industrialization rhetoric in the 1930s to show how this discourse shaped the inception of the female tractor driver myth. Then I move to the examination of the traktoristka narrative in the press, literature, and film to show how the culture began speaking in the feminine idiom.

In the period from 1928–1932, Stalin launched the First Five-Year Plan, a rapid industrialization program of heavy industrial development and the collectivization of agriculture. In the following years, the implementation of the First Five-Year Plan brought about the transformation of the entire Soviet economy, society, and culture. This was a vision that dreamed of a complete makeover of industry, people, and nature via technology. Maxim Gorky's journal *Our Achievements* celebrated machines as the main carriers of transformation: "the time has come to take all the riches of the country into our hands," the editorialist proclaimed. "The time has come to construct our fatherland anew with the hands of machines…to dress the whole country, from Archangel to Tashkent and from Leningrad to Vladivostok in the iron armor of

industrial giants…to weave the whole country into a network of electrical powerlines."[1] The massive production of technology brought significant changes, one of the most crucial being the introduction of women into heavy industry. What followed were major shifts in cultural, social, and gender politics. Technology became the fundamental catalyst of the Stalinist revolutionary program. The 1930s was a time when technology was mass-produced but also heavily contemplated. In 1931, at the First All-Union Conference of Workers of Socialist Industry, Stalin outlined a new direction of technological development: "Bolsheviks must master technology (ovladet' tekhnikoi)....In the period of reconstruction, technology decides everything....What remains to be done is not that much: to study technology and to master science. And when we achieve this, we will develop tempos that we cannot even dream of at the present moment."[2] Stalin envisioned technology as an armature of the utopian future soon to come. Technology and science were a new language that Soviet citizens needed to learn to speak quickly and fluently. Stalin's demand for technological proficiency quickly became a catchphrase, and the fiery motto, "technology decides everything" (tekhnika reshaet vse), appeared in all media. In the following four years, nearly every newspaper headline featured this slogan.

Cultural production closely followed the latest political trend. Fascination with machines in art did not cease to inspire artists. Tractors were celebrated as carriers of both industrial and cultural progress. Tractor culture was made monumental in 1935, when contemporary architects V.A. Shchuko and V. G. Gel'freikh erected the Rostov Theatre. The new architectural wonder, the tractor theater featured the latest architectural trends: "a busty stone tractor with caterpillars made of glass and a dazzling marble radiator."[3]

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[1] Quoted in Sheila Fitzpatrick, *Everyday Stalinism: Ordinary Life in Extraordinary Times: Soviet Russia in the 1930s*, New York: Oxford University Press, 1999, p. 68
[2] *Pravda*, no.35, February 5, 1931 p. 3 (All translations are mine unless noted otherwise.)
[3] The Rostov Art Theater, at http://www.rostovteatr.ru/theater/history/ (last accessed May 12, 2019)

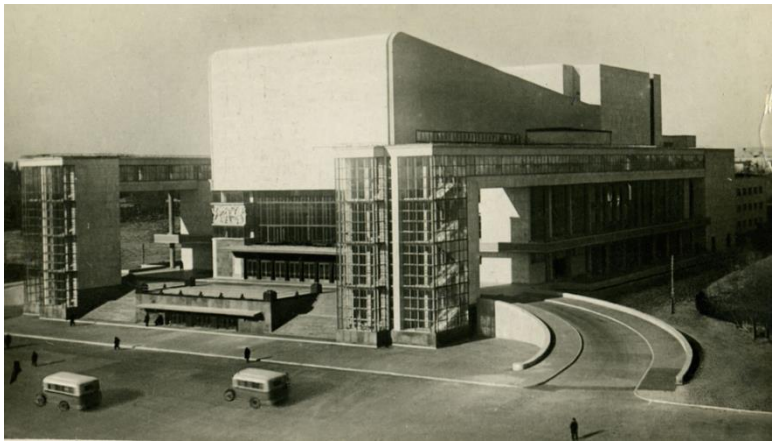

Figure 32: The Rostov Art Theater.

Béla Illés, a Hungarian writer who spent most of his life in the Soviet Union, wrote about the tractor theatre before it was open to the public in 1934. According to Illés, this theater-giant (teatr-gigant) was supposed to be very different from everything seen before. It had its own power station, reading and smoking rooms, a gym and bathrooms. The theater featured enormous stages and a large interior space that allowed viewers to see everything. It was conceived as a theater designed for mass spectacle: "If war is shown, then an entire army with cavalry, artillery and tanks will pass through the stage. If there is a collective farm in the scene, the entire tractor brigade will be able to pass before the audience."[4]

In 1935, the same year the Tractor Theater was erected, Stalin initiated another political challenge in the midst of the Second Five-Year Plan (1933–1937): "We have essentially survived the period of technological famine (period goloda). Having survived it we have embarked on a new period, I would say, a period of human scarcity, in the field of cadres,

[4] "Teatr nashego vremeni," *Pravda*, no. 217, 1934, p. 4; In the same article, Illés wrote that the construction leader Stambler consulted medical specialists to ensure maximum utilization of the viewers' senses. "Comrade Stambler, construction supervisor of the Rostov theater, invited three professors, a neuropathologist, ear and eye specialists…After consulting for half-an-hour, they were so fascinated with Stambler's ideas and agreed to a continued collaboration; they offered to write a paper that would address light, color, and forms that would enable the viewer maximum visual and hearing focus on what's unfolding on the scene."

workers able to harness technology (osedlat' tekhniku) and carry it forward."[5] During the Second Five-Year-Plan period, the second stage in technological progress in which heavy industry was still considered a top priority, technology was already secured and mastering it became a new challenge to tackle. In his well-known speech, Stalin explicated on the meaning of mastery of technology in the new period of development:

> We used to say that "technology decides everything." That slogan helped us to solve technology issues and we have created the widest technological basis. In order to put technology in motion and use it effectively, we need people who have mastered it, we need cadres who are able to utilize technology *lege artis*. Technology without people who have mastered it is dead technology. People who are in charge of technology and have mastered it, can and must produce wonders (chudesa). This is why the old slogan "technology decides everything" must be replaced by a new motto "cadres decide everything (kadry reshaiut vse). This is most important now."[6]

To show what was expected in this more advanced stage, Stalin opted for an unusual, yet telling, linguistic move. He only slightly modified his well-known slogan by rhetorically substituting machines with humans; and from this moment on, technology, which was already deeply ingrained in every fiber of Soviet consciousness, symbolically merged with Soviet flesh. Stalin first introduced this cyborgian maneuver in the Kremlin, the symbolic forge of the "cadre"—people. These new people, coupled with machines, internalized technology and made it native. According to Stalin, technology on its own was of no use, it was literally dead, it could not produce wonders. Only when the alliance of humans and machines is secured, according to Stalin, miracles (chudesa) are going to become reality. This type of discourse brought a new

[5] "Rech' tovarishcha Stalina v Kremlevskom dvortse na vypuske akademikov Krasnoi armii 4 maia 1935 goda," *Pravda*, no. 123, May 6, 1935, p. 1.
[6] Ibid.

understanding of the body rhetorically invested with technology, like the Rostov Tractor theater, envisioned as a giant cultural machine with people inside its architectural cavity that perform as a motor power of the new culture. This empowered body, the cadre body, was the next stage in technical development. The cyborgian-cadre body that evolved together with machines became the first discursive miracle of Stalin's revolution.

Miracles were the trademark of this period. Early Stalinist culture insisted on producing wonders by means of both physical and intellectual work. Pushing against traditional limits that in early 1930s were interpreted as backward and bourgeois and establishing new standards of both production and education secured the production of cadres. Cadres were therefore new people, molded by the Party's philosophy of challenging physical and intellectual limits; technological natives who delivered wonders. Early Stalinist culture refashioned the traditional understanding of a miracle, seen as an improbable event not explicable by science. In the 1930s, a miracle became a logical,[7] scientifically controlled end-result of a new philosophy of cadres. New generations began to think of the extraordinary as the new ordinary. This new ordinary, according to this philosophy, was not hard to achieve if one followed Stalin's recommendations: "what remains to be done is not that much: to study technology and to master science."[8] From this moment on, cadres began to be celebrated as true heroes of socialist labor. They were hailed as daring, physically ready, and heroic. Raisa Orlova, a dissident and later immigrant, remembered her youth as a period of endless possibilities for creating miracles:

> Life, properly speaking, would begin in a new and sparkling white house. There I would do exercises in the morning, there an ideal order would exist, there all my heroic achievements would commence….Faster, faster toward the great goal, and there

[7] As V. Molotov, the chairman of the Council of Peoples Commissars put it: "Our country can already perform veritable miracles." Molotov, *What is Stakhanovism.* New York: International Publishers Co., 1936, p.30.
[8] *Pravda*, no.35, February 5, 1931 p.3

> everything would begin in a genuine sense. It was both possible and necessary to alter everything: the streets, the houses, the cities, the social order, human souls. And it was not all that difficult.[9]

In November of 1935, Stalin delivered another historic speech at The First Conference of Stakhanovites of Industry and Transport of the Soviet Union.[10] He defined what it means to be a "Stakhanovite." According to Stalin, it was vital to distinguish between the shock workers of the previous period and the Stakhanovites of the present stage. The key difference between these two was technology:

> In the past, about three years ago, in the period of the first stage of socialist competition, socialist competition was not necessarily connected with new technology….The present stage of socialist competition, the Stakhanov movement, is inevitably connected with new technology….The Stakhavovite movement is organically linked (organicheski sviazano) with new technology.[11]

New people were—both literally and figuratively— organically coupled with machines. Their bodies acquired new cyborgian abilities, they were redesigned by technology, which now acted as a new body part, a new organ with which they outperformed. Beating the norm in the thirties meant performing like a cyborg. At the same conference, Stalin outlined the main characteristics of Stakhanovites:

> Three years ago, there were no such people. These are new people, people of a special kind (osobennye)….What kind of people are they? They are mostly young or middle-aged working men and women, cultured people with technical knowledge (tekhnicheski

[9] quoted in Sheila Fitzpatrick, *Everyday Stalinism*, p. 69
[10] The Stakhanovite movement, which would soon spread throughout the USSR, took its name from Aleksei Stakhanov, the worker who had mined 102 tons of coal in less than 6 hours in 1935, breaking the coalmining record.
[11] "Rech' tovarishcha Stalina na pervom vsesoiuznom soveshchanii Stakhanovtsev," *Pravda*, no. 321, 1935. p. 1

> podkovannye), people who are models of precision and accuracy in work, who appreciate the time factor in work and have learned to count time not only by minutes, but also by seconds.[12]

It is interesting that Stalin uses the term "tekhnicheski podkovannye" for people equipped with technical knowledge to describe Stakhanovites. In its figurative meaning, the word "podkovannyi" in Russian means to have specialized knowledge, mastery in specific field. In its literal meaning, the adjective "podkovannyi" means having a horseshoe. A horseshoe attached to the hooves of a horse serves a prosthetic function to allow a horse to work longer and harder than is natural. The image of the horseshoe also serves here to evoke an anecdote about a mare, another well-known story that Stalin narrated just several months earlier in the Kremlin. The moral of the story was meant to instruct about the negative consequences of being an indifferent person. Besides having specialized knowledge and new machine-empowered bodies, Stakhanovites must not be indifferent, they should always be caring people:

> I remember a case from Siberia during my exile years. It was fall, flood time. Around 30 people went to the river to collect wood swept away by a raging huge river. Towards the evening, they returned to the village, but without one friend. When I asked about him, they indifferently (ravnodushno) said "he stayed there." When I asked, "what do you mean he stayed there?" they said with the same indifference "why ask any further? He drowned." And one of them rushed off to water his mare. To my reproach that they care more for horses than for humans, one of them answered with the general approval of the rest, "why should we pity them, the people. We can always make people (zavsegda

[12] Ibid.

> sdelat' mozhem). But the mare...try to make a mare (poprobui sdelat' kobylu).[13] Here is a little detail, maybe insignificant, but very characteristic.…It seems to me that the indifferent attitude of some of our leaders towards the people—cadres and the inability to appreciate people is a relic of that strange attitude of people towards people, that I just described in the episode from far-off Siberia....If we don't cherish our cadres, we will limp with both legs.[14]

Stalin used the metaphor of a disabled body to point to the dangers of living in an indifferent society. Indifference (ravnodushie), that in Russian implies having an uncaring soul, produces a limping body incapable of heroic deeds. Stalin here indirectly advocates positive emotions, empathy, and compassion that cadres-Stakhanovites need to cultivate in their *tekhnicheski podkovannye* bodies. The care his Siberian comrade shows for the mare must be directed to a new kind of people the state was trying to introduce. In 1935, Stalin shifted attention to feelings. Already in November of the same year, at the Stakhanovite conference, he devised another catchphrase and inaugurated happiness as the Soviet *spiritus movens*: "Life has become better, comrades. Life has become merrier. And when life is joyous, work becomes more effective.... Hence the high rates of output. Hence the heroes and heroines of labor."[15]

Thus, in an extremely short period of time, Stalin formulated the tripartite arrangement: technology—cadres—emotions, that brought a crucial shift in the culture marking the entire decade. This triad shaped the idiosyncratic representation of a model woman worker. Stalinist culture fashioned and fed off the image of the traktoristka myth that was utilized as a new model

[13] In this Siberian anecdote, the comment "try to make a mare" alluded to the problem of the scarcity of number of horses in the country. By 1935, Soviet Russia has already solved the problem of horse breeding by implementing the artificial insemination techniques introduced by a controversial scientist, Il'ia Ivanov, whom I briefly discussed in the introduction chapter.
[14] "Rech' tovarishcha Stalina v Kremlevskom dvortse na vypuske akademikov Krasnoi armii 4 maia 1935 goda," *Pravda*, no. 123, May 6, 1935, p. 1
[15] *Pravda*, no. 321, November 22, 1935, p.1

of socialist advancement. Vladimir Paperny writes that in the early Stalinist period an anthropomorphic vision of culture became important: "the measure of all things again becomes 'man,' while the primary value became the 'living'" (119). The new culture molded itself on a specific kind of a human model, on the "architectonics of a life-loving, healthy, well-built person."[16] The emphasis was indeed on the human image, but I argue, a specifically gendered one. These were not just "people," but *women*. The preceding avant-garde period of the 1920s, with its insistence on speed, on male-dominated technology and art, and on aggressiveness in language (Futurism) was a predominantly masculine-centered culture. The early Stalinist 1930s experienced a significant shift in which the cultural focus was placed on the opposite sex. This period privileged a different paradigm in which the primary value was assigned to traditionally-viewed "feminine" characteristics. Qualities such as warmth, joy, merriment, laughter, rosy-cheeked faces, decoration, and fertility became key cultural signifiers. Paperny writes that architecture began to cherish the fertility pathos, "façades [were] of value if they express[ed] warmth" (129), the metro was described as "light and joyous" (125), building was interpreted as "passionate" (120). It was Stalin who with his formulation "life has gotten better, life has gotten merrier" started the feelings trend that merged with the techno-anthropomorphizing cultural model. This generated a technocratic culture saturated with feminine attributes. The measure of progress became a female cyborg, a melding of technology and the female body-mind, and this change marked a significant shift from the previous male-oriented avant-garde culture. Choi Chatterjee claims that:

> The transformation of the Russian woman from a symbol of backwardness to a symbol of modernity in Soviet propaganda served as a means of justification for Stalinist policies.

[16] Vladimir Paperny, *Architecture in The Age of Stalin: Culture Two*, Cambridge Studies in New Art History and Criticism, New York: Cambridge University Press, 2002 p.120.

> Second, in the process of this re-structuring, the Soviet discourse relating to modernity, industrialization and collectivization and the welfare state was gendered both in spirit and tone.[17]

The poet Dem'ian Bednyi registers this change in cultural attitudes toward women in his poem "Privet rastushchei sile," ("Greetings to the Growing Power"):

Pro "babu" zlye pribautki	Mean jokes about women
U nas uzh bol'she ne v khodu	Are no longer in vogue
Pro "babu" starye pogulki	Old ditties about women
S kul'turoi novoi ne v ladu	Are out of tune with our new culture
Tsena takomu balagur'iu	The worth of such a jokester is
Antisovetskaia tsena	Valued as anti-Soviet[18]

As the title of 1936 film *Chudesnitsa* (*The Wonder Girl*) by Aleksandr Medvedkin suggests, the techno-woman becomes another wonder of early Stalinist culture. The 1930s "chudesnitsa" is a woman altered by her tools, and empowered by technology. Its most potent symbol becomes the tractor driver (traktoristka). Stalinist culture anxiously wanted to forge a new cultural model of progress that was juxtaposed to the previous avant-garde period. The culture legitimized itself by showing changes and progress on the Lenin–Stalin path of socialist development. The Lenin–Stalin path-slogan, often evoked in this period, symbolized continuity with the previous culture, but it also introduced the future new course. Viacheslav Molotov, the chairman of the Council of Peoples' Commissars glorified Stalin as the creator of the highest working culture, as someone who not only inherited Lenin's legacy but exceeded it by creating a

[17] Choi Chatterjee, "Soviet Heroines and the Language of Modernity, 1930–39" in *Women in the Stalin Era*, Melanie Ilic, ed. Basingstoke: Palgrave Macmillan, 2001, p. 49.
[18] Dem'ian Bednyi, "Privet rastushchei sile," *Pravda*, no. 66, 1935 p. 2.

joyful Stakhanovite culture: "Lenin…developed ideas of socialist competition, and these ideas became the principal force in the building of socialism....The faithful successor to the work of Lenin— Comrade Stalin — became the genuine inspiration and leader of socialist competition, the highest stage of which is represented by the Stakhanov movement."[19] Molotov emphasizes the shift in the cultural paradigm by associating it with a grandiosity that has never been seen before, a sort of miracle produced in a scientific laboratory: "something is taking place in our country" (15), "what we are doing is a great experiment" (20).

In this chapter, I argue that Stalinist art and culture undergoes a great experiment by fashioning itself as feminine culture, embodied in the image of the traktoristka, the Soviet heroine of labor. This new culture parallels women's refashioning and their integration into heavy industry. The culture forges itself by showing a woman remade with machines (most commonly, the tractor in the 1930s.) She, once a backward peasant tied to the land, emerges as a technologically-empowered heroine. This simultaneous remaking of the female-self and the feminization of culture, the "wonderous" merger of official discourse with the new cyborgian heroine was a way of legitimizing Stalin's power. The culture of the 1930s enacts a self-forging political and cultural drama in which the new woman emerges as a refashioned Kremlin goddess in the socialist spectacle of labor. In this chapter, I analyze newspaper articles, Stakhanovite biographies, literary depictions, and films featuring female tractor drivers to show how 1930s culture works with female cyborg imagery to promote its progressiveness and to authenticate its political system. The first Stakhanovki (female Stakhanovites) portrayals appeared in major newspapers, most notably in *Pravda*, and this newly established journalistic genre influenced further literary and film imaginings of the traktoristka myth.

[19] Molotov, *What is Stakhanovism*, p. 28

In 1931, the columnist Ia. Boiarskii wrote a text that outlined the tasks of contemporary art. He invites artists to produce an image of the new woman mastering technology that reflects the new Stalinist culture:

> Before art there is an exceptional task of constructing an artistic portrayal of these new processes….Once artists realize this, the image of a woman-champion (obraz zhenshchiny-bortsa) and builder of socialism will take the place in our art that it deserves by virtue of those new exceptional shifts and phenomena that occurred in the era of advanced socialist construction. It is vital to raise this issue before the authors, playwrights, screenwriters, composers: Do not forget about the woman.[20]

This headline of *Pravda* in 1934 binds together the image of a working woman with the development of culture: "We need to recognize growing social activism of our working women and their advancement to leading positions in our society as an unequivocal sign of the development of our culture."[21] Not only artists, but also journalists enthusiastically tackled the challenge of re-gendering and popularizing the new culture. *Pravda*, the leading promoter of new work-values, featured numerous columns on the Stakhanovki, who talk about their transformed lives and instruct other women on how to become exemplary workers. These columns celebrated female tractor drivers as models of Stakhanovism. The press ardently published what I call "tractor poetry," a genre-in-the-making that pioneered the tractor driver heroine in literature. Together, literature and the press created the traktoristka narrative that tells the story of woman's rise from backward peasant to a liberated modern woman who makes miracles. In this narrative, Stalin's benevolent image is tightly fastened to the technology-empowered woman and is presented as the one who enables and encourages her transformation. Headlines such as "How

[20] Ia. Boiarskii, "8-e marta," *Sovetskoe iskusstvo*, 1931, p. 2.
[21] *Pravda*, no. 66, 1934, p. 1.

Comrade Stalin Forged a Stakhanovite out of Me" ("Kak iz menia vykoval tovarishch Stalin stakhanovku")[22] populate the press and serve as reminders that it is *he* who creates *her*.

By the mid-1930s, the artistic representation of the traktoristka was already in place. Actual women workers and their feats served as a basis for creating this image. The first and the most celebrated tractor operator was Pasha Nikitichna Angelina (1912–1959) from Ukraine. In the late 1920s Pasha took tractor driving courses and in 1933 organized the first Soviet all-female tractor brigade. She became an instant celebrity and the model for all working women aspiring to become a part of the official working culture. In 1936, *Pravda* published Dem'ian Bednyi's long poem, titled "Flowers and Roots" ("Tsvety i korni"), in which he glorified Angelina's accomplishments. Bednyi was at this time established as Stalin's favorite poet who enjoyed multiple benefits for celebrating the new culture in his poetry. He was chosen as a perfect candidate to write a poem about Pasha-the-traktoristka, who was to become a part of the socialist realist literary canon.

The poem works with all the main imagery that will be used to portray traktoriska. The poem's tripartite structure features three different voices, each of which affirms the traktoristka myth from different angles. "Flowers and Roots" begins with the voice of the lyrical subject, then moves to Angelina's own voice (heavily edited) and ends with Pasha's brother's praise for his sister. The three voices in the poem, the voice of the state, Pasha's politically-charged speech, and her brother's family voice, symbolize the three common perspectives in which the traktoristka image was molded. The lyrical subject's voice mirrors in style the voice of the state and represents official traktoristka discourse. The poem begins by setting the story in the Kremlin, the sacred place where "inspiring speeches" (vdokhnovennye rechi) about traktoristkas are generated. The long list of attributes describing Angelina belong to official traktoristka

[22] "Rech tov. Lysiakovoi (tkachikha fabriki im. Fruidze, Moskva)," *Pravda*, no. 315, 1935, p. 2

rhetoric. Pasha is an "able female orator" (oratorsha–del'naia) who delivers rousing speeches about female empowerment. Alongside her oratory abilities, Pasha is a "veritable wonder" of the early Stalinist culture as she fulfils all of Stalin's demands outlined in the first two Five–Year Plans: she masters technology, beats the production norm, and is a member of the youth division of the Communist Party.

Traktoristka	the tractor driver
Udarnitsa	shock-worker
I komsomolka	and Komsomol member
Pasha Angelina	Pasha Angelina.[23]

In the last line of the first stanza, the name Pasha Angelina becomes a symbolic name inscribed in the Kremlin pantheon followed by the general approval of the audience: "Ovations. The hall responds enthusiastically" ("Ovatsiei. Zal otvechaet vostorzhenno"). In his poem, Bednyi depicts the first Stakhanovite conference where Pasha is awarded the order of the Red banner of labor. This is a momentous event where a woman is proclaimed the model image of a new culture.

It is only after Pasha officially becomes the heroine of the state that she is given the chance to speak in her own (edited) voice. Her Kremlin address is symbolically placed in the central part of the poem. Her voice is rendered as a first-person plural we (my), which is very much in line with the spirit of socialist state rhetoric, but this "we" is also the collective voice of her first all–female tractor brigade and all the Soviet women workers. In her speech, Pasha invokes Stalin's slogan of mastering technology and then moves to the gender question:

"My, komsomolki,	"We, Komsomol women,
Ovladeli mashinami.	Have mastered machines.
V goriuchem ne znaem pereraskhoda!	We have no fuel waste!

[23] Dem'ian Bednyi, "Tsvety i korni,"*Pravda*, April 11, no. 101, 1936, p. 6.

Pobednogo znameni	Our victorious banner
V sorevnovan'i s muzhchinami	In competition with men
My ne ustupim	We will not give up
A derzhim —	But will keep it
Tri goda!"	For three years!"

Pasha juxtaposes her female brigade to the competing male-tractor team by exposing the flaws of the latter. The male brigade has four malfunctioning tractors, two of which are completely broken, while her brigade has four perfectly operating machines.

"My svoi priveli	We brought our tractors
S pesniami,	Singing
S tantsami,	And dancing
Na ispravnom khodu	In good working order
Vse chetyre!"	All four!"

This gender juxtaposition serves to emphasize Pasha's brigade work enthusiasm and her team's creative approach to machines that involves both their agile bodies and their creative artistic talents (singing and dancing). In addition, Melanie Ilic rightly observes that "the traktoristka's determination to prove herself equal to, or better than, her male colleagues can be regarded as a definitive act of feminist defiance."[24] The female brigade's technical knowledge and their emotional, artistic relationship with tractors is what makes them stand out. Their bond with technology enables production miracles and represents a new direction in labor politics. The

[24] "Traktoristka: Representations and Realities" in *Women in the Stalin Era*, pp. 115–16.

lyrical voice introduced at the beginning of the poem reappears to symbolically frame Pasha's speech with a commentary on her oratory talents that in style resemble political poster art.

Rech' byla eta pesn'iu	This speech was a song
Prizyvno—plakatnoi	A slogan— like in a banner
Kolkhoznoi pobedoi	Of Kolkhoz victory
Nad agrotekhnikhoi kosnoi	Over backward agricultural machinery
Chudom	By miracle
Pashi Angelinoi	Of Pasha Angelina
Traktoristki znatnoi,	The outstanding tractor driver,
Komsomolki	Komsomol member
Ordenonosnoi!	Medal bearer!

In the third part of the poem, Angelina's brother evokes the hardships of her past and contrasts them to her present happy life. The readers are presented with a list of things that constitute Soviet happiness: the wonders of Pasha's work brigade ("chudesa ee brigady"), her widely known celebrity ("proslavilas' sestra/ob etom znaet vsia strana"), her work ethics where words and actions are inseparable ("ee slovo i delo zhivut neottorzhenno"), her continuous re-invention of the self, and finally the sense of fun and joy that emerge in friendly competition:

Sestru na chestnyi vyzval "boi":	He invited his sister to a fair contest
"Ia sorevnuiusia s toboi	"I am challenging you to a competition!
Na traktore il' na kombaine!"	Either a tractor or combine!"
Vot gde veseloe zhit'e	This is where jolly life is!

Bednyi's poem puts together a lyrical trajectory of Pasha's advancement and transformation into the heroine of labor. Nearly all the elements constituting the traktoristka narrative are invoked in the poem: the heroine's former life and family relations, her intimate bond with tractors and her brigade, her becoming a celebrity who gives speeches at Kremlin, and her political activism that only reinforces her conversion.

Together with newspapers articles on Stakhanovki, the speeches of Kremlin-awarded workers significantly shaped the traktoristka discourse. The Stakhanovki speeches functioned as mini-autobiographies offering detailed accounts of their lives and their attitude toward work. Choi Chatterjee asserts that,

> At these ceremonial events, Soviet heroines (that is, women who had apparently penetrated the bastions of male primacy) were asked to recount their life histories. Naturally, the heroines speak in an edited voice and the conjuncture between the state discourse and these public stories is quite remarkable.[25]

The actual speeches were mainly delivered at Kremlin workers' conferences and were published soon after in order to reach a wide readership. These texts functioned as primers and provided insight into the lives of women who transformed themselves through machine work. What was especially appealing for the readership at the time was that these were not made-up stories, but accounts based on the actual persons who made their way from backward peasants to heroines of the USSR. These texts were usually published as booklets intended for workers and schoolchildren. They were mostly written by the Stakhanovki but always edited by professional authors. Most of these accounts are very similar in content, following a particular narrative arc, and are written in undemanding prose that is intended to inspire and instruct quickly. If the art of the 1920s was considered unintelligible for the masses, as was the main objection addressed to

[25] Choi Chatterjee, "Soviet Heroines and the Language of Modernity, 1930–39," p. 54

avant-garde authors, the art of the 1930s was meant to be accessible to everyone, including children. Some of the first speeches of this kind are later turned into longer autobiographies. One of the earliest examples is Angelina's own speech delivered at the second All-Union Congress of Women Delegates, published at the beginning of 1935. After her Kremlin address, Pasha became the most well-known traktoristka, one of Stalin's personal favorites and one of the rare lifetime Soviet celebrities. Her life story shaped the traktoristka genre, including her own first official 1948 autobiography *Liudi kolkhoznykh polei* (*The People of the Kolkhoz Fields*).

How Was the Traktoristka Made?

In 1935, Pasha Angelina, who was only 22, spoke before the Kremlin audience, aware of the historic moment in which her voice instigated a new gendered culture. She began her address by crediting her family for becoming a tractor driver, but immediately singled herself out as the one who entered the public arena: "I was only following in my brothers' footsteps. Now they will read about me in the newspapers."[26] Pasha's story, which the Soviet audience read about in newspapers and popular literature, was a story of rebellion. In the traktoristka narrative, a woman engages in gender transgression via her voice and body, emerging to deliver an alternative narrative that contests what used to belong to hyper-masculinist cultures: technology, sex and rhetoric, and male heroism. In her speech Pasha credits her family for her success, but her autobiography reveals that she encountered obstacles very early on. When Pasha first communicates to her brothers that she wants to become traktoristka they react harshly, confronting her by reminding her of her gender limitations:

"Don't be surprised"—I said. "I will be a tractor driver."

[26] P. Angelina, V.M. Bakholdina, "Zhenshchina na traktore: Rechi delegatok na 2-om s''ezde kolkhoznikov-udarnikov 13 i 14 fevralia 1935 g.," Moscow: *Sel'khozgiz*, 1935, p. 12.

"Think about this"—interrupted Vasilii. "A tractor is a man's thing (muzhskoe delo)."

"It can be woman's too! —I exclaimed.

"Don't be ridiculous, Pasha! I am telling you, the tractor is not your business"—he replied rudely.

"You didn't convince me, my dears"—I objected. "Life will prove you wrong."[27]

This is a common beginning in the traktoristka genre. A young woman expresses her desire to become a traktoristka and immediately faces family disapproval. *Pravda* regularly published stories like this one. Traktoristka Polina Gal'chenko recounted the obstacles she faced when she, like Pasha, expressed her wish to operate a tractor: "My father categorically opposed this, saying 'this is not a woman's business.' 'No, father! Don't upset me, I have formed a strong attachment (priviazanost') to machines. I always approach them with regard (s soobrazheniem)'".[28] Traktoristka Varvara Maksimovna Balkhodina said that she was also not taken seriously when she first expressed interests in tractors: "In 1931 I applied for tractor driving lessons. They all laughed at me."[29] Pasha is told by local tractor instructor Shevchenko that "tractor driving is purely a male occupation (eto chisto muzhskoe zaniatie). There is no such thing as a woman tractor driver" (*Liudi kol. polei*, 20). Shevchenko uses word "chisto" to impose gender limits and to warn Pasha that crossing these boundaries would pollute the "natural" order of things. Tracy Nichols Bush asserts that,

> it is likely that many men felt that a fresh infusion of talented women into a traditionally male sector challenged their masculinity. At the 1932 All-Union Avtodor Meeting, a Leningrad delegate announced that according to "scientific data," every woman who

[27] Praskov'ia Nikitichna Angelina, *Liudi kolkhoznykh polei*, Moscow-Leningrad: Gosudarstvennoe izdatel'stvo ministerstva prosveshcheniia RSFSR, 1952, p.19. (The first edition is published in 1948 in Moscow by *Sel'khozgiz*)
[28] "Slava nashego raiona," Pravda, no. 258, 1937, p. 3.
[29] P. Angelina, V. M. Bakholdina, *Zhenshchina na traktore*, p. 20.

spends six months in a vehicle has a nervous breakdown and becomes insane. *Za rulem* [magazine] powerfully refuted this contention by suggesting that an anti-woman stance was also anti-Soviet: "All references to the weakness of women hide, doubtlessly, the masked agitation of the class enemy, which must be liquidated to its root.[30]

After an open family conflict, the traktoristka undergoes a psychological crisis. Her emotional distress reveals her special attachment to tractors. Pasha becomes isolated from her family: "My mother invited me several times to the table, but I refused. I was in a strange, depressed (podavlennoe) mood. For a long time, I went restlessly from one corner of the room to the other not knowing what to do. Thoughts about tractors wouldn't leave me. Days went by and I was still not studying (izuchaiu) tractors" (*Liudi kol. polei*, 20). After some time, Pasha's depression induces bodily symptoms and she gets sick:

> Several days after that conversation with my father, I fell ill. I had a fever and took to bed. My mother was with me all the time, she sat next to my bed with a concerned look. "Pashenka, my daughter" she begged me, wiping away her tears "don't take this too close to your heart. Take care of your health."
>
> "Don't try to calm me down, mama! I am not a child….I never thought about tractors like I do now" (*Liudi kol. polei*, 22).

Pasha uses romantic language to describe her infatuation with the tractor. She can't stop thinking about it, which causes melancholy followed by physical symptoms (podavlennoe nastroenie, blizko k serdtsu, zdorov'e, temperatura). She develops a lovesickness because of her unconsummated love for tractors. Valeria Sobol asserts that,

[30] Tracy Nichols Busch, "Women and Children First? Avtodor's Campaigns and the Limits of Soviet Automobility from 1927 to 1935," *The Russian Review*, vol. 70, no. 3 (July 2011), p. 408.

> …in the Soviet period, predictably, we do not find memorable instances of the use of the lovesickness topos.…Soviet mainstream literature, with its emphasis on social and ideological concerns and its focus on lower classes, did not have much room for the exploration of the romantically induced physical sufferings of fragile ladies and sensitive young men. The exclusively materialist interpretation of the human being canonized by Soviet ideology, moreover, made the issues of the body-soul interaction all but irrelevant.[31]

Sobol is certainly right to say that lovesickness in its traditional form is not typical for socialist realist prose, however, certain reflexes of classical Russian literature do reemerge but in unexpected forms, such as techno-lovesickness. In the eponymous biography, traktoristka Klavdia Vasina goes so far as to exclaim "if you don't let me drive a tractor, I will hang myself (ia poveshus')."[32] For these women, the tractor was a chance to change the course of their traditional, predictable lives that didn't leave them room for growth. Forming a symbiotic alliance with their machines gave them an opportunity to live differently and to assert themselves in society. In their accounts, Stakhanovki typically divide their lives in two periods, before and after meeting their machine. Before the woman worker comes into close contact with technology her life is described in negative strokes: "I grew up as a dark and forgotten creature whose life, it seemed to me, would never see the light (ne budet prosveta)."[33] Most of them were tied to the home "in the past I was a housemaid (prisluga)" (Podolina, 5). Machine life promised them mobility, education, social life, and a chance for self-transformation.[34] This is why they develop

[31] Valeria Sobol, *Febris Erotica: Lovesickness in the Russian Literary Imagination*, Seattle: University of Washington Press, 2009, p. 198.
[32] *Klavdia Vasina*, written by N. Vigilianskii, OGIZ (Omskoe oblastnoe gosudarstvennoe izatel'stvo), Omsk, 1942, p. 6.
[33] N. Podolina, *Ia grazhdanka strany sovietov*, Moscow: Partizdat, 1937, p. 5.
[34] Melanie Ilic asserts that "anyone employed as a tractor driver was more likely to be officially classified (in the census, for example) as a 'worker' rather than as a 'peasant.' As an example of skilled work in agriculture, tractor

such a deep bond with tractors and become depressed, physically sick, and even think of suicide when they are not allowed near machines, as the narrative would have us think. Once the future traktoristkas reach this stage, their families allow them to take tractor courses. This is the moment in the traktoristka narrative when they begin their second life: "I began to see clearly (tochno prozrela). A new world opened up, I looked (gliadet') at machines with new eyes (drugimi glazami), I grew politically," Podolina asserts (6). This new life brings them light, literally "new eyes" through which they engage with the world. Future traktoristkas begin to thrive, inspired with enthusiasm and emotions: "my second life started, filled with joy and bright hopes" (Podolina, 5).

Figure 33: The Past and Present (*Pravda*, no. 66, 1933, p.2).

Their actual encounter with tractors triggers a psychosomatic response. Klavdia Vasina's first rendezvous with her machine is accompanied by strong physiological reactions, "with a

driving offered an opportunity for vocational, geographic and social mobility. Peasants who had experience as tractor drivers had an increased likelihood of finding work in the rapidly expanding urban industrial centers." Melanie Ilic, "Traktoristka: Representations and Realities" p. 123.

beating heart (s b'iushchimsia serdtsem) she came near the tractor" and felt "a powerful, passionate affection (sil'niaia goriachaia priviazannost')," (Klavdia, 14). Traktoristkas' emotional and bodily responses are very sexual in nature. Already in her first production novel *Gidrotsentral'*, Marietta Shaginian advocates the idea of erotic work and a relationship with technology that enables body-mind transformation. Female tractor-drivers intensely experience this woman-machine union. Klavdia Vasina asserts that what she needs is "a passionate (strastnoe), self-forgetful work drive in which you can squeeze out (vyzhat') all that you can from the tractor," (Klavdia, 15). Vasilii Pomitiaev's 1932 poem "Traktoristka,"[35] similarly portrays an erotic encounter between a traktoristka and tractor:

Eti nochi	Those nights
S traktorom ne redki	With the tractor are not rare
Ei oni drugikh nochei milei	They are dearer to her than all other nights (p. 2)

The lyrical subject in the poem engages in a conversation with a traktoristka who tells him about her passion for her machine. From the outset he promises to truthfully relate her experience, "I'm not going to embellish it!" (Ia ne prikrashu!):

"Znaesh' ty"	"Do you know"
Ona mne govorila	She said to me
…	…
"Kak ia sil'no traktor poliubila?	How strongly I came to love my tractor?" (p. 3)
…	…
"Kazhetsia,	"It seems to me
Vot tak by ia sidela	That I would sit

[35] Vasilii Pomitiaev, "Traktoristka," *Stikhotvorenia*, 1932, RGALI, 613 op, 1 ed. khr. 2259

Za rulem	At the wheel
Vse vremia	All the time
Den' i noch'	Day and night
Esli-by	If only
Ustalosti	My body weren't feeling
Ne chuvstvovalo telo	Tired (p.3)

The traktoristka minutely describes her bodily changes when operating the tractor. This interaction leads to intense body stimulation that feeds off tractor powers. This erotic exchange, in which the traktoristka's body is altered, is described as a transcendental experience:

Ot rulia	From the wheel
Do serdtsa	To the heart
Cherez ruki	Through my arms
Zud takoi priiatnyi	Such a pleasant tingling (p. 3)
...	
A v grudi	My heart is
Tak radostno stuchit!	Pounding so joyously
....	
Grud' vskipaet	My bosom boils with
Traktorovoi siloi…	Tractor potency…
Vse krugom	Everything around is
Torzhestvenno	Sublime
Krasivo	Beautiful
Oi, kak khorosho!	Oh, how good it is! (p. 5)

In tractor poetry and Stakhanovite narratives, autobiographies of women's encounter with the machine is often depicted as an erotic exchange that yields full bodily transformation. In Eisenstein's *Old and The New* (1929), the machine (milk separator) becomes the source of erotic pleasure for the heroine Marfa Lapkina. Marfa's growing excitement before the machine is portrayed as a sexual climax. In Eisenstein's film, the arrival of the machine symbolically separates the old and new worlds. Marfa Lapkina transforms into a modern Soviet woman via technology. The encounter with machines inspires these unconventional portrayals of technologized sexuality that is ideologically tempered. The omnipotent machine hyper-stimulates perception, body, and mind. When traktoristka Klavdia first operates her tractor, she wants to remake (peredelat', 17) and overcome herself (prevzoiti sebia), (Klavdia, 18).

Figure 34: (in Praskov'ia Nikitichna Angelina, *Liudi kolkhoznykh polei*, p. 32).

In order to become a qualified traktoristka, it was not enough to learn how to operate the machine. Along with taking tractor courses, female tractor-drivers began to read literature, watch

films, and go to the theater. The most frequently repeated among their literary favorites are Maxim Gorky's *Mother* (1906), Nikolai Ostrovskii's *How the Steel Was Tempered* (1932–1934 [serial]; 1936 [book]), Aleksei Tolstoi's novels, and technical literature on tractors and various other vehicles. In the traktoristka narrative these are required works that enable them to internalize Soviet ideology, grow politically and learn the joy of socialist labor: "All this seriously helps me in my work" (vse eto mne ser'ezno pomagaet v rabote"), claims Podolina (Ia grazhdanka, 10). At the same time, in this period the Soviets became obsessed with the idea of being a cultured person. Female tractor-drivers are the quickest to respond to this cultural demand: "one must be cultured" (nuzhno byt' kul'turnoi), (Klavdia Vasina, 4). As before, Pasha outdid all others. In her autobiography she remembers reading Pushkin, Turgenev, Chekhov, and Tolstoy. Sheila Fitzpatrick writes that Pasha became known as a "cultured traktoristka" who excelled in standardized popular knowledge testing:

> The popular weekly magazine *Ogonek* ran a regular feature in 1936 called "Are you a cultured person?" that allowed readers to test their general knowledge. Among the things a cultured person should know were the names of five plays by Shakespeare, five makes of Soviet automobiles, four rivers in Africa, three types of warplanes, seven Stakhanovites, two representatives of Utopian social thought, two poems by Heinrich Heine, and two Soviet icebreakers. Pasha Angelina…did quite well on the *Ogonek* quizzes.[36]

While traktoristkas were working on the life of the mind to become "cultured," they were also training to be specialized cadres. In tractor-prose, heroines soon realize that operating a tractor is not enough and they want learn everything about the machine. "How she now wished to study and understand the machine more deeply," the narrator comments on Klavdia Vasina (Klavdia,

[36] Sheila Fitzpatrick, *Everyday Stalinism*, p. 88.

9). Traktoristkas bond with their vehicles and do not drive other tractors. They pay special attention to the hygiene of their tractors by maintaining strict sanitary conditions both around and with machines. Traktoristkas can only operate tractors when wearing clean driving uniforms. Pasha comments on this habit: "we taught young traktoristkas to look after their tractors with great care, we didn't allow them to approach their tractors looking dirty. If you are dirty, your tractor is dirty" (*Liudi kol. polei*, 50–51). Stalin's cadres were praised as new people devoid of moral dirt, which also translated into a literal sanitary obsession. To know the tractor means to know and study its personality: "a machine is the same as a person, you can never know it at first glance," (*Klavdia* 14). Traktoristkas equally contemplate parts and the whole of their vehicles; they can tell by listening to the machine if they need to fix malfunctioning parts. Stalin's invitation to produce cadres who are caring and have mastered technology for the tractor industry meant that traktoristki also needed to be expert mechanics. When Bakholdina comments on improving her (cadre) skills she means that she needs to master the tractor principles, including its mechanisms, maintenance, care, and repair: "I need to study more, and most importantly, I need to master technology."[37]

Z. M. Baruskova's 1939 booklet *Work Experience of a Seamstress Operator* (*Opyt raboty mashinistki-shornitsy*), is an insightful source that shows what the Soviets meant under the slogan of mastering technology. Baruskova's text provides detailed step-by-step explanations on how she mastered the conveyor machine. Her text functions as a mini-primer on how to become a Stakhanovka (there is a subheading "stakhanovskaia ratsionalizatsiia" [34]). Baruskova first elaborates on what it means to know the machine and then moves onto the worker's relationship with it. She works with a sewing machine, but she knows her advice can be applied to any machine-work, as she lays out the principles that a cadre worker must become proficient at. The

[37] Baklholdina, "Moi traktor shel vperedi vsekh," 20.

main objective of any worker, according to Baruskova, is to increase production, break the norm, and become a model worker. In order to do so, a woman worker needs to take care of her machine ("zabotit'sia ne tol'ko o svoei rabote, no i o rabote svoego konveiera"), be disciplined ("sobliudat' distsiplinu"), and synchronize her body movements with her machine ("ritm svoei raboty sochetat' s ritmom konveiera").[38] Baruskova praises her competence in maximizing her hearing: "if necessary, I can work without looking, I make stitches with my hands and just listen to the machine sound" (6). This type of description is characteristic for 1920s prose, but always in connection with male characters. Characters like Bynza in Gladkov's *Cement* and Kuz'ma in Pil'niak's *Machines and Wolves* were machine experts who could detect the slightest machine flaw just by listening to its sounds. In the 1930s, women too could do this. Baruskova asserts: "I know my machine so well….When you know your machine well you can determine its condition by the sound (po zvuku opredelit')" (6, 7). Like traktoristki, Baruskova gives instructions on how to clean and oil the machine to prevent malfunctioning.

The most interesting part of Baruskova's account is when she talks about the worker's body and senses. She claims to have developed work methods that amplify her senses. She uses all her senses equally and actively works on their development: "I combine different operations in the process of distributing work between different senses. During active work I include touch (when feeling the strap), sight (when looking at it), and motor functions (transfer of the strap)" (18). Her goal is to teach her senses to work independently and to control the machine by minimizing hand-eye coordination "by touch without looking" (35). Baruskova acquires enhanced sensory experience and betters her bodily abilities by adopting machine movements as her own. By imitating the pace of her machine, she widens her physical potential and actions.

[38] Z. M. Baruskova, *Opyt raboty mashinistki-shornitsy*, Moscow-Leningrad: Gosudarstvennoe izdate'stvo legkoi promyshlennosti, 1939, p. 4.

Barskova also learns how to control and rationalize hand and feet motion to eliminate superfluous actions and speed up her work: “I can perfectly eliminate abrupt movements that waste time. I execute quickly and accurately” (19); “I optimized my movements (ia ratsionalizovala priemy)” (35). She talks about using a specific group of muscles to avoid wasting time (36–37). Baruskova’s body begins to look and act like a machine. She accelerates her body not by exhausting it, but by disciplining it to accurately repeat scientifically-calculated movements. Breaking the production norm to produce the veritable miracles of Stalin’s techno-culture is attainable if one abides by exact taylorized instructions. Superfluous body motion, according to Baruskova, leads to overwork and exhaustion, which decreases production: “In one time and motion study it was established that during half an hour of work seamstress Ts. produced 225 unproductive foot movements....As a result, with her right foot she made a useless path (bezpoleznyi put’) of 2 meters and 10 cm, and her left 0.8 m” (21). In order to make the most of her body she takes breaks at the exact same time: “I am trying to take breaks regularly. With a sound of the bell I begin my work, with a sound for a break I leave work” (15). Baruskova pushes the body boundaries, intensifies her senses by making them work independently via her machine.

Already in the 1930s, Soviet culture engaged in advancing the sensory experience of the techno-body. Baruskova’s account illustrates how in the new fused body, the machine becomes a new organ that enables a heightened sensory experience. Correspondingly, the tractor becomes a new body part that enhances sensory abilities. When traktoristka Podolina talks about acquiring a new set of eyes, along with metaphorical meanings, she is also referring to biological changes in the direction of augmenting her existing visual abilities: “I began to see clearly (tochno prozrela). A new world opened up, I looked (gliadet’) at machines with new eyes (drugimi glazami)” (6).

Only after a traktoristka forms an alliance with her machine and internalizes this shift is she ready to perform miracles. From this moment on, the traktoristka pushes boundaries. Pasha Angelina forms her first all-female tractor brigade. Once she is ready to work the land and beat the norm, Pasha gets a male helper, Ivan Mikhailovich Kurov, who inspires her to organize her first tractor team. Kurov also educates Pasha politically and helps her understand the need for an organized political system that unifies the work collective. Obviously, the helpers in the traktoristka narrative symbolize the power chain that leads the traktoristka to the creator of Soviet progress in the Kremlin. Kurov comes up with a plan: "We need to form a big traktoristka collective. You will all outperform (rabotat' udarno), and let them then dare to say that women have no place behind the wheel of a tractor!" (*Liudi kol. polei*, 30). To Kurov's suggestion Pasha replies: "This is our old dream! … My friends Vera Anastasova, Natasha Radchenko, Liuba Fedorova want to master tractor work" (30). It is telling that Kurov needs to verbalize the brigade plan first regardless of the fact that Pasha has already conceived the idea. In the traktoristka narrative, at this early stage, women get male guidance that ensures their politically correct advancement. Kurov asserts: "you, Pasha, gather your girlfriends and say Kurov approves (odobriaet) this action." He even appoints her the leader of the brigade: "And if we recommend you for a leader of the all-female tractor brigade, you will not object to it? Man up (muzhaisia), Pasha! A great life is ahead of you" (30). Kurov is predicting Pasha will be a great success under the condition that she symbolically act like a man. In 1933 Pasha becomes the brigadier of the first female tractor brigade. Before her team sets out on their first task, the village women and men protest and mock them. Kurov supports the girls and they start driving. Everyone stands still for hours observing them breaking their record. They are awarded the Red banner and Pasha is interviewed by a *Pravda* journalist. After this first success, the brigade is

invited to teach male brigades: "We instructed male tractor brigades and taught them how to operate their machines. We showed them how women have mastered such a complex machine! We told them: 'comrade tractor drivers, you didn't believe that women can do this, that we can fulfill the plan. Now learn from us and watch how we advance.'"[39] It is precisely this moment that Dem'ian Bednyi evokes in his poem, "Flowers and roots", when he gives Pasha a voice to tell her story of the female collective that becomes a model brigade. In Klavdia Vasina's account, Klavdia's brother becomes the helper and assigns her to read tractor books. At first, she does not understand technical literature, but her brother tells her: "you need to understand that this is important. One needs to be cultured (nuzhno byt' kul'turnoi)" (4).

From the very onset, Stalinist culture tied its development to female advancement. The image of a woman at the wheel was regularly featured in the press as the utmost sign of Soviet progress: "A woman in our area, as well as throughout the country, has become a big force (stala bol'shoi siloi). She sat behind the tractor, behind the car wheel, and at the combine wheel."[40] Ol'ga Iakovlevna-Mutina advances from a traktoristka to party deputy of the Irkutsk region: "I, a simple traktoristka-girl advanced to run the state. Have you ever seen this before? Can you see this happening anywhere else? No, nowhere else except in our great Soviet country."[41]

Once the traktoristkas started beating the norm they got the chance to advance further. Every local and reginal newspaper reported on their achievements and interviewed them. They became instant celebrities that everyone looked up to, as the narrative would want us to think. Traktoristkas embodied all the attributes of Soviet progress: machine expertise, record production, and emotion. This was the moment in which they became a political icon and a driving force in culture. Traktoristkas' further development was conditioned by party guidance.

[39] P. Angelina, V. M. Bakholdina, *Zhenshchina na traktore*, p. 14
[40] "Kem stala taezhnaia zhenshchina," *Pravd*a, no. 289, 1936, p. 3.
[41] "Ol'ga Iakovlevna-Mutina svoim izbirateliam," *Pravda*, no. 329, 1937, p. 1.

Male helpers, usually their brothers or tractor instructors, were now replaced with the larger political family. The significant part of the traktoristka myth was that she grew by becoming politically conscious. The newspapers regularly reported like this: "the Lenin-Stalin party inspire[d] her creative enthusiasm and, in both word and deed, help[ed] her learn and grow further."[42] The party privileged traktoristkas by awarding them the highest state honors, promoting them to deputies, engineers, correspondent-members of the All-Union Academy of Agricultural Sciences of the Soviet Union, and members of The Supreme Soviet of the Soviet Union, with the power to approve constitutional amendments (Pasha Angelina in 1937, 1946, and 1950).[43] In their speeches, interviews, and biographical accounts, traktoristkas never failed to mention that they were brought up by the party and that they owed everything to it. Podolina asserts: "I walked the thorny path from a housemaid to a deputy and a presidium member of Stalin's Moscow council (Podolina, *Ia grazhdanka*, 4-5). Podolina, and many like her, always stressed that it is the party that molded them into a cultured and caring heroine of labor:

> When I first came to the factory, I was blind and didn't understand the need for so many machines…I was concerned only with mine. Having finished my shift, I rushed home, not caring about newspapers, books, or theater shows. Several years passed. Educated by the Party (vospitannaia partiei), I became a qualified worker who knows many machine secrets…I care about the entire factory…I care about the entire country (22–23).

In her *Pravda* interview, Ol'ga Iakovlevna Mutina repeated the same thank you Party formula: "I am educated by the Bolshevik Party and I myself am now working on recruiting Stakhanovite-traktoristkas."

[42] "Narodnyi prazdnik," *Pravda*, no. 67, 1936, p. 1.
[43] Pasha Angelina was twice a Hero of Socialist Labor (1947, 1958), a recipient of the Stalin Prize (1946), three orders of Lenin, and the Order of the Red Banner of Labor.

Once female tractor drivers acquired political consciousness, they are ready to see Stalin. Their visit to the Kremlin symbolized the biggest award for their achievements. Victoria Bonnell asserts that "beginning in 1933, some political posters emphasized the linkage between the kolkhoznitsa and Stalin (77), and that "superhuman exertion alone no longer sufficed to assure heroic deeds; Stalin's presence provided the inspiration and the talisman for great accomplishments.[44] After breaking her first record, Pasha Angelina got an invitation to meet Stalin. It is her male helper Kurov who conveys the message to her, "Pasha, get ready to travel. Moscow calls you" (*Liudi kol. polei*, 42). After initial disbelief, Pasha begins to imagine her conversation with Stalin: "Can it be true that I am going to Moscow, to the Kremlin, that I will see Stalin?" (42). She gets anxious on the train to Moscow: "I couldn't sleep, I kept thinking about Moscow. Will I get to see comrade Stalin? Will I meet him? If yes, what do I say? What would be the best thing to say?" (43). In 1935, Stakhanovka Khristina Baidich gave an interview to *Pravda* in which she talked about her own nervousness before meeting Stalin: "Her head was spinning from overwhelming impressions and joy….During the first hour on the train there was an absolute silence….Everyone was immersed in deep thoughts, and as it later turned out, everyone was thinking the same thing, the most important thing, their conversation with Stalin."[45] In the traktoristka narrative, meeting Stalin is described as a cathartic experience through which the traktoristka achieves full social integration and strengthens her political values.

Dem'ian Bednyi's poem "A Greetings to the Growing Force" ("Privet rastushchei sile," 1935) encapsulates the central moment in a traktoristka's life, her meeting with Stalin during the

[44] Victoria E. Bonnell, "The Peasant Woman in Stalinist Political Art of the 1930s" *American Historical Review*, vol. 98, no. 1 (February 1993), p. 78.
[45] "Otchet Khristiny Baidich," *Pravda*, no. 321, 1935, p. 3.

second Congress of the Kolkhoz and Stakhanovites in 1935. Bednyi portrays the scene preceding traktoristka Dunia Petrova's speech before the Congress participants:

Vot ona,	Here she is
Vozbuzhdena, uvlechena	Excited, captivated
Dokladom, iarkimi rechami,	By the lead address and powerful speeches.
Chuvstv neispytannikh polna,	Full of the untested feelings
Zavorozhennymi ochami	Enchanted,
Ne otryvaia ikh, gliadit	She can't take her eyes off
Tuda, gde Stalin sam sidit.	The place where Stalin himself sits.[46]

Pasha Angelina is similarly enchanted by the sight of Stalin: "Iosif Vissarionovich took the podium. We applauded him. I looked at Stalin, I couldn't tear my gaze away from him, my eyes were brimming with tears of excitement..." (*Liudi kol. Polei*, 43). Dunia Petrova, too, is captivated by the sight of Stalin the same way she is enthralled by her tractor. Her mechanical wonder has taken her all the way to the Kremlin.

I vot—ona uzh na tribune,	And now—she's already on the podium
I ei-da, ei! Petrovoi Dune!	And to her, yes, to her! To Dunia Petrova!
Vse rukopleshchut. Stalin tozh.	Everyone claps. Stalin too.
On rukopleshchet vsekh sil'nee.	He claps harder than everyone else
On—stalo ei teper' vidnee,	He—she now sees clearly,
Kak na portrety ne pokhozh,	Is unlike his portraits,
Vblizi on proshche i rodnee.	From close up he is simpler and more dear.

[46] Dem'ian Bednyi, "Privet rastushchei sile," *Pravda*, no. 66, 1935 p. 2.

With his excited body language, Stalin is shown as someone who understands the traktoristka's achievements better than others. The lyrical subject creates a special bond between Dunia and Stalin, to which she responds emotionally, seeing him as one of her own ("on rodnee"). In Vasilii Pomiatev's poem "Traktoristka," the traktoristka elicits the same response about her tractor: "how strongly I came to love my tractor/ Nothing is dearer to me (nichego rodnei ne nakhozhu)". Again, in the "Traktoristka," the lyrical subject chooses "rodnia" that implies kinship but also harmonious affiliation, something agreeably suited to her nature, a kindred spirit. Along with emotions, another typical emphasis in a traktoristka's meeting with Stalin is on his deep insight into their lives:

Konechno, Stalin *znaet* eto!	Of course, Stalin *knows* this!
On *znaet, znaet*, kto ona!	He *knows, knows* exactly who she is!
No takzhe *znaet* on zaochno	He *knows* her even though he never saw her
S nim vmeste *znaet* vsia strana!	And with him the entire country *knows*!
I uvazhaet imena	And he respects the names
I podvigi takikh zhe tochno	And the feats of those like her
Kolkhoznits slavnykh, kak ona.	Famous Kolkhoz women. (emphasis mine)

The verb "to know" appears five times stressing Stalin's awareness of the traktoristkas' existence. He even knows about them without getting to know them personally (zaochno). In addition, zaochno literally means beyond eyes, beyond the empiric, as if to suggest Stalin's omniscience. Stakhanovka Khristina Baidich[47] repeats the Stalin-knows-us-all trope:

[47] Khristina Baidich was a Stakhanovka from the 1935 "Five-hundreders" movement (piatisotnitsy), famous for record-breaking sugar-beet harvests.

> And what a man he is, what a great heart he has if he knows about our individual lives and cares about a woman's life….When Stalin spoke of how women used to live before, my entire life flashed before my eyes and I wanted to cry. Now the word joy (radost') reverberates in our speeches frequently. Comrade Stalin knows our life like his very own (kak svoiu sobstevnnuiu). What he said of women is the sacred truth (sviataia pravda). (Otchet Khristiny, 3)

Choi Chatterjee claims that,

> The extensive 'thank you Stalin' literature that emerged in the 1930s exemplified this symbiotic relationship between Stalin and Soviet heroines….The extensive concern for women's welfare that Stalin was credited with was in consonance with the public imaging of the dictator as the paternal champion of women's rights, and the sole guarantor of their upward mobility.[48]

In his poem, Bednyi does not focus on Dunia's speech. Typically, the traktoristkas are confused before their first public speech and it is the "all-knowing and caring" Stalin who encourages them to speak. Pasha's account depicts the moment when she losses her voice followed by Stalin's immediate reassurance "be bolder, bolder, Pasha" (smelei, smelei Pasha) (*Liudi kol. polei,* 44), after which she begins to talk about her brigade's achievements. Stalin's words are treated as sacred and are remembered for life: "Stalin's words became guiding words in my work. When I was going through hardships, when I needed to start something new and risky that would result in victory, I remembered these words "be bolder, bolder, Pasha" (*Liudi kol. polei*, 46).

Inspired by the celebratory atmosphere, traktoristkas end their speeches by promising Stalin to break more records in the following year. In the course of her life, Pasha Angelina saw

[48] Choi Chatterjee, "Soviet Heroines and the Language of Modernity, 1930–39," p. 63.

Stalin several times. During each visit she would promise to tackle a new challenge and break a new record. During these meetings with Stakhanovki, Stalin outlined a political direction that women workers needed to follow. When the word cadres (kadry) became prominent, Stalin publicly reminded Pasha that she needed to work on producing more qualified traktoristkas, "cadres, comrade Angelina, cadres" (kadry, tovarishch Angelina, kadry) (*Liudi kol. polei*, 49). After this Pasha formed ten female brigades and an institute for training traktoristkas in Ukraine. In 1939, Pasha comes up with her slogan, "one hundred thousand female friends—onto the tractor!" (sto tysiach podrug—na traktor! (*Liudi kol. polei*, 59).

The Kremlin visit, the final stage in the Stakhanovka narrative, is transformational and every Stakhanovka feels she is a completely different person: "I will return home to my work, to my Vichuga, completely changed (sovsem drugoi). It is as if something new has appeared in my heart (chto-to novoe v serdtse poiavilos')."[49] These interviews, autobiographies, and poetic works were obviously heavily edited to reflect the Party's ideological needs and concerns. The Stalin cult was an obligatory part of the genre. In the years when Stalin's purges (1936–1938) swept through the USSR and more than twenty million people were executed, newspapers and literature sang praises to the Leader and of their happy life. Murder and terror coexisted with the country's modernization drive. While the first was not discussed publicly, the latter was in focus in all available media. The new culture, with the traktoristka as its main symbol of progress, became an important subject of cinema.

Feminine Culture: Traktoristka/Stakhanovka on Film

In 1931, the journal *Sovetskoe iskusstvo* invited filmmakers to produce movies about new women:

[49] Maria Vinogradova, "Meniaetsia zhizn'," *Pravda*, no. 317, 1935, p. 6

> What did cinema do to show the new communist view on women on screen? Nothing or very little....Neither dramaturgy, nor literature nor film produced anything to show women's heroic struggle in socialism….Women of the reconstructive period, women builders of socialism are waiting and demanding their embodiment on screen (svoego ekranogo voploshcheniia). It is the filmmakers' duty to finally bring forward this significant subject matter.[50]

Al. S-Nev's comment that Soviet film did not have movies that featured women in their ideological development wasn't entirely accurate. In 1929, Sergei Eisenstein released his *Old and New*[51] that featured traktoristka Marfa Lapkina. *Old and New* was Eisenstein's first film on a contemporary political theme: it tells the story of Soviet collectivization and transition from manual work to machine labor. Eisenstein considered this film more significant than *October*, which he shot in parallel with *Old and New*: "*October* was an overtime job: our main job was and is *The General Line*, a film that we consider to be the next stage in our film work."[52] For Eisenstein, the next stage meant experiments in montage theory, montage of attractions, overtonal montage, and change from mass scenes and mass-hero to individual characters. But what additionally makes this film transitional is its topic that anticipates the development of Soviet cinema in the 1930s: at the center is a woman who initiates and caries out technological progress. After Eisenstein was accused of formalism, this film was pulled from theaters in 1930. But the theme of women symbolizing progress that he introduced in this film would mark the entire following decade.

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[50] Al. S-Nev., "Pudra, vintovka, fordzon (put' zhenshchiny na ekrane)," *Sovetskoe iskusstvo*, no. 2, 1931, p. 2.
[51] The original title was *The General Line* (*General'naia liniia*), which was renamed after Stalin's personal intervention.
[52] S. M. Eisenstein, *Selected Works: Vol 1.Writtings 1992-34*, ed. and trans. Richard Taylor, Bloomington: Indiana University Press, 1988, p. 93.

In *Old and New*, Eisenstein introduces the idea of the transformation of the female body via technology. Both the old and the new worlds in the film entertain the idea of change brought about by women who perform miracles. In the old world, which operates on a primitive form of magical thinking, the idea of a miracle is treated in a traditional way. The film begins with images of bodily stasis. Neither dead nor alive, the bodies shown in fragmentary shots and extreme close-ups create the impression that they are a pile of flesh.[53] The only exception is an old woman who performs a magic ritual by pouring water in the fireplace and poking the fire with a stick. The smoke travels not through the chimney but disperses within the interior of the house. Surrounded by smoke, the old woman evokes the image of the ancient Greek priestess Pythia at the Delphic Oracle, who communicates with the otherworld by inhaling fumes and vapors. After the ritual, she pokes her family members with her stick and makes them move. She incites this temporary change from inertia to movement by engaging in magic practices. She seems to be against the disintegration of the household, but her miracles are only temporary. To this old world, Eisenstein juxtaposes the image of the protagonist Marfa Lapkina, who decides to bring change by asking the kulaks to lend her a horse so that she can work the land.[54] After they decline, she pushes her body to exhaustion by using it in place of a horse to plow the land.

Female imagery is very prominent in the film and is consistently associated with movement, earth, fertility, and energy (even in the inert old-world women still give birth to children). Eisenstein assigns the power of transformation to women in both worlds, but it is the new world in which change and miracles are actually possible. Eisenstein rethinks the notion of a miracle through the prism of scientific thinking. Permanent, "veritable" miracle is achieved

[53] The body in the old world is emaciated, dirty, worn out, and disabled (in a church procession scene, a believer can't walk and is sliding on the ground).
[54] The kulaks were affluent peasants who could own a farm and hire labor. Also, they were the main targets of the collectivization campaign.

through science and industry and not via magical thinking and rituals. Vance Kepley Jr. states that once Eisenstein decided to shoot the film, "scientific fever possessed him."[55] In the new world, it is Marfa who begins the process of change and invites everyone to organize a dairy cooperative. Marfa gets a male helper, an agronomist resembling Lenin who represents the Party and who leads her through on her path toward progress. The village acquires its first machine, the milk separator that converts milk into butter. The famous scene introducing the milk separator is loaded with sexual symbolism. Marfa's first encounter with the machine is orgiastic. Her growing arousal and the peasants' excitement at the technological wonder is brought to the point of erotic climax. The milk separator has two phallic-shaped faucets that, after being stroked manually by Marfa, literally ejaculate condensed milk and splash it onto Marfa's face.

Figure 35: Marfa and the milk separator (frame capture, *Old and New*).

The masterfully-shown eroticism with the machine symbolizes Marfa's first cyborg experience. The machine stimulates her perception, body, and mind, enabling her change. Eisenstein quotes with delight the Parisian journal *Le Mois* in which a film critic analyzes the milk separator scene:

> And suddenly the thickened milk turns into cream! The eyes sparkle, teeth glisten through a wide grin. Peasant Marfa stretches her arms to take in a stream rushing

[55] Vance Kepley Jr. "The Evolution of Eisenstein's "Old and New,"' *Cinema Journal*, Vol. 14, No. 1, 1974, p. 38

> vertically to her; her face is splashed with cream, and she laughs, laughs! This is a sensual, almost animal joy: it seems that she is ready to throw off her clothes and, in a frenzy of passion, roll naked in these streams of well-being (blagososto ianie) gushing upon her, spilling cream around her."[56]

In order to change, one must leave the old self via ex-stasis. During the three-year shooting of *Old and New*, Eisenstein was fascinated with the idea of ex-stasis: "the exit from the self (vykhod iz sebia) from one state (sostoianie) into another, was at the heart of the theme of the peasants who became collective farmers."[57] I read the ex-stasis as cyborgian since it blurs the boundaries between human and machine. Ex-stasis is also liberating for it brings cathartic joy in transformation. Marfa—both literally and figuratively—establishes a comradery with the machine (mashinoe tovarishchestvo) in the new world.

The event of the tractor's arrival is the continuation of Marfa's transformative experience. The theme of female progress is fully shown in the tractor sequences. When the male tractor operator brings the machine to the village, the tractor suddenly stops working. The tractor driver tries to repair the machine without success. As he sits exhausted near the malfunctioning tractor, a little boy passes by and literally spits on him. In *October* (1928), a little boy who initially participates in the storming of the Winter Palace and then falls asleep on the Emperor's throne is interpreted as a concealed self-portrait of Eisenstein with his commentary on Imperial Russia. Sperber writes "the young boy is possibly a kind of subtle self-portrait of the director" who comments on the pre-Soviet era: "The boy jumps onto the throne. From a very low angle, we see the boy's feet swinging in the air. This blasphemous treatment of the sacred throne of the Romanoffs underlines the meaning of the revolution: everything is changed, everyone is

[56] Sergei Eisenstein, "Pafos separatora i chasha graalia: Razbiraia kompozitsiiu," at http://kzref.org/sergej-ejzenshtejn-neravnodushnaya-priroda-ii-pafos-separator.html (last accessed May 12, 2019)
[57] Ibid.

liberated. There is nothing mystical or sacred about the throne. Why shouldn't a young boy enjoy it?"[58] In the similar vein, the boy spitting on the male tractor operator may be Eisenstein's comic commentary on patriarchal society: why shouldn't a young boy spit on him and why shouldn't a woman be a harbinger of progress? After this, Marfa enters the scene and unbuttons her coat. She begins her cyborgian merger by symbolically undoing her old self. Then the driver, who functions as a helper, tears Marfa's skirt piece by piece and places the detached garment in the machine. This ménage à trois (the man-woman-tractor) makes the machine operate again. Like in the milk separator scene, Eisenstein utilizes sexual desire, a sort of a sex-stasis, to establish the human-machine alliance. Joan Neuberger states that "for Eisenstein, desire is always about merging and thus eradicating difference, if only temporarily. Desire seeks to replicate the bliss of that transcendent moment of synthesis-exstasis -in sex, in power, in violence and in art."[59] The ex-stasis is ultimately achieved in the film's finale where Marfa, now a full-fledged traktoristka, is shown transformed riding into the future. Marfa the traktoristka becomes the genuine miracle of the new world.

Figure 36: Marfa Lapkina as traktoristka (frame capture).

[58] Murray Sperber, "Eisenstein's October," *Jump Cut*, no. 14, 1977, pp. 15-22 at https://www.ejumpcut.org/archive/onlinessays/JC14folder/October.html (last accessed May 12, 2019)
[59] Joan Neuberger, "Strange Circus: Eisenstein's Sex Drawings," *Studies in Russian and Soviet Cinema*, vol.6, no.1, 2012, p.13.

In 1932, three years after Eisenstein introduced the image of the female tractor driver to cinema, Efim Dzigan and Boris Shreiber released their silent film, *Woman* (*Zhenshchina*),[60] which tells the story of Mashka, who dreams of becoming a tractor operator. Like Eisenstein's *Old and New*, *Woman* also places emphasis on collectivization efforts and is structured on the old-new opposition. If Eisenstein's film showed Soviet viewers that a woman could become a traktoristka, Dzigan and Shreiber's *Woman* taught them how to become one.

The vital part of becoming a traktoristka in early films on this subject was their opposition to the kulaks. If in *Old and New* the kulaks were portrayed as physically far removed from the world of Marfa Lapkina, in *Woman*, the kulaks are members of the immediate family, relatives, husbands, and close friends. An'ka, who is already a successful traktoristka, is harshly criticized by her kulak family: "a female life has always been tied to household, around motherhood. And machine, An'ka, ruins a woman, crushes her. Leave, An'ka, your Kolkhoz epoch." In the same vein, Mashka's husband and her closest friends oppose her wish to become a traktoristka. When Mashka visits the tractor instructor he makes sure to chase her away and mocks her for not knowing tractor parts: "women lack the ability to think about machine construction and engineering! Go away! You're unfit!" Moreover, the village women want to punish her physically as they feel threatened by Mashka's unusual life choices: "Beat her! (Bei ee!) She is ruining our woman's life."

Victoria Bonnell has asserted that peasant women and men saw collectivization historically as a "second serfdom," and symbolically as the "beginning of the Apocalypse." The collective farm, together with its tractors, became a symbol of the Antichrist on earth. As a consequence of such thinking, many women "participated in riots in which they attacked and sometimes burned down the kolkhoz stables, barns, haystacks, and houses; they confiscated

[60] The film is officially translated as *Woman's World*.

seeds, blocked and sometimes destroyed tractors, and attacked local officials."[61] As the kulaks become more vocal in their demands to end collectivization, Mashka is even more determined to operate a tractor. She steals a tractor manual from the machine tractor station (MTS) and begins to read it day and night.

In 1932, *Proletarskoe kino* published a review of *Woman* in which the reviewer praised Mashka's determination to begin a new life: "And now a new life rushes forward. New women are building new life. Masha is here too. She is uncontrollably drawn to the machine. She passionately (strastno) wants to learn to operate a tractor so that with a firm hand she can drive it on the fields of the collective farm."[62] The tractor becomes a symbol of political and social change. As Melanie Ilic suggests "the tractor, it was later proclaimed, was to play a decisive role in the transition to collective farming. Songs were written about tractors, and tractors, as we have already seen, began to appear in cartoon pictures and on posters, in poems and on film.[63] *Woman* is surely one of those films that promoted the tractor as a synonym of progress. Progress meant putting an end to the old way of life, and it is no surprise to see that Mashka begins the process of undoing her old self by losing interest in her household and her family: the food she prepares burns on the stove; she reads her tractor literature while her baby helplessly cries in the cradle. The erasure of her motherly feelings and complete loss of interest in her husband indicate the initial signs of change in Mashka. Chatterjee states that "Soviet heroines realized that collectivization would free them from their miserable dependence on their husbands and fathers," [64] and Soviet films of the period certainly supported this type of thinking. Mashka smashes the entire kitchen into pieces and liberates herself from home. She needs to erase home

[61] Victoria E. Bonnell, "The Peasant Woman in Stalinist Political Art of the 1930s," p. 66.
[62] "Poema o sovetskoi zhenshchine," *Proletarskoe kino*, no.13, October 1932, p. 27.
[63] Melanie Ilic, "Traktoristka: Representations and Realities" in *Women in the Stalin Era*, p. 111.
[64] Choi Chatterjee, "Soviet Heroines and the Language of Modernity, 1930–39" in *Women in the Stalin Era*, p. 55.

boundaries in order to begin her self-refashioning. Mashka's detachment from home is not interpreted as cruel. Her entrance into a new life is described by the film review as positive and transformational:

> The picture as a penetrating poema pours from the screen and takes the viewer with its warmth, passion, hot pulsation of life currents, strong and confident joy of the winning forces of new life. This is a poem about a Soviet collective-farm woman who breaks up the centuries-old layers of oppression and idiocy of village life and asserts her place in the widest areas of socialist construction (Poema o sovetskoi zhenshchine, 28).

After she breaks with her family ties, she is admitted to the tractor training station. But before she can be initiated into the machine world, Mashka needs to overcome one more obstacle. Men at the tractor station decide to trick her by asking her to carry a bolt that has just been tempered. Not knowing that the bolt is hot, Mashka takes it with her bare hand. The scene in which Mashka carries the hardening bolt is intercut with the scene in which a kolkhoz woman gives birth to twins. The scene of labor functions as an intensifier to the bolt scene, but also illustrates Mashka's agonizing pain. Once Mashka realizes that she has been deceived, she decides to turn the situation to her advantage. She acquires unexpected physical strength and succeeds in moving the bolt. The *Proleterskoe kino* reviewer analyzes the scene in the following way:

> A cruel hooligan joke. The bolt has just been taken out of the flame. Mashka touched it and burned her fingers. Laughter. Mashka looks back. Oh, I see! And she again takes the bolt that burns her hand and carries it to the instructor. Men are scared and embarrassed. They feel embarrassed before this woman, whom nothing can stop (28).

In the cyborgian turn, Mashka forges her new identity, gives birth to her new self that is symbolically supported with the scene of the twin birth.


Figure 37, **Figure 38:** Mashka holding the bolt (frame capture, *Woman*).

Dzigan and Shreiber show the fashioning of the female cyborg on Soviet screen by literalizing the act of welding metal and flesh.

Once this bond is established in film, the attention is turned to showing a Stakhanovka on screen. In 1936, Aleksandr Medvedkin released *The Miracle Girl* (*Chudesnitsa*), film that tells the story of the young girl Zinka who wants to become a record-breaking milkmaid. The film is dedicated to Stalin's favorite Stakhanovki Pasha Angelina, Mariia Demchenko, and Nada Persiiantseva. Medvedkin's main emphasis is on the idea of generating Soviet wonder by actualizing Stalin's demand for the production of cadres that make miracles. *The Miracle Girl* is also in dialogue with Eisenstein's *Old and New* as it is structured on the old-new opposition. The story line is simple: two milk cooperatives, a four-year record holder, "Zaria pobedy" ("The Flame of Victory"), and its main contender "Belye peski" ("White Sands"), are engaged in a friendly competition in the overproduction of milk. Zinka belongs to "Belye peski," which is low on the milk production, and dreams of becoming famous. Her grandfather, the leader of the kolkhoz, thinks Zinka is too young to become a milkmaid. Like in the traktoristka narrative, Zinka protests and says to her grandfather: "you don't feel sorry for me. You want to defame me (obesslavit' khochesh')." A shepherd boy, Ivan, falls in love with Zinka, but he knows that he

needs to become famous so that she can love him. This becomes a leitmotif in the thirties, everyone dreams of Stakhanovite glory, otherwise their life is considered worthless. Ivan puts it succinctly: "I myself am an ordinary person, but I want something extraordinary (a khochetsia neobyknovenno)…I want to become a famous person (znamenityi chelovek), a hero, so my life is not wasted (chtoby zhizn' ne propala)."

The Miracle Girl promotes Stalin's "care and emotions" discourse from the thirties. Kolkhoz "Belye peski" is not overproducing milk as its chief milkmaid Varvara works without ideological content (bezydeino) and with negative emotions. She beats her cows, yells at them, thinks they are the reason for her miserable life (muchenie moe), and as a result, the cows do not produce milk. Young Zinka knows that this approach is wrong, and she finally gets twelve cows to implement her work methods. She gives them names, speaks of their different characters, and feeds them different food based on their personalities. In addition to treating the cows with tender emotions, Zinka studies contemporary critical literature on milk production to improve her skills.[65] At the same time, Varvara turns to an old village sorceress and asks her to cast a spell over her cow so that she can start producing milk. In a series of comical situations, the old witch fails to produce the miracle and ends up high in a tree chased by the infuriated cow. A young village boy says to the sorceress: "and you whisper something, whisper and nothing comes out of it." Like in Eisenstein's *Old and New*, wonder is seen as two-fold: the old idea of wonder that operates under inexplicable conditions is doomed to failure while progressive Soviet wonder that is scientific and strictly controlled is destined to succeed.

[65] In Ivan Pyr'ev's 1941 film *The Swineherd and the Shepherd* (*Svinarka i pastukh*), swineherd Glasha Novikova, played by Marina Ladynina, attends the All-Union Agricultural Exhibition in Moscow to learn about pig raising. There she learns about a new science and work ethics. "Comrades it is clear now that even pigs can be beautiful. They live now according to science (po pravilam nauki)." Like in Medvedkin's film, Glasha Novikova applies new work methods, which include being emotional to piglets, and she even invents a new type of a feeder for them that she names the "mommy" (mamasha).

As soon as Varvara realizes that old miracles do not work, she turns to Zinka for help. This signals that Varvara is ready to be ideologically initiated and transformed ("peredelai sebia, Varvara"). Zinka gives her a crash course in new Soviet emotionality by enumerating Varvara's flaws: "you lack tenderness, your voice sounds like a man, you have work-worn hands." Zinka further instructs Varvara to sing gently when near her cows. The new culture advocates "feminine" emotionality. Everything that is associated with traditional male attributes such as coarse body, voice, and aggressive behavior is deemed undesirable. Once Varvara internalizes the new emotional standards, her cows begin to overproduce milk and the miracle begins to unfold. Zinka's cows become record-beaters and Zinka is invited to Moscow. The invitation marks the beginning of her Stakhanovite stardom. She visits the Kremlin and cries tears of joy upon seeing Stalin. Medvedkin uses documentary footage of Stalin and intercuts it with images of Zinka's "thank you Stalin" speech in which she promises to give her whole life to him.

Eisenstein's, Dzigan and Shreiber's, and Medvedkin's films introduced a new woman on screen: hardworking, determined, and emotional. For Ivan Pyr'ev, emotionality becomes one of the major themes in his Kolkhoz musical comedies. In the 1930s, Pyr'ev asserts that "indifference (ravnodushie) is the greatest threat in our art."[66] According to Pyr'ev, comedy is an ideal genre that makes the viewer thrive on positive emotions: "Soviet comedy inspired by love and appreciation for working people generates laughter…laughter that helps workers in their efforts, struggle, and life" (*O proidennom*, 66). In his films, *The Wealthy Bride* (*Bogataia nevesta*, 1937), *The Tractor Drivers* (1939, *Traktoristy*), and *The Swineherd and the Shepherd* (*Svinarka i pastukh*, 1941), Pyr'ev focuses on two major themes—village romance (sel'skaia romantika) and heroism (geroika, 62). While the former rests on emotions, the latter refers to

[66] Ivan Aleksandrovich Pyr'ev, *O proidennom i perezhitom*, Moscow: Soiuz Kinematografistov SSSR: Biuro propagandy sovetskogo kinoiskusstva, 1979, p. 109.

presenting work in a heroic pathos, such as the musical number called “The tractor drivers’ march” from *The Wealthy Bride* in which tractor drivers overperform in collecting hay before the dangerous storm. In his *The Miracle Girl*, Medvedkin first introduces the theme of Stakhanovite love between the heroes of labor Ivan and Zinka. In this genre, the girl dreams of a boy who becomes famous by doing something extraordinary. Zinka asserts: “I want my boyfriend to be a hero of any kind.” Only when Ivan becomes famous by saving nineteen calves from a fire does Zinka confess to him: “Any girl can fall in love with such a guy. You are extraordinary (neobyknovenny).” In Pyr’ev’s *The Wealthy Bride*, Stakhanovite Marinka falls in love with the tractor driver Pavlo. After she hears of Marinka’s emotions, the female brigadier leader asks her immediately “is he a Stakhanovite? A shock-worker? If he is lazy you too will underperform.” It is only after one proves to be an exemplary worker that one is allowed to love intimately. In Pyr’ev’s film, the girls who made it to the honor roll board (meaning they outperformed and are credited for it) are considered ideal brides, “on our list all brides are in sight (na vidu).” The leader of the tractor brigade tells Marinka that Pavlo is the best tractor driver of their region and he advises her in the following way: “Girl, do you want the best life advice? Marry a tractor driver. You will not waste your life.” Kovyn’ko the bookkeeper, who wants to become Marinka’s husband, tells her “Marinka, please love me. I will become a tank operator (budu tankistom), a tractor driver, a pilot.” In Pyr’ev’s films only Stakhanovites and exemplary soldiers are ready for intimate love.

For a progressive Soviet woman, working on getting an education and doing exemplary work first of all meant economic independence. Pasha Angelina comments in her speech: “When we competed with an all-male brigade, they couldn’t outrun us. Then they asked me if I am married? I said no, I first will get an education, become an engineer, and only then will I marry

someone. One can get married anytime, but first I need to have a profession so that I am not financially dependent on my husband (chtoby ne muzh menia kormil)."[67] In 1935, *Pravda* published a Ukrainian traktoristka love song by Pavlo Tychina with a similar theme. A drunken man, who does nothing but daydreams, asks a traktoristka to be his wife. The traktoristka replies in the following way:

Your plan is not going to work

A woman aspires

High and forward

You are flawed, and drunk

You lack deep thoughts.

We need to toil and study

…

This is how I respond to your love!

If you become a shock-worker

I might love you again.[68]

In his *The Tractor Drivers* (1939), Pyr'ev returns to this theme and turns the traktoristka into an object of male desire. Pyr'ev shows the traktoristka as a fully made person. Thanks to previous movies on the subject, the viewer has already learned how a woman worker becomes a Stakhanovka. Pyr'ev builds on this knowledge and is interested in showing her as a real celebrity with fans and admirers. He casts his wife Marina Ladynina, whom the audience already met in

[67] P. Angelina, V.M. Bakholdina, *Zhenshchina na traktore*, p.13.
[68] "Pesnia pod garmon'," *Pravda*, no. 120, May 1, 1935, p. 8.

The Wealthy Bride,[69] to represent the image of the traktoristka on screen. Pyr'ev obviously relies on the spectators' memory and further elaborates on the traktoristka myth. The prototypes for Pyr'ev film were the record-breaking traktoristkas Pasha Angelina and Pasha Kovardak. Pasha Kovardak was particularly inspirational for visual representations of female tractor drivers. In his autobiography, Pyr'ev outlines the attributes of the ideal image of his heroine in *The Tractor Drivers*: "The prototype of Mar'ana Bazhan, the heroine of our prospective movie was Pasha Kovardak. I met numerous times with that tiny blue-eyed girl with bright flaxen hair…I am greatly indebted to her for all her assistance around script writing and making the film" (*O proidennom,* 69). Pasha Kovardak and Marina Ladynina[70] were a perfect visual match. In addition to this, Pyr'ev insisted that the lead actress needs to know how to operate a tractor and other vehicles. He wanted his traktoristka to be both idealized and real. "In *The Tractor Drivers*, [Ladynina's] heroine Mar'ana Bazhan needed to fly over the steppe on a motorcycle and to operate a complex caterpillar tractor ChTZ on plowed land. And she did it all, as if she had always been traktoristka" (*O proidennom,* 75). But what was very important for Pyr'ev was an erotic but not overly sexual image of the traktoristka. She needed to be very feminine, blond, thin, and attractive in order to arouse the spectators' imagination. R. Iurenev asserts that "all of this Ladynina played easily and genuinely with joyful humor…preserving, under all her militant qualities, her feminine softness (miakhkost') and attractiveness."[71] In Pavlo Tychina's song written for the accordion, the traktoristka is also depicted as an eroticized blonde who wears

[69] Ladynina would also play the leading role in Pyr'ev's *The Swineherd and the Shepherd* (1941)
[70] Many years later Ladynina confessed that playing kolkhoz women was not satisfying for her. "And I, an actress of The Moscow Art Theatre who had already started playing serious dramatic roles, completely unexpectedly found myself on the set of *The Wealthy Bride*. In an instant, I turned into a 'rural actress' (v sel'skokhozaistvenuiu aktrisu). Naturally, with every consequent film this character role (amplua) became more robust, and this was not satisfying to me." Marina Ladynina, "V poiskakh putei," in *Ivan Pyr'ev: V zhizni i na ekrane*, Moscow: Kinotsentr, 1994), p. 106.
[71] R. Iurenev, "Ivan Aleksandrovich Pyr'ev: Biograficheskii ocherk," in *Ivan Pyr'ev: V zhizni i na ekrane,* Moscow: Kinotsentr, 1994, p. 33.

high-heels (traktoristka na kablukakh), smells like mint, and has a figure that is compared to a violin. A drunken daydreamer asks her to be his darling: “you, my proud blonde, you must be mine” (“Pesnia pod garmon’,” p. 8).

Likewise, Pasha Angelina began her tractor career not looking very feminine. She used to be called a man in a skirt. The 1930s culture celebrated the feminine and gradually pushed out all the attributes and tropes that did not correspond with the ideal Soviet woman. Pasha was pressured to fit this image, and she tried hard to show that she was feminine enough by having regular manicures once a month. Over a decade, Pasha underwent a significant change in her style.

Figure 39: Pasha Angelina in 1935.

Figure 40: Pasha Angelina in 1944.

Victoria Bonnell comments on the new feminine image in the thirties:

> Whereas earlier images of peasant women had often emphasized maturity and fecundity—broad hips and large bosoms—the new image stressed a far slimmer and more youthful body, with understated breasts. The kolkhoznitsa was depicted as a young

and vigorous worker but seldom a mother. Heroic status and youthfulness became inextricably intertwined.[72]

In Pyr'ev's film, femininity is projected onto the tractors as well. Female tractor drivers change the standard look of their machines to make them appear more feminine. Their tractor model tellingly named "Stalinets" is adorned with a parasol to reflect the new feminine culture.

Figure 41, **Figure 42:** Traktoristki operating the Stalinets (frame capture, *The Tractor Drivers*).

The story begins with Klim Iarko (Nikolai Kriuchkov), a demobilized tank driver returning from the front line against Japan on a train with two friends. He is not sure where he wants to go until he sees Mar'ana Bazhan's picture in the newspapers. Klim immediately decides to go to Ukraine to meet Mar'ana. The fact that the viewer learns about traktoristka Mar'ana, like most of the Soviet people did at the time, via the press, is telling of Pyr'ev's attention to authenticity and the identification of viewers with the male gaze. Mar'ana is already a celebrity and dream for many men, Klim being just one of them.

[72] Victoria E. Bonnell, "The Peasant Woman in Stalinist Political Art of the 1930s," p. 63.

Figure 43: Mar'ana Bazhan (M. Ladynina) from the newspapers.

Mar'ana is already a part of Soviet celebrity culture. She is featured in the press, receives a large amount of fan letters daily, and her male admirers, like Taras Bondarenko, want to work for her tractor station just to be around her. Mar'ana is aware of her popularity, and like most of the stars, she seems annoyed by it.[73] In order to distance her admirers from personal contact with her, she announces that she is engaged to Nazar Duma, a clumsy and funny tractor driver who likes to drink and steal gas from neighboring tractor stations. Nazar too is in love with Mar'ana and gladly accepts to play the role of her fiancé. According to the tractor brigade manager Kirill Petrovich, Nazar is not a good fit for Mar'ana as his work ethic is always under question. The comedy revolves around this confusion as Klim, who very soon upon his arrival at the village becomes the tractor leader of the male brigade, promises Kirill to make Nazar an exemplary

[73] In 1939, Moscow organizes a one act playwriting competition on the traktoristka topic. It is telling that all the plays work around similar themes. The traktoristka is shown as an object of male desire, she is always very beautiful, and all men want to be with her. In Ivan Timofeevich Chernopiatov's play *Traktoristka*, three men are in love with traktoristka Vasia, who almost never shows up in the play (RGALI, 652, op.7, ed. khr 3308). In Andrei Dmitrievich Zaitsev's play *Tasia traktoristka*, Tasia is only interested in her machine: "She is the leading traktoristka in her region. She loves her machine and takes good care of it. I and all men and women envy her." (RGALI, 652, op. 7 ed. khr. 1087, p. 9) Traktoriskas rarely speak in these plays and show no interest in intimate love. By silencing traktoristkas and limiting their presence in these plays, the authors make them into an object of male desire. Pyr'ev too makes Mar'ana Bazhan an object of admiration and phantasy in his film by letting her act indifferent to her numerous male admirers.

worker in order to be a good match for Mar'ana. The false love triangle Mar'ana-Nazar-Klim moves the action forward.[74]

Before Mar'ana meets Klim, she is shown as independent, detached from her male admirers, strict but always joyful. She is constantly in motion, operating her tractor and riding a motorcycle. It is symptomatic that at the moment Mar'ana meets Klim she falls from her motorcycle and temporarily becomes physically incapacitated. Pyr'ev suspends Mar'ana's mobility and detaches her from her machine. She falls from her vehicle in order to fall in love. For the short term, Mar'ana places her cyborgian existence on hold so that she can bond with a human. By fixing her motorcycle and bandaging her injured leg, Klim initiates a connection with Mar'ana via her technological self. But Klim needs to show his technological competence in order to win Mar'ana's heart. He becomes the male lead instructor training his men for war. In the late 1930s, men are transitioning from being tractor drivers to being tank operators. As a tank operator, Klim is not a competition to Mar'ana but rather an inspiration as he is competent in handling a complex combat machine. He also wins her heart by showing his care for Nazar and turning him into a Stakhanovite. The film ends with Klim's and Mar'ana's wedding; their union is backed by the portrait of Stalin (state approval), whose symbolic presence is accentuated by the musical score celebrating Stalin's future war victories.

But the film that fully encapsulates the female culture of the 1930s is Grigorii Aleksandrov's *The Bright Path* (*Svetlyi put'*, 1940). Aleksandrov engages all the vital elements that constitute early Soviet culture: redefining the old idea of a miracle, female transformation via technology, the inception of the Stakhanovite movement, and the inscription of Stalinist

[74] Richard Taylor states that "like *The Wealthy Bride*, *The Tractor Drivers* contains all the key elements the kolkhoz musical: a love triangle, a light-hearted conflict between good (Klim) and redeemable evil (Nazar), a plot prolonged by a misunderstanding, and, of course, plenty of music." Richard Taylor, "Singing on the Steppes for Stalin: Ivan Pyr'ev and the Kolkhoz Musical in Soviet Cinema," *Slavic Review*, vol. 58, no. 1 (Spring 1999), p. 152.

discourse of the she-cyborg in the cultural canon of the 1930s. Aleksandrov reworks the Russian Cinderella (Zolushka) fairytale and sets it in the 1930s, beginning with 1930 and ending with the opening of All-Union Agricultural Exhibition in Moscow in 1939.

The Bright Path tells the story of Tania Morozova's transformation from a peasant maid to a Stakhanovite heroine. In the first scene, Tania is awakened by the street loudspeaker (gromkogovoritel') that speaks in a female voice. The loudspeaker stands for the voice of the state and the fact that the famous intro "Moscow is speaking" (govorit Moskva) begins with the female voice is not accidental.[75] This disembodied voice now stands for the new culture that symbolically awakens Tania. Right away, the male voice takes over and through a series of instructions guides its listeners to perform the routine morning exercises. If the female voice stands for the new culture, the male voice is the one that ideologically trains the female body to perform the proper movements. Analyzing the Soviet radio and loudspeaker in early Soviet sound films as a voice of authority, Lilya Kaganovsky interprets them as "disembodied entities speaking with the 'voice of power,' and in almost every case, speaking directly the State's ideological message."[76] Therefore, Tania's awakening to the call of authority is her way of agreement, her saying yes to the cultural revolution in the 1930s and becoming a subject of "ideological recruitment or the call of the big Other" (Kaganovsky, 50). The viewer soon learns, however, that Tania works as a maid in an inn and still belongs to the old world. When the engineer Lebedev arrives from Moscow to the village inn and first sees Tania he calls her Zolushka (Cinderella): "I am telling you, you are Zolushka! The old fairytale is about miracles."

After she meets her future prince, Tania also meets her helper, the good fairy (feia), the party member Maria Sergeevna, who saves her from her poor village existence. Maria Sergeevna

[75] Typically the voice from the loudspeaker is male.
[76] Lilya Kaganovsky, *The Voice of Technology*, p. 27.

proposes that Tania go to Moscow to get an education. Tania asks her "Where do I go?" to which Maria responds "You'll go where I take you (kuda povedu tuda poidesh)." Like the female voice from the loudspeaker that awakens Tania to accept her new life, Maria Sergeevna, the embodied voice of the state, takes her to the place where progress is: "I will take you to our castle (nash dvorets)." The castle turns out to be a *text*ile factory, symbolically a factory of cultural text that Tania willingly enters. Tania begins the process of transforming herself via weaving machines to become a cultural weaver and to be weaved by the culture. At the factory, she begins her training and reads weaving literature together with Stalin's speeches to become ideologically ready for transformation. As a part of facing and overcoming obstacles in the Stakhanovka narrative, in order to become a specialized worker (a cadre), Tania trains on a malfunctioning weaving machine. Lebedev, who works at the factory as an engineer, becomes her mentor by assigning her to work with a functioning machine. Tania falls in love with Lebedev, but she knows that she needs to become an exemplary weaver in order to be with him. She says to her friend: "He is an educated person, an engineer! And who am I?" Aleksandrov here repeats the Soviet demand for professionalization that grants a happy life. The genuinely happy bride must be a Stakhanovka, and action develops in this direction.

After Tania reads about the beginning of the Stakhanovite movement in *Pravda*, she is immediately inspired to become a member. When her factory director declines Tania's request to work with sixteen weaving machines at once, she writes directly to Molotov, who replies with enthusiastic approval. Tania becomes a Stakhanovka after she beats her first record. After that she, as the Stakhanovite genre requires, sets even higher goals for herself and eventually works simultaneously on two hundred forty weaving machines. Tania becomes a celebrity and is invited to the Kremlin to receive the order of Lenin. Aleksandrov is rewriting the old miracle to

show Soviet magic on screen. But Aleksandrov goes further than other directors in showing that the actual creators of the new female culture are men. One scene is particularly revealing in this sense. The factory director speaks to a male textile designer who shows him the latest trends in textile materials. The designer points at a woven fabric with an industrial print on it. It is not accidental that the tractor print is shown in a close up, since Aleksandrov is showing the new culture embodied in a traktoristka image.

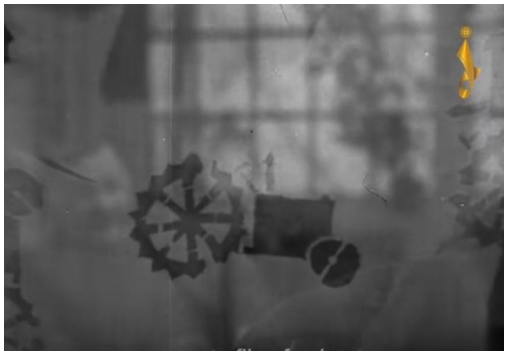

Figure 44, **Figure 45:** The tractor print and the cardboard mannequin (frame captures).

Furthermore, the tractor print is placed in the perforated part (torso and hands) of the female cardboard mannequin. This inner void is filled with a text(ile) fabricated by men. In just a few subsequent shots, Aleksandrov shows that this Soviet ventriloquism, a cultural design with its main ventriloquist Stalin (symbolically the factory director), is at the heart of female progress. The most explicit shot shows the factory director looking directly at the viewer through the female void that he fills with meaning.

Figure 46: The factory director (frame capture).

After Tania receives the order of Lenin, Aleksandrov accentuates the erasure of the old fairytale and the production of a novel cultural text. Tania looks in the Kremlin mirror, which symbolizes time and ideology, and reflects on her past and future. In the mirror she sees her old self, the old-world Zolushka to whom she says farewell. The old world in which the female subject waits for an outside miraculous agency to change her life is brought to a close. In an act of self-reflection, shown as looking at her face in the mirror, Tania leaves her old self and watches how the movie of her refashioned present and future life unfolds on the mirror screen. “What I used to be, I know. I would like to know what will be.” After she parts with the old image, Tania sees her new changing self, the Stakhanovka, the self-made Soviet Zolushka, who invites her to enter the mirror. Tania enters and is about to witness the ideological spectacle of the present-future.


Figure 47, **Figure 48:** Tania and the Kremlin mirror (frame captures).

By entering the mirror realm, Tania metamorphizes into a new rhetoric; she turns into the cultural text. In order for the future to unfold, the Stakhanovka of the thirties disappears and the transformed new Tania takes over the wheel of an automobile to witness the cinematic panorama of her future life. Stalinist culture mediated through the female gaze unfolds before spectator's eyes. The mirror as a portal into the ideology of the future works only if both Tania and the spectator look at it. During her flight, Tania sees feminine culture unfolding before her. It is telling that she rides/flies in the sky around Vera Mukhina's monument *Worker and Kolkhoz Woman*, the centerpiece of the All-Union Agricultural Exhibition in 1939.

Figure 49: Tania and Mukhina's monument (frame capture).

Aleksandrov's vision of the New Woman behind the wheel pasted over Mukhina's masterpiece of the new art embodies Stalin's feminine culture on screen.

Tania, now an engineer, drives herself to the All-Union Agricultural Exhibition to give a speech at the opening of the new pavilion devoted to the textile industry. The engineer Lebedev arrives at the exhibition and fails to recognize the new Tania. He asks Maria Sergeevna, the "fairy god mother" who took Tania to Moscow: "Where is Tatiana?," to which Maria Sergeevna tellingly replies, "Ah, you Onegin!" Now that Tania/Tatiana is an engineer and Lebedev has risen in the ranks to the position of factory director, they are ready to become a couple. The fact that Maria Sergeevna invokes Pushkin by calling Lebedev Onegin is telling. By associating Lebedev with Onegin and Tania with Tatiana, Maria Sergeevna brings to mind the canonical figure, the father of modern Russian culture, Aleksandr Pushkin. The couple is a novel work of art (a Soviet *Eugene Onegin*) of the new culture whose new language creator is Soviet power. In this culture, the heroine is the protagonist and the scene of her *text*ile speech symbolizes Tatiana's culture. Having Stalin's statue next to her, Tania is shown standing next to the operating weaving machine that produces textile. Her body language mimics Stalin's, which only amplifies the association of the culture with its master signifier behind it. The textile produced before the spectators' eyes is the text of Stalin's culture, whose novel language of progress is uttered by the refashioned techno-woman.


Figure 50, **Figure 51:** Tania giving a speech at the All-Union Agricultural Exhibition (frame capture).

With his 1940 film, *The Bright Path*, Aleksandrov encapsulates the development of high Stalinist culture and its consolidation into verbal and visual phenomena. Aleksandrov shows on screen the melding of the gendered discourse with female transformation centered around Stalin's cult.

By integrating women into heavy industry in the 1930s, the Party wanted to signal its determination toward progress and modernity. Technology fused with the female body led to the creation of the Soviet heroine of labor whose most powerful symbol was the image of the tractor driver riding off into the bright future. Technology and technological discourse connected with fertility, the organic, and with emotion pathos through female cyborgism. Just like Platonov overcomes the immaterial-material dichotomy (ether-digestion) through male cyborgism, 1930s culture resolved the tension between the machine and the organic by introducing the female cyborg. In contrast to male cyborgs of the 1920s, who don't engage in reproduction but rather in resurrection and immortalization of brothers and fathers, the female cyborgs of the 1930s are fertile and focused on production and abundance. If male cyborgian culture is obsessed with death, female gendered culture is fascinated with life and happiness. In both cultures the introduction of the cyborg narratives attempted to resolve, but also exposed, political, social, and cultural anxieties and apprehensions that followed the creation of the communist state.

CONCLUSION

In early Soviet culture technology was tied to the arrival of the Russian Revolution and from the very beginning it signified political, economic, and social progress. Political and historical changes in the Soviet 1920s and 1930s had influenced cultural attitudes toward technology, which resulted in shifting perceptions of physicality and a reconfiguration of traditional gender roles. The 1920s were the time of Lenin's New Economic Policy (NEP), the internationalization movement, and collaboration with the West. The following decade was marked by Stalin's industrialization and collectivization policies characterized by radically isolationist political direction. Both periods depended heavily on the development of the technology. The political changes in these two decades affected the direction in which art was evolving.

Both cultures needed an official art, which would represent the transformation of the Soviet Union in its technological and ideological hypostases. The nineteen twenties were the time of the avant-garde, experimentation with forms, language, and montage in films. The 1930s introduced new aesthetics; Socialist Realism advocated party-minded art that was accessible and intended for workers. Technology gave shape to both periods and functioned as a catalyst for the transformation of art, society, and politics.

Gender-wise, the 1920s culture had a fixation on manliness and was primarily engaged in constructing the myth of a masculinized society, while the 1930s saw a shift towards female culture that gradually became the signifier of progress under Stalin. The tensions and differences between these two periods produced two distinct types of cyborgs, male and female. I use the term cyborg to encompass both fictional and material worlds, as a cultural and historical category that reflects political and gender concerns, and as a concept that helps interpret the

contact between body-machine and animal as a site of transformation. Two different evolutionary paths of the cyborg in the first two decades of the USSR revealed new bodily aspirations, gender identity concerns, and cultural values that shaped the norms of progress and modernity. In both cultures the introduction of cyborg narratives attempted to resolve, but also exposed, political, social, and cultural anxieties and apprehensions that followed the inception of the communist state.

During the NEP period, with the exception of the electrification campaign, the USSR did not have highly advanced industry, but it did have a well-developed discourse on technology that flourished in both political and cultural contexts. Technological discourse functioned as a prosthetic substitute for actual industrial scarcity. Discourse on technology influenced changes in the arts that became inspired with enthusiasm for machines and began aestheticizing technology. The general excitement was very appealing to the artists who felt that the country's radical metamorphosis represented an ideal site and atmosphere for the transformation of the arts. In his essay, "A Struggle for Form," Viktor Shklovsky writes that it is to the author's advantage to introduce technology into art: "Technology and science transform things for us, illuminate the reservoir of forms. It is only necessary to live with technology (zhit' v teknike)….As a result of such extra-literary work we will obtain new literary forms."[1]

Besides serving as an inspiration for the development of art forms, technology was also a catalyst for the creation of a new Soviet body; a New Man who would be equipped with his prosthetic technological devices in order to master the body and mind. The machine was glorified as the prosthesis that enabled the modern man to overcome his deficiencies. Shklovsky emphasizes the power technology has on humans: "What changes a man most of all is the

[1] Viktor Shklovsky, "Bor'ba za formu," in *Gamburgskii schet: Stat'i, vospominania, esse,1914-1933*, Moscow: Sovetskii pisatel', 1990, p. 392.

machine."[2] In his manifestos, Dziga Vertov enthusiastically animates the camera and gives it a voice that speaks of the might of the camera-eye which is described as a prosthetic agency that rectifies deficiencies and liberates human vision. In the arts, the machine was perceived as a new demiurge that created a new technological man, more perfect than his biological counterpart. Improving human existence by focusing on human biology and the body became a vital theme in culture that engaged in the construction of the Soviet techno-utopian project.

Narratives that promoted new enhanced male bodies thrived in this period. One way to technologize the body was by rejuvenating it, improving it from the inside with various serums, hormones, and internal secretion glands. This medical trend, equally popular in the West and the Soviet Union, pushed Soviet literature to examine the potential of such bodily enhancements and manipulations. The Soviet techno-surgical intervention appeared as a site where enhanced communist bodies were constructed. Authors such as Andrei Platonov were engaged in this new body mythmaking by offering their utopian visions of technologically rejuvenated Soviet men actively working on the creation of modern Soviet society. Authors like Mikhail Bulgakov were more reserved about the actual liberating potential of such an endeavor, but were equally involved in investigating the consequences of bodily experimentations. In his novella *The Heart of a Dog*, Bulgakov portrays Soviet transplantation and rejuvenation experiments that culminate in an apocalyptic scenario in which a criminal and a dog merge into the highly satirical image of the New Soviet Man.

The proliferation of immortalization narratives was yet another, more radical version of the rejuvenation trend. Boris Pil'niak and Platonov were two authors who utilized technology and technological discourse in their works to produce imaginary immortal cyborgs that enabled

[2] Viktor Shklovsky, *Zoo or Letters Not about Love*, trans. by Richard Sheldon, Dalkey Archive, Chicago 2001, p.115.

the creation of, what these authors thought was, a genuine communist society. Influenced by Nikolai Fedorov's mystical teachings on the resurrection of the dead fathers with the use of technology, both Pil'niak and Platonov engaged in constructing a New Man who has abolished death by scientific means. By actively speculating about Soviet technology in their works, Pil'niak and Platonov were contributing to the Soviet political and cultural quest of creating a communist society of new people. Their immortal humans were a utopian response to the general enthusiasm of the 1920s, which engaged in the production of technocratic cultural myths.

Women in the 1920s culture were consistently denied access to technology both in heavy industry and the arts. Diane Koenker argues that the early Soviet period was marked by a gendered division of labor, intensified by claims about women being insufficiently skillful at work: "Men objected to women because they were less 'craftsman-like' (iskusstnyi) than men."[3] Since they were traditionally perceived as gravitating toward family life and were less involved in production, women were easily categorized as less capable than men. The general attitude was that women could not understand technology and were represented as incomplete workers: "They were never taught the whole job. Men, who knew the whole job, retained the power of control on the shop floor and managed to confine women to the margins of shop-floor life. A job was 'skilled' because men said it was" (1443).

In the 1930s things began to change. Due to the shortage in labor during the First Five-Year Plan, the Party invited women to enter heavy industry and engage with technology. While male authors were engrossed in the production of their imaginary techno-worlds, women began to engage with industrial machines both physically and intellectually. Through their art and work with technology, women utilized industrial machines to remake themselves, to contest the

[3] Diane P. Koenker: "Men against Women on the Shop Floor in Early Soviet Russia: Gender and Class in the Socialist Workplace," *The American Historical Review*, vol. 100, no. 5, 1995, p.1441.

masculinist perspective on technology, to speculate about technology by infusing it with feminist politics. The author Marietta Shaginian and the film director Esfir' Shub, as well as the actual heroines of labor such as Pasha Angelina, contributed to the re-gendering of the culture in a feminine direction.

Soviet culture was gradually shifting from the production of masculine myths and saw a rise of female narratives. This new fascination in the 1930s led to the creation of the Soviet heroine of labor, the female cyborg embodied in the image of the tractor driver. The woman transformed by her tool became the new symbol of a changing Stalinist society. Soviet culture created this myth by appropriating "traditionally" viewed attributes of female reproductive power— the pathos of fertility, vitality, and happiness— and coupling them with technology. The cyborg woman at the tractor wheel became a synonym for the country's technological progress, economic abundance, and Soviet happiness. In contrast to male cyborg myths of the 1920s which engaged in reproduction but rather in resurrection and immortalization of the brothers and fathers rather than reproduction, the female narratives of the 1930s showed fertile techno-women focused on production and abundance. If the male cyborg culture was obsessed with death, the female gendered culture was fascinated with life and happiness.

While Stalinist culture invented the traktoristka myth to stand for the "progressive" politics that the Party was obsessively trying to promote, it actually served as a cover for the bad economic conditions, forced collectivization of agriculture, and political repressions. The traktoristka culture was plowing over the famine, the Gulag, and the mass-scale deaths. The female myth was the cultural and political prosthetic extension attached to the disabled political body of the Stalinist state.

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