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THE BODY POLITIC: SOCIALIST SCIENCE FICTION AND THE EMBODIED
STATE

By

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ABSTRACT OF THE DISSERTATION

“The Body Politic: Socialist Science Fiction and the Embodied State”

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My dissertation explores why and how science fiction writers and policymakers from Soviet Russia, Communist China, and the German Democratic Republic put a transformed human body at the center of their visions of the future. Since socialism conflated individual bodies with the national body, writers and planners commonly sought to portray a “new socialist human” free not only from want but also from physical imperfection. Science fiction texts described the world these citizens would inhabit as the socialist future, while policymakers drew up plans to create such utopias in real life. Both writers and planners placed narratives of the body at the nexus of modernizing developments as wide-ranging as marriage reform, cybernetics, hematology, labor camps, educational reform, and nuclear power.

Chapter one surveys representations of socialism’s ideal body in three national science fiction traditions. Since socialism erases the boundaries between individuals and the collective, then the health of the state should be reflected in that of its citizens. Science fiction authors influenced policymakers, scientists, and labor organizers (some of whom were, themselves, science fiction authors) through their literary projections of bodily perfectibility. At the same time, through what Marx identified as “the alteration of men on a mass scale,” socialist policymakers proposed projects that were as much acts of imagination

as any work of fiction. Socialist narratives of the future, whether literary or policy-oriented, required new bodies to fulfill their visions.

The texts at the heart of chapter two, “Conjugal Happiness in the Arms of Morpheus” by Wei Yahua and *Red Star* by Alexander Bogdanov, decouple biological reproduction from social reproduction. Considering biological reproduction an impediment to physical perfectibility and even immortality, theorists and policymakers focused on reproduction as a specific point of intervention aimed at improving sexual equality. Though this split takes different forms in each case—one through the creation of a national superorganism connected through bloodsharing, the other through the production of robots as a check on population growth—both texts redistribute social processes historically associated with one biological phenotype as egalitarian projects. By rejecting the connection between sex and social reproduction altogether, however, they suggest that actual reproducing bodies are irreparably flawed.

Chapter three asks how, in socialist narratives, workers were portrayed in the absence of work. Writers and policymakers often described the future as a post-labor utopia while exalting work in the present as a necessary duty, much like childbirth, from which every citizen would soon be freed. I argue here that the understudied ephemera *lian huan hua* (连环画)—linked serial images, or propagandistic comic books from the PRC—exemplify this ideal of a future free from labor. As quotidian projections of futurity, *lian huan hua* depicted aestheticized and politicized images of the human not as a user of tools creating the state, but as tools utilized *by* the state for measuring individual and social progress.

I turn in the last chapter to three texts about illness and deformity: the Chinese novelette “Corrosion” by Ye Yonglie, the Soviet story “Pkhentz” by Andrei Sinyavsky, and

the GDR short story “The Eye that Never Weeps” by Angela and Karlheinz Steinmüller. Though formally different, all three are troubled by the imperfect bodies of their socialist citizens—bodies whose infirmities call out for correction through the application of the state's hygienic practices. For these texts to acknowledge the continued existence of disability, however, is to risk betraying the socialist vision of a perfected humanity. Across national and linguistic traditions, socialist science fiction encountered its limit in representations of deviant bodies that resist idealization—bodies that these narratives nonetheless cannot do without.

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INTRODUCTION:

How do human beings develop and evolve? This question is at the center of two intertwined projects: socialism and science fictional visions of the future of humanity. Since socialism conflated individual bodies with the national body, writers and planners commonly sought to portray a “new socialist human” free not only from want but also from physical imperfection. Science fiction texts described the world these citizens would inhabit as the socialist future, while policymakers drew up plans to create such utopias in real life. Both writers and planners placed narratives of the body at the nexus of modernizing developments as wide-ranging as marriage reform, cybernetics, hematology, labor camps, educational reform, and nuclear power.

The question of human development and perfectibility is uniquely defined in socialist science fictional visions. Western utopian thinkers have historically approached this question via two approaches—one exemplified by Rousseau, who argued that “man is naturally good, and only by his institutions is he made bad” (208), or one represented by Locke, who claimed that human nature is a *tabula rasa*, neither good nor bad, but shaped through external social pressures. This Western approach to human categorization has dominated global understandings of the ethical and practical social forces shaping individuals and societies. Although these two approaches differ as to what is innate to human nature, they share a belief in the malleability of humanity by social forces. Such matters remain relevant today; Cary Wolfe, known for his writings on posthumanism and *de facto* rejection of “human” as a category altogether, notes that “ideals of human perfectibility, rationality, and agency inherited from the Renaissance humanism and the Enlightenment” (xiii) continue to dominate our categorizations of who and what constitutes a human, while technosociologists

Neda Atanasoski and Kalindi Vora recognize that these categories remain “predetermined by techniques of differential exploitation and dispossession within capitalism” (4), situating “humanness” as a shared global framework.

Yet throughout the twentieth century, socialist politicians, philosophers, and artists developed a different vision of humanity that were not limited to an imaginative reevaluation of human psychology and morality. Rather, across various national traditions throughout the twentieth century, politicians and authors alike imagined the human as capable of being perfected through both spiritual and physical change. By taking material steps to imagine and develop a society and its citizens outside of a capital-driven sociopolitics, proponents of socialism, in both its scientific and utopian forms, conflated the development of the human body with that of the national body. Authors and policymakers imagining a socialist world similarly imagined the human bodies that would inhabit it as fundamentally different from the humanity that was deformed, stunted, and degraded under capitalism. They imagined and described processes for complete human perfectibility. Through their visionary attempts to create a new socialist human, both socialism as a politics of change and literature as a mode of speculative planning were responsible for the implementation and expansion of wide-scale population planning projects across the twentieth century socialist sphere.

Science fiction offered the clearest account of the new human as he or she would develop under the influence of socialism. Yinde Zhang identifies the “novel of the future” as a powerful form of propaganda, reappropriated a “century later as prophetic literature, legitimating the renaissance of the nation” (799-900) and through which change can be imagined and actualized. In imagining the future, science fiction authors in particular were responsible for creating a utopian vision of who and what the nation would be, in that “the

determined negation of that which merely is, and by concretizing itself as something false, always points at the same time to what should be” (Bloch 12). The humanity of the socialist future would not be the humanity of the present, in all its wretchedness under existing social conditions. It would instead embody the best and brightest ideals of socialism—what Yinghong Cheng identifies as “a calculated and systematic cultivation of ideas and perceptions, consciousness and subconsciousness, personal character, psychology, and even physical constitution” (2) that would be inculcated by socialist development and defined by literary depictions of physical perfection in the near future.

By taking up the socialist science fictional literatures of the early twentieth century in nations and sprachraums as disparate as Soviet Russia, Communist China, and the short-lived East German republic, I hope to show that science fiction and socialism are responding to the same forward-looking attempt to predict the development of future national citizens and, to some extent, guide that development. Just like various strains of socialist thought operated teleologically (in that they saw socialism as having a fixed end point, wherein the state would be dissolved under full communism, and attempted to describe the specifics of a society once it had “arrived”), so, too, did different strands of science fiction respond to different demands and expectations. This project will attempt to chart the futurist impulse common to both science fiction and socialism and the ways in which authors conforming to socialist literary guidelines attempted to address the question of the ideal human in future socialist contexts.

Such a project falls within the purview of the small but growing body of literature that David C. Engerman calls “histories of the future,” and especially “the politics of the

future—how visions of the future both reveal and shape the exercise of power” (1410).¹

Scholars such as Jenny Andersson, in particular, highlight the opportunity to engage with the imagination of the future in countries such as China, where it has historically gone unstudied by Western scholars (1429-30). In addition to engaging with representations of the future and the bodies that would inhabit it, this thesis also emphasizes the ways in which state actors attempted to bring those imagined futures into existence, as well as how newly imagined socialist bodies came to be created through political, ideological, and literary policies.

Elsewhere, other scholars have already noted the “actionability” of Chinese leadership’s focus on futurism, with Julian Gewirtz identifying the post-Mao “actionable futurism” of Deng Xiaoping and Zhao Ziyang’s policies, inspired by the futurist Alvin Toffler, as “a futurism that required a response from the state and indeed shaped the economic and S&T [science and technology] policies of the Chinese Communist Party (CCP)” (117). What I am specifically interested in are how the “actionable policies” explored in socialist science fiction were co-imbricated with the sociopolitical drive to create the “new human” as actual fact. The interaction between these often-overlapping sets of policies—science fiction regulations on one hand and human development policies on the other—is primarily explored in a three-case study examining science fiction from Soviet Russia, the People’s Republic of China, and the German Democratic Republic² across several decades of the mid-twentieth century. While remaining cognizant of national historical and

¹See also Connelly, Matthew. “Future Shock.” *The Shock of the Global: The 1970s in Perspective* edited by Niall Ferguson, Charles S. Maier, Erez Manela, and Daniel J. Sargent, 2010, pp. 337–50. Cambridge: Belknap Press of Harvard University Press.

² Soviet Russia existed as an official political entity from 1922-1991, the German Democratic Republic existed from 1949 to 1990, and the People’s Republic of China came into existence in 1949 and continues to exist today. Some examples of literature addressed in this thesis will precede the official consolidation of these countries insofar as they speak to a similar embodied futurist impulses.

developmental differences, I endeavor to show why and how science fiction writers and policymakers from Soviet Russia, Communist China, and the German Democratic Republic put a transformed human body at the center of their visions of the future.

Insofar as the ideal human and futurist formulations are related, much of socialist science fiction focuses on the central task of visualizing and describing an idealized human form that does not yet exist, but which will be made to exist in the near future as a result of socialist planning policies. The resultant ideal human is a material product projected forward in time as a result of policies being put into effect in the here-and-now. Various socialist regimes differed markedly in their evaluation of the perfectibility of extant corporeal forms—leading thinkers and politicians in Soviet Russia, for example, believed that only future generations of “new humans” would become ideal Soviet citizens, while Maoist strictures held that, through extensive thought reform coupled with manual labor, even individuals that had previously proven themselves flawed could be perfected. What these differing ideologies and national policies shared, however, was an attempt to populate the nation-states they were becoming with a projected ideal, one that existed corporeally and temporally, and one which could be both seen and touched. Because of this, science fiction as it depicted the body and grappled with its place in a rapidly changing world, one characterized increasingly by ideological discord, was tripartite: temporal, discursive, and visual—the picture of the body in time. To demonstrate how science fiction actionably imagined and created such a body—both figuratively, as in a national body, and individually, with biopolitical plans aimed at individual reform—requires first establishing the shared goals between science fiction authors and socialist policymakers.

CHAPTER ONE: SOCIALIST SCIENCE FICTIONS

WHY SCIENCE FICTION? WHY SOCIALISM?

The question of classification and identification is an important one, not because of the importance of strict genre delineation itself, but because it had direct material impacts on society in a way that science fiction has rarely had in the West. Affecting not only the development of the nation-state and the ways in which it was held accountable for doing so, the regulations outlining science fiction under socialism also affected the processes by which individuals and groups were conceptualized and written into the national body politic. These classificatory schemas, far from fanciful projections, had real material effects on the experiences of people who lived, died, and were co-constituted by a literary form within which authors often struggled to formulate the future and who would inhabit it.

Science fictional literature and art being produced in socialist contexts were treated as realistic depictions of a developing future that would come into being and held to the same standards as socialist realist art and literature. Both the 1943 Yan'an Forum and the 1934 Soviet Writers' Congress claimed that art had a direct effect on human development, and in order to guide that development, science fiction authors were held responsible for producing positive-but-accurate depictions of human futures. Ying Qian, for example, discusses an event in which the poet He Jingzhi, criticizing the small vision of documentary filmmaking in the lead-up to the Chinese Cultural Revolution, asked, "Why can't documentary document tomorrow?" "Writing a few months later, Ding Jiao, vice director of the Central Newsreel and Documentary Studio, recounted He Jingzhi's observations before expressing his agreement. Yes, documentary could document tomorrow, Ding wrote, because the future was already embodied in the present" (Qian 587, Ding 5). "The future"

was something that could be documented because it was realistically within the purview of the extant present and capable of being expressed through art. To treat science fiction as a literary device that serves to enroll the present in a future-oriented project is not only an aesthetic act, but also indicative of the teleological inclinations of various socialist projects that saw themselves as points on an inevitable arc towards the future. Over the course of the twentieth century, socialist science fiction often served as a blueprint that guided subsequent population policies and provided various descriptions of human perfection to which individuals could aspire.

WHY THE BODY?

The dream of a new human has not been limited to socialist programs, and in fact has a long history across political spectra. Eric Kerr writes that “the idea of a human (or Man, or people, race when describing a species, citizen, etc.) is not just an idea with a contingent and protean history. It is more and more constructed by the technologies people use to track, categorize, and define one another” (Kerr et. al). From Aristotle’s *zoon politikon*³ (the political, state-building animal, humans newly differentiated from lower forms of life by their ability to develop goal-oriented plans) to the *homo economicus* (economic man) of John Stuart Mill (paragraphs 38 and 48), humans have been defined and redefined not only as separate and unique, but also newly emergent from technological, political, and economic changes. Even Henri Bergson, in *Creative Evolution*, notes that “we should say not *Homo sapiens*, but *Homo faber*. In short, intelligence considered in what seems to be its original feature, is the faculty of manufacturing artificial objects, especially tools to make tools” (139). The newly evolved human is defined by Bergson, as with Kerr, not by their

³ Aristotle’s *Nicomachean Ethics* (I.13) and *De anima* (III.11)

intelligence *per se*, but by their ability to conceptualize and use technology, as well as the way that technology shapes them—a break from the old form of humanity and a portent of future change.

Such conceptualizations of the new human were inherently revolutionary because they upended the status quo and posited not only a new citizen-subject, but a new political world that such subjects would inhabit. For example, the idea of the *homo novus* being wrought by revolutionary change, resulting in a totally new individual, is central to Judeo-Christian ideology, with the Bible claiming complete spiritual and corporeal rebirth through Christ: “Therefore, if any man be in Christ, he is a new creature: old things are passed away; behold, all things are become new” (II Corinthians 5:17). This new creature is the result of belief in a new system of thought, which results in both physical rebirth and political change—that is, revolutions have always invited corporeal reimaginings. Referring to the French revolution, Antoine de Baecque notes that “corporeal images were at the very center of the metaphoric language used to describe the revolution in progress” (I), while the body politic during the English Revolution is well known to have been regarded as a mass collection of men that could be considered one living superorganism, superseding god and nature: “For by Art is created that great LEVIATHAN, called a COMMON-WEALTH, [...] which is but an Artificiall Man; though of greater stature and strength than the Naturall” (Hobbes 81).

Yet as a specific term, one with a fixed association to a socialist political movement that would grow, expand, and vary over the coming century, “‘new man’ first entered European and world political language in the 1860s and was associated with a particular political group: the Russian intelligentsia who emerged as a revolutionary force and claimed to change Russian society” (Cheng 15). With the rise of socialist national expansion, the

Russian “new man” quickly became the Soviet new (hu)man (новый советский человек), and, as an ideological and corporeal ideal, was taken up by various other socialist movements across the globe, most notably in China. As a concept delimited by both historical association and biopolitical experimentation, “the new human” has analogues throughout place and time but is here⁴ specifically used to refer to the revolutionary new citizen subjects created under socialism.

The “new socialist human” was imagined not only as an individual subject newly defined under socialism, but also as a synecdoche for socialist populations more broadly. Pang Laikwan is quick to note the way that such images of embodied subjecthood as described by Thomas Hobbes are easily shifted from the individual to an application to the masses and the ways in which individuals interact “with the dominant ideology to acquire a sense of self” (Pang 3). This is reflected in Marx’s own identification of “the human essence” not as something abstract that is inherent in each individual, but rather that “in its reality it is the ensemble of social relations” (Marx, *A Contribution*, 11-12). Cheng Yinghong further elaborates that this emergent subject formation was more than merely an ideological reshaping, claiming that, at least for the socialist project, “behind the ideological, political, and social changes [to the communist movements of the last century] was a more ambitious and comprehensive goal: to remold the mind, psychology, and even character of individuals

⁴ I use “new socialist human” throughout this text whenever possible, even though it is not necessarily etymologically or historically correct. While many descriptions of the “new human” used “man” in the generic sense, their ideal subject was considered to be male. The phrase “new Soviet (hu)man,” from which the “new socialist human” derives, was written “новый советский человек,” using the word “человек,” which functions etymologically identically to the English “man,” in that it has both a generic meaning of “humankind” but also a specific meaning of a male human, from which a female or nonbinary human would deviate. There are many examples of the “new socialist woman” as a separate category from the “new socialist man,” but as “new socialist man” was a category invested from the outset with the linguistic ambiguity of referring to both the mass of humankind and the sex-specific traits associated with masculinity, I have chosen to use “human” rather than “man” in my own analysis, and retain “man” as a generic term only when the original authors have done so.

by means of various party and state policies designed for a “new man” and, through this “new man,” to make history and perpetuate the revolution” (1). Beyond even the psychological dimensions of this humanistic remolding was a concerted effort to reimagine an embodied population that was fundamentally informed by socialist ideology.

The new socialist human was therefore the natural end point of centuries of revolutionary ideology and corporeal language in which ideal individuals were remade in the light of a new society. As socialist revolutions intended to make the world anew, so too did they intend to remake humanity. The socialist new human was defined by a specific set of characteristics that were posited as differing from their predecessors; for example, Theodore Hsi-en Chen identifies the following seven attributes as characteristic of the new socialist human: absolute selflessness, obedience to the Communist party, class consciousness, ideological study, labor and production, versatility, and being a “red expert.” Of these, ideological and manual transformation are intertwined, with the special recognition that [in China specifically] “The Common Program of 1949 provides that reactionary people ‘shall be compelled to reform themselves through labor so as to become new men’” (92). Through physical change came ideological change, and ideological change necessitated physical change.

National approaches to creating such a new socialist human were two-pronged: new people would develop their bodies through labor and health-conscious lifestyles, and they would develop their minds through education and cultural indoctrination. Various socialist regimes adopted wildly differing approaches to how best to implement these measures and which measures to emphasize. For example, the possibility of the rebirth of the current population as idealized citizens differed greatly from the perceived necessity of removing old ideologies and defunct bodies in order to make way for new generations, despite both

approaches being focused on perfected future populations. What was consistent among these various national approaches was the central importance of cultural education for both individual development and ideological evolution.

Socialist Chinese authors and policymakers, for example, viewed the new human as a figure that was capable of being remolded through restorative labor and ideological education. Chen claimed that this process both created a new generation of ideal citizens while simultaneously reshaping existing ones, noting that “While the new generation is being molded according to the Communist ideology, older people with old minds and hearts must be remolded. The making and remaking of new men therefore becomes a fundamental task of the Communist revolution and the central aim of education” (99). Chinese science fiction author Zheng Wenguang, a staple of science fiction from the fifties through the eighties, identified the reshaping of new people through education as also central to the aims of science fiction, claiming that “The realism of science fiction is different from the realism of other genres; it is a realism infused with revolutionary idealism because its intended reader is the youth (*“Tantan Kebuan Xiaoshuo”* [“Discussing the SF Novel”]). The youth referred to here reflect the fact that Chinese views towards the new human held that they could be molded from existing individuals through education, and such an education would be acquired, at least in part, through the consumption of science fiction.

Thus, while the concept of a new human is not inherently new in and of itself, what is unique about the new human as it emerged through various socialist projects is the way in which authors and policymakers alike treated science fiction as an actionable blueprint for developing such a human. By treating the socialist citizen-shaping projects of the twentieth century as radical attempts to create a new form of humanity that could only exist under socialism, science fictional depictions of a new socialist humanity played a critical role in

shaping the interrelational, aesthetic, and epistemological paths that these massive experiments traversed. By exploring, predicting, inspiring, and, in some cases, even commanding individual enrollment in the developing body politic, science fiction conflated idealized individuals with idealized national and political states.

Chinese science fiction authors were not alone in their belief that futurist predictions of bodily perfection could influence new generations to develop in the same vein. In discussing the role science fiction played in developing Russian society at the turn of the twentieth century, Anindita Banerjee identifies its value as exemplary of Gramsci's "'cultural pedagogy': when literature or art, playing on the deepest desires, anxieties, hopes, and fears of its audience, simultaneously enables them to perceive their world in a new way and provides them with the skills and dispositions necessary for inhabiting it" (12). Science fiction allowed for a new understanding of who an individual was and what his or her place in a rapidly changing world might be. But more than simply reflecting existing cultural or political trends, science fiction was uniquely situated to mold the biopolitical reality of emergent socialist revolutionary citizens. This formation of a new body politic was not simply reflected in a type of literature reacting to ongoing changes, but actually predicted by and shaped by it.

For example, Banerjee gives the example of an early Soviet propaganda pamphlet entitled *The Soviet People*, which claimed that the country had become the "motherland of a new and higher type of Homo sapiens: Homo sovieticus" (43, quoting Mikhail Heller) framing the birth of the nation as a science fictional achievement in which "millions of years had been needed for the cell to advance to the stage of Homo sapiens, to reach the level of man endowed with reason, but it took only sixty for him to be cleansed of all impurities," thus giving birth to "a new biological specimen" (43). That such an emergent new human

was identified as the result of a national engagement with biological modernity represents the techno-scientific reconfiguration of both the body and consciousness that was a feature of socialist aesthetics more broadly and socialist science fiction specifically. This biological reconfiguration was central to both Marxist materialism and Maoist idealism. In Russia, utilizing an aesthetics of embodied modernity, “[...] science fiction was an unprecedented negotiating medium between everyday life, *byt*, and the higher planes of existence, *byt’e* [...]”. Biological modernity implies biophysical, biopsychological, biosocial, and biocultural change, often disciplinary in nature, with a shared emphasis on the betterment of life” (Banerjee 120). At the same time that in China the “ardent Cultural Revolution further legitimized the aestheticization of not only politics but also society,” promising “not only a better but also a more beautiful future” (Pang 29-30). Because socialism promised a better future populated by better humans, and science fiction was positioned to describe that future, literature focused on the new socialist human became more than simple propaganda and actually served as the foundation for many of the policies that would shape real people’s lives.

One of the most widely recognized examples of the influence of science fiction on political developments is the impact that the socialist revolutionary and science fiction author Nikolai Gavrilovich Chernyshevsky had on the early Bolshevik party. His science fictional novel, *What is to be Done? A Story of the New Man* (1861) defined and reified the attributes of the soon-to-be-realized new human: (s)he was to be selfless, healthy, muscular, strong, well-educated, and exhibit individual behavior consistent with the betterment of socialist society. (S)he was to reject any animalistic impulses under the aegis of collective well-being and master him- or herself through rigid adherence to intellectualism and physical discipline. The story was wildly popular upon publication and introduced the term “new (hu)man” to the broader public, as “Rakhmetov, the heroic antagonist of the novel, is

identified as “belonging to a new breed” whose attributes represent a whole new generation of the revolutionary intelligentsia” (Cheng 16). A contemporaneous Soviet writer, Mikhail Koltsov, attributed the emergence of Soviet labor heroes explicitly to this vision of the new human: “Yesterday a peasant, a sullen poor peasant, today he is remade in the Bolshevik crucible into an advanced worker, the pride of his class and country—he has become before one’s eyes a strong person of tomorrow” (Brooks 85).

The popularity of Chernyshevsky’s novel in inspiring a new wave of revolutionaries is difficult to overstate; according to Cheng Yinghong, “When a revolutionary was arrested, often one of the first questions he or she was expected to answer was, “When and where did you read *What Is to Be Done?*” (17) In its depiction of a rational future utopia guided by technology and socialist ideology, *What Is to Be Done?* inspired a “new breed” of people who would bring such a future about. Not simply a matter of inspiring individuals to emulate the behavior of its characters, however, it was also the direct source of political emulation. Lenin himself regarded Chernyshevsky as his forerunner, not Marx or Engels. Speaking of the need to cultivate class consciousness among the workers of the world, Lenin “outlined his thesis in his famous pamphlet *What Is to Be Done?* (1902), whose title reflected Chernyshevsky’s influence on him” (Cheng 17). By basing his political treatise on a science fictional one, Lenin illustrated the direct outgrowth of political efforts at the highest levels drawn directly from science fiction. Socialism’s “new breed” of humanity was inspired by literary projections of human evolution in the future, foregrounding an emergent socialist body as the locus of social change more broadly.

In the following sections, I will give a brief introduction to three examples of science fiction that grapple with the emerging new socialist human in China, Russia, and East Germany. Emerging from the same political regulations that outlined socialist realism, art

and literature that were conceptualized as explicitly socialist were not produced as purely aesthetic products; rather, they were intended to uphold and promote socialist ideology for their readers. What this tended to mean was a dedication to depicting a teleologically inevitable, ideal socialist world, along with the imperative to both imagine and train the ideal citizens who would inhabit it. This new socialist subject would, through literature, become something entirely new: the new socialist human, a construct of futurity and a representative figure of national self-identification.

CHINESE SCIENCE FICTION AND THE CHINESE MODEL CITIZEN (模范公民)

In his unfinished 1902 novel *The Future of New China* (新中国未来记), the reformer, author, and politician Liang Qichao describes a utopian 1962 in which individuals live in harmony with themselves and the state. Though interpersonal disagreements remain, the utopian social conditions of the Chinese government are reflected in the relationship between individuals, while between citizens and the state, a “perfect mood” (Wang 2010). reigns. By depicting a perfect society in which individuals are both subsumed into a unified harmonious collective while also actively envisioning and shaping the society that engenders them, Liang joined fin-de-siècle thinkers such as Kang Youwei, Chen Duxiu, Lu Xun, Tan Sitong, Lin Yutang, and others in projecting an imaginary future that would be inhabited by imaginary citizens as an achievable goal of modernity.

In some ways, this vision represents what John Fitzgerald describes as the end of history, a Confucian-inspired idea of “a universal era when ‘all under heaven belonged to all’, an ideal age in which no distinction was recognized in the civilized world between public and private, and in which all primordial, religious or ethical grounds for rivalry among families

and communities had dissolved” (19). The elimination of interpersonal division as the grounds for strife would be effected by a cohesive governing body, even when those interpersonal divisions themselves remained. Rather than a homogeneity of embodied and cultural characteristics, individual differences might remain salient markers of personal identity, but would cease to become a source of division when “the people” were united as one under a benevolent vision of development.

David Der-wei Wang identifies this futurist vision as a unique development of Chinese literature at the turn of the twentieth century, one characterized by the recognition of national trauma at the hands of Western imperialists. Wang stresses that literary futurity at the beginning of the twentieth century was “an inherent assertion of a body politics re-forming China at both national and personal levels,” with actionable depictions of development in literature seen as “a tool crucial to reconstructing the national body” (Wang 2004, 279). Wang is not alone in seeing China’s futurist visions as reactions to its colonial subjugation; theorists such as disparate as Ban Wang,⁵ Nathaniel Isaacson, Lydia Liu, and Song Mingwei have all written extensively about literary attempts at reckoning with China’s semi-colonial subjugation, with Isaacson specifically noting that “Advocates of science fiction in early twentieth-century China sought to adopt the sf genre as an instrument of national strengthening, scientific popularization, and political revitalization” (Isaacson 2013, 33) wherein “the importation of science and science fiction appeared to many Chinese intellectuals to be a matter of national survival” (Isaacson 2013, 34).

⁵ Ban Wang explicitly claims that “Chinese nationalism is a response to a situation of colonialism and national crisis.” (Wang, Ban. *Illuminations from the Past: Trauma, Memory, and History in Modern China*. Stanford University Press, 2005, pp. 19), while Liu’s monograph *The Clash of Empires* explores how the very concept of “China” as a modern nation developed out of competing systems of comparative epistemological grammars.

The projection of future citizens as free from the degrading and dehumanizing effects of their past as humiliated colonial subjects was central to the constitution of a strong body politic, free of the “Sick Man of Asia”⁶ stereotype widely in circulation at the time. As early as the late 1880s, national criticism had begun to circulate contesting the “prevailing European representation of China as a decaying corpse” (Fitzgerald) by re-envisioning it as a sleeping giant, a nation that would awaken in the future to great power and acclaim. Upon awakening, the physical limits of the planet itself would be the only constraints on its progressive development, with reformer Kang Youwei musing positing that an ideal community would be one that had overcome divisions in language, class, and culture in order to achieve interstellar peace and prosperity. As a practical mode of achieving this future, however, he settled on a consideration of “how to do away with the calamity of war in the world in which I was born,” as opposed to pondering “deeply how to rid all the stars and all the heavens of war” (66, 80). On Earth, the most practicable way of achieving global harmony was a near-future nationalist project that elided class, gender, race, language, religion, and other markers of division under the utopian auspices of harmony in the national body reflecting harmony in the state—a harmony to which sleepers will awaken after Western capitalist oppression is overcome.⁷

⁶ The “Sick Man of Asia” (东亚病夫) was a concept that pathologized Chinese bodies through Western representations of them as inherently sickly, weak, and craven. This concept remained at the forefront of much of Chinese cultural policies from the late 1800s up to the present day.

⁷ The role of “waking the sleepers” through near-future literary calls to arms was taken up most famously by Lu Xun, who wrote in his preface to *Call to Arms* an analogy of the country’s sleeping citizens: “Imagine an iron house: without windows or doors, utterly indestructible, and full of sound sleepers – all about to suffocate to death. Let them die in their sleep, and they will feel nothing. Is it right to cry out, to rouse the light sleepers among them, causing them inconsolable agony before they die?” to which his interlocutor responds that if even a few awaken, then destroying the iron house will have been worthwhile. Lu Xun. Preface to *Call to Arms. Selected Stories of Lu Hsun*. Foreign Language Press, December 1922.

Transferring the perfectibility of the human from a question of space to a question of time, Liang's unfinished novel represents what David Der-wei Wang has identified as a fold in time "between the miserable past and the fantastic future," in which its future citizens, awakened to their full potential, were "called on to witness the suspension of history and project its fulfillment in the long run" (Wang 2004, 84). The novel's primary speaker, Kong Juemin (孔觉民), has a name that means "to awaken the people" or "to enlighten the people," indicating that his didactic role is one of interpellating a broadly understood mass of people into the project of development. And while Liang's future China is not itself socialist, his vision for China as a powerful future force is one shared by the twentieth century's numerous experiments that attempted to imagine varying configurations of future communities united as one.

The new human as it was imagined in China thus became defined by a process of transformation that was localized in place but projected forward in time, a nationally bound ideal that developed in response to what was conceptualized from the outset as an alternative epistemological project of healthy, robust subjectivity. From the early twentieth century's cultural reformers through the rise of Maoist party politics through the post-1989 boom,⁸ the new human was depicted as a national citizen made possible by evolving state policies, but also as responsible for the development of those policies. As Mao's socialist vision became increasingly prominent, this new human, too, was increasingly shaped by an evolving socialist ideology. But even before 1942, when Mao elaborated during the Yan'an

⁸ The point at which Song Mingwei identifies the current boom in science fiction being produced in China, especially science fiction dealing with ethical technological development. See both "Variations on Utopia in Contemporary Chinese Science Fiction." *Science Fiction Studies*, vol. 40, no. 1, Mar. 2013, pp. 86–102 and "After 1989: The New Wave of Chinese Science Fiction." *China Perspectives*, no. 1, Jan. 2015, pp. 7–13.

Talks his vision for a national communist literature, literary depictions of the humans who would populate a future China were deployed as a rejection of Western ideals and to consolidate the symbol of what a future Chinese citizen would be.

That a newly defined Chinese citizenry was defined as explicitly a product of socialist development grew out of this central preoccupation with a rejection of the West.

Contemporary cosmotheorist Yuk Hui identifies the double-bind of conceptualizing a new epistemological project—such as that of the new human—through its rejection of an imposed and hegemonic standard as a denial of coevalness that maintains the language of the dominant form. He claims that “*In China, technics in the sense we understand it today—or at least as it is defined by certain European philosophers—never existed.*” There is a general misconception that all technics are equal, that all skills and artificial products coming from all cultures can be reduced to one thing called ‘technology’. And indeed, it is almost impossible to deny that technics can be understood as the extension of the body or the exteriorization of memory. Yet they may not be *perceived* or reflected upon in the same way in different cultures” (9). Authors creating a science fictional projection of the ideal human form were attempting to create something new—a new China, a new citizen—while predicating that vision on a rejection of the past and disavowing historical memory of corporeal trauma. In its origins at the beginning of the twentieth century, this development grew out of colonialism, while later Maoist attempts to reject the past became defined by many theorists as a rejection of history itself. Shaped by an embodiment that rejected illness and weakness for health and power, the new human would awaken into a world where historical trauma was little more than a nightmare best left in the past.

One of the earliest science fictional texts to grapple with this physical embodiment as a rejection of Westernized modernity was Xu Nianci's 1905 text "New Mr. Braggadocio," which—while a humorous, silly, and deliberately bombastic romp—attempted to articulate the new human at the intersection of technological progress and national development. The titular Mr. Braggadocio became a symbol burdened by historical consciousness and the necessity of individual and national development in response to that historical positioning. David Der-wei Wang has identified this characterization with "The notion that things evolve in a linear fashion, and even progress towards a single natural end, [which] became a commonplace among enlightened intelligentsia of the late Qing, having for them the status of a natural law and moral imperative" (Wang 1997, 301). "New Mr. Braggadocio" plays with the linear progression of time by posing an alternative epistemological understanding of the body and its various sensorial ways of relating to the world. In doing so, it creates a future citizenry explicitly separate from the universalizing humanism of Western impositions.

Various translated as "New Tales of Mr. Braggadocio," "New Tales of Mr. Windbag," "A Tale of New Mr. Braggadocio," "New Tales of Mr. Absurdity," etc., "*Xin faluoxiansheng tan*/新法罗先生谭" is a text that Ma Shaoling identifies as a prototypically unique combination of foreign sources and literary traditions, classical Chinese traditions of the *zhiyuan* (tales of the strange and supernatural) and *chuanqi* (fantastic tales and romances), and modern scientific and pseudo-scientific theories, written in the classical *wenyan* form (55). The story serves as a sort of satirical companion to a Meiji-era Japanese short story by Iwaya Sazanami, "which Takeda Masaya 武田雅哉 identifies as a loose translation of the stories of Baron von Münchhausen" (Isacson 2016, 2). Both the story and its subsequent translated prequels "bear many of the thematic and historical hallmarks of colonial modernity—

globally circulated Baudrillardian homages to translations of translations long divorced from any originary ‘master text’” (Isaacson 2016, 2).

The story begins with the self-introduction of the titular Mr. Braggadocio, who announces himself as one who once believed in all that was prescribed by religious and traditional thought, until the lived experience of empirical observation and experimentation changed his approach to the world. Still, however, he finds himself fascinated by the idea that “there would be nothing we call knowledge that would fall outside the purview of science, and there would be no further discovery” (Xu 15)—that is, that what constitutes knowledge is continually in the process of being invented and nothing can be learned or understood outside the epistemological bounds of what he decries as “sophistry.” “In anguish, he climbs to the top of a mountain, loses consciousness in an infinite gravitational pool, and wakes up to find that he has split into—“for lack of better names”—what religions refer to as the “soul” (*linghun*) and the “physical shell” (*quke*)” (Ma 57).

Thereafter the two split halves of the narrator pursue different narratives; in one, the soul-self engages with an experiment in producing light—an experiment that involves notes on the physical function of solar waves and includes a critique of Western scientific learning that distances the narrator from Western modes of knowledge production, seen to be inferior and confused (“Sunlight mixes with all other particles, which Occidental people refer to as ‘energy’, but actually once energy has been released in light, it disappears” (Xu 18) and “[...] the entirety of Europe and the Americas and everyone was astonished by it. Astronomers, physicists, chemists and naturalists, seeing that all objects had lost their shadows, attempted to use their knowledge to explain the source of the light. Their discussions were a confused hodgepodge, their arguments muddled” (Xu 19). This section of the narrative incorporates numerous jabs at the supposed superiority of Western scientists,

all shown to be subpar or foolish in comparison to the extra-empirical experience of the narrator's soul-self.

At the same time, the narrator's body-self "comes rattling to a halt" in the center of the Earth, where it encounters the venerable ancestor of the Chinese race, Huang Zhongzu/黄种祖—a god-like scientist who practices a type of moral chemistry, revealing to the narrator that "only three ten-thousandths [of a gas] remain" that contribute to the human capacity for autonomy and altruism, while more than "sixty-five percent remains [...of a substance making up] the desire for money, while this is superstitious faith in spirits. And this unstable gas is unbridled arrogance, while this one is benighted ignorance" (Xu 26). The old progenitor bemoans the fate of (Chinese) humanity when such a preponderance of their moral chemical balance is poisonous. In doing so, he frightens the narrator so much that he bodily flees, only to be ultimately reunited with his soul-self, which has just returned from a trip to Mercury and Venus.

Even in this brief synopsis we can see how invested in questions of subjectivity, nationalism, and possibilities for alternative modernities are being addressed, even if the narrator begins the tale by dismissively announcing that it is nothing more than a ludicrous imitation of the Japanese short story (itself based off of the absurdity, inconsistency, and social satire contained in the German *Baron Munchausen*) and not to be taken seriously. Yet despite its satirical and wildly hyperbolic tone, as well as the at-best shaky description of modern physics, chemistry, astronomy, economics, evolutionary biology, and geology, the story centers around an epistemological paradox related to knowledge production and

proof,⁹ as well as an exuberant embrace of a physical existence that rejects the “Sick Man of Asia” caricature promoted by the West.

Through this embrace of alternative embodiments and approaches to modernity, “Tales of New Mr. Braggadocio” illustrates two separate impulses: that of the historical-epistemological and that of the ethical-practical. Despite the story’s patent and self-conscious absurdity, it runs head-on into questions of cognitive and exploratory systems that, though imaginary, involve very real contradictions and clashing epistemologies. The end of the story itself is emblematic of the danger posed by modern technology as an enframing device—though a socialist vision that allows for the non-necessity of employment or labor while having every need met is theoretically the teleological end goal of a society moving towards full socialism, the narrative resolves with widespread unhappiness and riots as a result of the very achievement held up as a socially-localized ideal. Though Mr. Braggadocio has been obsessed with the concept of that which is not knowable by science, in the end he harnesses that extra-scientific ability and enrolls it in the rationalistic process by which it will become known and utilized by society—he even founds a university with one hundred thousand students, all enrolled in a course dedicated to how to harness, master, and utilize brain electricity—and in doing so, problematizes his own impossible idealization of a way of knowing that exists *external* to the scientific process.

By embodying speculative scientific progress in the physical bodies of individuals, “Tales of New Mr. Braggadocio” inculcates national progress as an embodied practice and

⁹ the Munchausen trilemma is central to “New Tales of Mr. Braggadocio,” in that it argues that for any knowledge to be proven true, proof must be provided, yet proof can also be demanded of any proof held to sustain the original terms of knowledge production. Either the proof is taken as axiomatic, the theory and proof support each other in a circular argument, or, ultimately, each proof requires further proof *ad infinitum*. Mr. Braggadocio evades the question of proof altogether by insisting on the epistemological validity of knowledge outside of a Western Enlightenment rationalism, yet also directly engages with that same telos of modernity.

casts the titular character as emblematic of an aspirational futurity who has surpassed the accomplishments of Western scientists. This focus on a model citizens—both fictional, as with Mr. Braggadocio, and real-life, such as Lei Feng¹⁰—conflated individual and mass desires with utility to a broader body politic. Older Western research, such as Charles Ridley, Dennis Doolan, and Paul Godwin’s 1971 study on the use of educational materials in molding young Chinese minds, deals with this by focusing primarily on the propagandistic aspects of developing model behavior in children. More recent scholarship, such as James Farley’s dissertation on the construction of new citizens through the use of model workers (2016), is more cognizant of the role in overcoming national humiliation and establishing an image of a strong body politic that was central to the population planning projects of the twentieth century. Farley identifies the new citizen as “Fundamental to Mao’s thinking [...]. This ‘new citizen’ was to be based on core values identified by Mao as being necessary for China to successfully build a new society following imperialist occupation” (1) and was part of a conscientious push to create a new class of citizens. By identifying “model citizens” as workers who embodied the values held up for popular assimilation, these values were simultaneously democratized and embodied in individuals who became invested with national ideals.

The titular character from “Tales of New Mr. Braggadocio” can retroactively be read as an example of the kinds of model citizenry that would become more common several decades later, despite its foregrounding as a work of humor. In his representativeness as a “new generation” who has surpassed Huang Zhongzu,¹¹ Mr. Braggadocio, as the apex of

¹⁰ Lei Feng was a communist soldier who became the face of numerous propaganda campaigns exhorting Chinese citizens to “follow the example of Lei Feng.” He was idealized as the epitome of physical health, moral courage, right-thinking, and ideological praxis.

¹¹ The story’s racial ancestor and creator of a specifically Chinese humanity.

human development, must awaken the “earliest civilization in the world” from its people’s “muddled dreams, wipe the sleep from their eyes, push them to catch up, and create a new true civilization. They can use [his enhanced physical capabilities] to put the people of Europe and America to shame, and allow the yellow races to rule the roost” (Xu 19). As the image of the new model citizen began to form from Confucian and post-colonial imaginaries, it did so as a symbolic rejection of the Western imposition of weakness and depravity onto an emerging body politic, one defined just as much by what it rejected as what it embodied. The idea of the “Sick Man of Asia” and the legacy of Western imperialism would continue to haunt the new human in China, to the extent that contemporary scholars such as Song Mingwei define the post-human as one intentionally unburdened with a historical consciousness, unlike the human who is aware of his or her historical burden (Song 2015). To embody the dream of physical perfection requires that the sleeping nation awaken from the nightmare of its past and become what Liang Qichao identified at the turn of the century as *xin min* (新民)—the new humans who would revolutionize the nation and carry it into the future.

RUSSIAN SCIENCE FICTION AND THE SOVIET NEW MAN (НОВЫЙ СОВЕТСКИЙ ЧЕЛОВЕК)

Perhaps it seems anachronistic to speak of Chinese science fiction before speaking of Soviet science fiction, as Soviet literary regulations on the genre inarguably influenced those promulgated in China. Rather than focus on the lines of influence that Soviet Russian science fiction had on its more-or-less concurrent development in socialist China, such an approach elides the question of one-to-one influence and instead recasts the issue of science

fiction's national development as a comparative study within the larger aspect of genres of socialism, in which both socialist ideologies and science fictional literatures grapple with questions of futurity and the role individuals would play in it.

What would come to be known as *nauchnaia fantastika* was not defined as such until 1938, at the height of the Great Terror that sought to eliminate “undesirable” elements from the Stalinist regime. Through a simultaneous purge of mass reminders of the nation’s feudal and ethnic past at the same time that a literary genre for identifying the future’s ideal citizenry was codified, science fiction in Soviet Russia became intrinsically tied to a programmatic articulation of the new socialist human’s role in society.¹² Until this classificatory term was used by one of the leading literary figures at the time,¹³ the literature that would be grouped under the label *nauchnaia fantastika* was not defined or singled out in any special capacity from the field of broadly-defined “light” or “popular” literature. While it would later become a powerful genre capable of speaking both for and against the government, its origins were humble, being largely seen as either a type of writing for children or as a Western importation, not a defined genre with specific political aims. As Matthias Schwartz writes, “Only as a result of the intensified literary political polemics in the late 1920s did *nauchnaia fantastika* begin to be discussed and conceptualized seriously as a special, different type of light fiction. Not until the second half of the 1930s was it used to

¹² Note that *as a fixed genre* it was conceptualized and named later than in either China or the West.

¹³ Writing in 1938, the father of Soviet science fiction, Alexander Beliaev, wrote: “When a new scientific-fantastic novel [*nauchnaia fantastika*] is published, the copies are literally sold out within hours. In the libraries, there is a never-ending waiting list for such books. In magazine surveys, readers consistently rank scientific fantasy in first place... Its success among readers is immense and indisputable.” (Beliaev, Alexander. “Zolushka: O nauchnoi fantastike v nashei literature.” Translated by Matthias Schwartz. *Literaturnaia gazeta*, 15 May 1938, 3.) Beliaev at this point had already written a classic of Soviet science fiction, “Professor Dowell’s Head” (Голова профессора Доуэля), among others.

denote a generally accepted though still contested genre, now officially assigned to the field of children's and youth literature" (225).

That is to say, when Russia officially became communist in 1917 following the seizure of power by the Bolsheviks, neither the term nor the concept of science fiction/*nauchnaia fantastika* as a bounded genre, separate from popular writing, existed.¹⁴ Rather, popular writing with scientific elements circulated without distinction as part of the country's mass literary media, associated most strongly with adventure stories and detective novels. According to Schwartz, the Pinkerton detective novels in particular were popular imports at this time, as were certain authors writing in the earliest stages of what would come to be known as science fiction first in the West, and later in Russia as well. "In the 1920s, all reader surveys named adventure literature as one of the most popular types of literature, and translations of foreign texts fascinated readers the most. Edgar Rice Burroughs, Jules Verne, Sir Arthur Conan Doyle, and H. G. Wells were probably the most widely read contemporary foreign authors of the time" (Schwartz 229). Translations of English science fiction were being read in Russia roughly around the same time they were circulating in China, furthering fears of Western influence.

This transnational popularity of proto-science fictional, proto-national literature caused no small amount of consternation among both authors and politicians, such that at the 1922 Komsomol fifth conference, Nikolai Bukharin—who would go on to spearhead

¹⁴ According to Schwartz, the first person to "provide a more elaborate conceptual formulation of *nauchnaia fantastika* [...] was the young fantasy author Palei" in 1929, when he presented his ideas for a "Soviet scientific fantastic literature." Much like the outlines for Chinese science fiction presented by Wu Dingbo, Palei's proscriptions for Soviet science fiction were relatively limited both aesthetically and politically: "*nauchnaia fantastika* was first and foremost to correspond to scientific standards, that is, it was to have a popularizing effect. Second, it was to introduce readers' imaginations to new research questions, that is, to be inspiring. Third, it was to satisfy high literary standards by consisting of well written and excitingly presented subject matter." Ibid, pp. 235

the Stalinist “socialism in one country” (социализм в отдельно взятой стране) state policy, ultimately shifting the Soviet Union away from a theory of global, international socialism and towards an internal self-strengthening movement—demanded the introduction of a “Communist Pinkerton” that would “focus on man conquering nature with the help of science and technology, and they were to include depictions of the “society of the future” (Schwartz 228). In doing so, policymakers and authors hoped to use science fictional depictions of a specifically ideologically constrained individual to throw off the specter of Westernization and create a national future vision that would both satisfy market demand and undergird national ideological policy as embodied in individual character types.

Yet science fiction as it developed in Soviet Russia was also a genre deeply concerned with questions of bodily commodification, medicalization, and a superhuman insistence on the superiority of socialist bodies over capitalist ones. During the years following Russia’s rebuilding and reorganization following the Bolshevik Revolution, hygienic state practices underwent a two-fold epistemological development: while severe epidemics ravaged cities and biomedical practices utilizing the century’s newest technological innovations sought to combat real material illnesses, the concept of a modernity replete with “social diseases”—often associated with the idea of contamination and boundary breakdown, both of the physical body and of national borders—also came into being at this time. What we see occurring concomitantly is a national discourse conflating biomedical practices of cleanliness, health, and technoscientific progress with the rise of national might.

While Lenin famously claimed, “either socialism will defeat the lice or the lice will defeat socialism” (Lenin 1961, 228) and labeled his opponents parasites, diseases, and filth, the new commissar of health (1918) steered the national agenda towards disease prevention and eradication. That is, at the same time that cleanliness and health were very real material

problems facing society, they functioned separately and equally at the immaterial level to represent social and individual degradation. Medicine and bodily integrity were therefore paramount not only to a new view of biomedical practice, but also for the new concept of biosociality within the public sphere—a concept that enrolled the general populace into nation-building practices focused on their own corporeal forms. Health became defined not only the absence of pathology but as the active promotion of well-being, including those behaviors that contributed to a healthy national body.

Much like with the “Sick Man of Asia” stereotype against which Chinese science fiction developed, dirt and germs therefore came to represent a capitalist threat to the development of the socialist nation. Soviet socialism viewed scientific developments even tangentially affiliated with the West with deep suspicion, considering them ideologically tainted and capable of corruption. Despite this inherent suspicion, however, in 1918, Lenin insisted that Russia “must adopt all that is valuable in the achievements of science and technology from the West,” despite the fact that, “like all capitalist progress they stand for the refined brutality of bourgeois exploitation” (Lenin 1972, 63). In order to catch up to the West, methods of production developed by Taylor and Ford (to be discussed further in chapter two) were adopted and integrated into Russian biopolitical control of the body, evidencing the obsession of Russian hygienists with regimented work production and its utilization of human labor: incorporating industrial timekeeping into a mechanical regimen for the body, laying out tables for the rational planning of both the workday and leisure/personal edification, mechanization of the body’s biological functioning, and more were all enthusiastically adopted. It should come as no surprise, then, that the body became the arena wherein battles between cells and germs, vitamins and malnutrition, sickness and medicine, took place, but also where the state sought to reify its regimen for nation-building

from the smallest scale up to the biopolitical polity as a whole. In her critical work on Russian modernity and science fiction, Anindita Banerjee identifies this drive as “[...] a peculiarly national engagement with biological modernity, [in which] Russian science fiction clung to an ethos of emergence and nonteleological transformation even as it appropriated techno-scientific means of reconfiguring the body and the consciousness” (121).

Any deviation from prescribed biomedical guidelines was construed as leading to imminent ruin, united as such guidelines were with the explicitly political coupling of the body of the individual and the body politic. In the discursive marriage of state interventionist practices and physical health, socialist Russian citizens could advance directly to a higher utopian state by adhering to guidelines for both health and social production. This “utopian state”—much like the ontological dualism of health that was at once both abstract and corporeal—was doubly conceptualized as a “state of being” but also the praxis of ensuring a perfect socialist polity, with the body of the citizen belonging to the state and any health problems caused by “deviant behavior” undergoing a discursive shift towards classification as mutilations on the body politic, not merely a matter of individual ill health. Literature in general, and, increasingly during this time period, science fiction in particular, were as equally under the control of a newly-centralized state as hygienic guidelines, and—tasked with the responsibility of promoting not just scientific possibilities but ideologically correct scientific possibilities—were uniquely situated to outline the new expectations of and for bodies within the developing state system.

The Soviet Russian public and scientific establishment further came to be characterized by a singular fixation on the possibility of overcoming death and physical degradation in pursuit of a utopian future freed from the constraints of the corporeal body. This body, newly positioned in relation to the state, represented in an immediate and

quantifiable way the material building blocks of a more nebulous and undefined body—that of the state, only recently piecing itself together following the previous years of violence and bloodshed. The material violence done upon the nation state was thus to be remedied in the individual physical body, with the aim of rectifying political turmoil writ large through state-sanctioned practices of modernized hygienic practices. This rectification necessitated intervening heavily in the human body, but in doing so, the body itself was problematized—it was simultaneously representative of the larger political body but also a hindrance to be overcome.

One particularly instructive text (and one to which we will return in more detail in the next chapter) for thinking about the context of the science fictional body in not-quite-yet socialist Russia is Alexander Bogdanov's *Red Star: The First Bolshevik Utopia*. As previously noted, Russian science fiction grew out of a much more populist tradition than did Chinese science fiction, often introduced by Western translations, popular texts written in an imitative style of detective novels, or pulp. It wouldn't be until the codification of a socialist literary paradigm in 1932 under the auspices of the Union of Soviet Writers (Союз писателей) that science fiction assumed the sanctified role in public and political life that it was known for during the later Soviet years. At the very beginning of the twentieth century, however, polemical propaganda as art was nowhere near as popular among the general masses as adventure stories. Richard Stites, in his introduction to the 1984 English translation of *Red Star*, notes that Bogdanov, in particular, had close connections with urban workers and revolutionaries, and as such was keyed in to the general public's reading habits. His 1908 novel, *Red Star*, while explicitly a socialist utopia, was also a thrilling story of revolution, adventure, love, and redemption, reissued numerous times during the first few decades of the century. As Stites also notes in his introduction, "The first edition of *Red Star*

appeared in St. Petersburg in 1908. It was reissued in Petrograd and in Moscow in 1918, and again in Moscow in 1922. A stage version was produced by Proletcult theater in 1920. In 1928, after Bogdanov's death, it was published as a supplement to *Around the World* (1). It was widely available, widely read, and seemed to capture much of the prevailing revolutionary and technological fervor of the time.

The novel follows the story of its Bolshevik hero, Leonid—a revolutionary on Earth, whose “sound physical health, flexibility, [...] capacity for intellectual labor, few or no personal attachments on Earth, and as little individualism as possible” (Bogdanov 43) make him ideally suited to his task of serving as a liaison between Earth and Mars. In the vein of Johannes Fabian's description of the denial of coevalness (Fabian 2014), the Martians—characterized by their advanced science, rationality, and physical evolution—represent a temporal classificatory schema in which they are the future of an Earthly society still stuck in the past. While the revolution is just gearing up on Earth, Martian society has been a socialist utopia for at least a hundred years, and Martians view themselves as elder siblings to the still inchoate human socialist brotherhood. While Leonid is, in part, invited to Mars in order to share Earth's culture (in some ways a ruse, as he is unaware that his contribution is being used to convince the Martians that it is not morally acceptable to eliminate all human life and occupy Earth to take its resources for themselves), he is also there to observe and learn about a society that is posited as an inevitable evolution of humankind's future.

I have previously noted the emphasis on literary regulations outlining socialist science fiction in regards to near-future developments and the general lack of the kinds of “implausible” elements that may be included in Western science fiction—aliens, interstellar travel, etc. While a brief synopsis of *Red Star* makes it seem like the exception to such a general rule, in fact, the emphasis in the book is moreso on the temporal political and social

evolution of Earth—how Mars represents the near-future socialist utopia that Earth is in the process of becoming. It is emphasized repeatedly throughout the text that, while it took the Martians a couple hundred years to develop their society, Earth’s more turbulent political climate promises to do the same thing in a fraction of the time. It is very much within the fifty year “near future horizon” that defines most socialist science fiction. But within this near future we see significant changes to both the body and the body politic that would presage much political thought on the same topic.

As the future of humanity, Bogdanov’s Martians illustrate an aspirational ideal for human and social development. To this end, Stites notes that “He [Bogdanov] was the first in Russian fiction to combine a technical utopia, grounded in the latest scientific theories of the time, with the ideas of revolutionary Marxism” (1). Bogdanov’s Martian socialist utopia is socially egalitarian, but completely technocratic and meritocratic. Menni, the leader of the expedition, proves himself to Leonid by explaining that a scientific theory Leonid holds has already long been proven on Mars, and gives him visual evidence to back it up. Upon seeing this, Leonid knows all that he needs to know to leave behind his revolutionary brotherhood and go with the Martians: his own future. Over the course of the novel, it is repeatedly shown that it is the dual victory of the scientific technical revolution with a socio-political revolution that will lead to universal socialism—the two go hand-in-hand.

The opening paragraph of the novel even details how the past is evacuated in preparation for the future—a future that the author of the novel’s diary, Leonid, is already aware has happened (both in the sense that he writes his diary after the events have taken place, not during them, and in the sense that he has seen “the future” in Mars’ more developed society): “The excitement of battle quickly spread throughout the masses. Souls opened selflessly to welcome the future as the present dissolved in a rosy mist and the past

receded somewhere into the distance and disappeared” (Bogdanov 24). The past disappears completely and the present is only defined in terms of the future it already anticipates—a temporal preoccupation tied closely to technosocial developments, as noted by Menni’s burden of proof in the validation of Leonid’s scientific theories—Earth’s current scientific research is irrelevant until adequate future theorizing makes it possible. Similarly, the description of the Martians’ flying machines—that they are made of ordinary material but rely on a matter repulsion that counterbalances their weight—indicates an interest in scientific explanations that are—as Leonid previously pointed out—only possible to theorize about without knowledge that would be potentially acquired in the future. That the Martians have already developed this knowledge—and, as Menni points out, long before Curie or Ramsey discovered it—invalidates the Earth’s past by recasting it given the knowledge of the future.

Once on Mars, Enno, a physicist preparing to give a speech to the Martians on the feasibility of settling Venus, tells Leonid: “You are saddened by the backwardness of your planet and the maliciousness of your humanity. I shall be talking about a planet where the highest forms of life at present are dinosaurs and flying lizards, whose manners are even worse than those of your bourgeoisie. Coal is not blazing in the furnaces of capitalism there, but is still growing in the form of gigantic forests. Shall we go hunting ichthyosaurs sometime? They are the local Rothschilds and Rockefellers—much gentler than the Earthly variety, of course, but then they are also far less cultivated. Life there is on a level of primary accumulation which your Marx neglects to mention in his *Capital*” (73). Again, we see here the temporal reimagining of the past in light of the future—capitalism doesn’t yet exist on Venus, but resources are already imagined in terms of their use value to an ideological and economic system that has yet to arrive. Too, the relationship to modernity in a Russian

context is in full force here; Leonid despairs over the barbarism of Earthlings as compared to the genteel socialist development of the Martians, but Enno reassures him that even the hated bourgeoisie of Earth is more cultivated and well-mannered than the still-primordial beasts of far-off Venus. Thus the inner planets exist in relation to each other not only in terms of developmental distance but also literal distance, with the planet closest to the sun, Venus, at the lowest level of social development (cruel beasts), Earth at a mid-point of advancement (still mired in capitalism), and far-out Mars at the apex of technical, social, and political development (socialism). The most modern civilization is not only temporally ahead but also spatially separate, demonstrating explicitly the relational aspect of science fictional modernity. The future of humanity's corporeal and ideological evolution is thus made plain for Leonid—and by extension, Bogdanov's readers—to see.

There's much more to say about Bogdanov's *Red Star*, particularly in its vision of a future humanity materially and biologically united into one superorganism of shared politics through constant and repetitive blood transfusions, but that will take place in the next chapter. For now, both the structure of the novel and its recurrent focus on temporally situating the scientifically- and socially-advanced present of the Martians and the inevitable future of humankind serve to illustrate ways in which even texts that featured “unrealistic” and “unscientific” plot devices, such as aliens, posited them in such a way as to promote the positioning of the author's contemporary society into an ideological temporal strata that resituated the past in relation to a coming future and the future human as the inevitable progress of contemporary humanity.

EAST GERMAN SCIENCE FICTION AND THE NEW HUMAN (*DER NEUE MENSCH*)

Both science fiction and the concept of the new socialist human developed in a very different context in the German Democratic Republic than in either Soviet Russia or the People's Republic of China. While the development of the new human in Russia had roots in Orthodox Christianity's contempt of the body and the attempt to create a monistic universal apotheosis, and the new human in China developed out of a transformative ideology linking mental and physical development to the unifying progress of a soon-to-awaken postcolonial nation-state, the development of the ideal human in East Germany was dogged not only by opposition to Westernization, but also haunted by the immediate Nazi past. Because German population planning programs under Nazi rule *a priori* excluded individuals from full citizenship and humanity along constructed racial and ethnic lines, the socialist attempt to oppose this history meant that its ideal human, while still physically perfect, was more defined by ideology than corporeal transformation. As it developed out of a cultural break with West Germany and under Soviet ideological influence, the GDR was ostensibly committed to an antifascist socialist development track that rejected any ties to the Nazi-led genocide of their immediate past while struggling to perceive a future completely sutured from that history. It is easy to see how the new socialist human, burdened with such historical baggage, became a flashpoint for these developmental anxieties.

Foremost among this historical baggage, especially as it pertained to idealized socialist citizens, was of course the legacy of Nazi eugenics, which was impossible to evade. Sheila Faith Weiss defines eugenics as a "political strategy denoting some sort of social control over reproduction. In the interest of 'improving' the hereditary substrate of a given population, this supposed science seeks to regulate human procreation by encouraging the fecundity of the allegedly genetically superior groups in society and simultaneously discouraging and even prohibiting so-called inferior types from having children" (1). In the

German context, this improvement of the future national body has historically been tied to *völkisch* (ethnico-racial) ideologies, though much recent scholarship (Weiss's included) has placed the Nazis' eugenics program within a larger international context inclusive of class. The subsequent East German conceptualization of the new socialist human developed out of a national mythologization of the East German people as anti-fascist and committed to harmony, discursively and materially rejecting both capitalism and Nazi war atrocities.

Following the Potsdam Conference and the division of postwar Germany into the Federal Republic of Germany (West) and the German Democratic Republic (East), East Germany entered a political situation in which, as a Marxist-Leninist socialist economy, it was led by the Soviet-aligned Socialist Unity Party of Germany (SED). Under SED leadership, the country attempted to distance itself from the horrors of what it considered Western atrocities, with West Germany associated with capitalist powers and East Germany as part of a separate international socialist network. Yet completely severing ties with the past proved difficult, despite what Peter Arnds describes as "unbroken taboos against [speaking of] the German past" (3). The attempt at denazification on the part of Allied powers following the war also had the unintended consequence of destroying many records of medical "discipline," as well as much of the information about victims of such discipline (Polianski 261-267). That the country's political leaders and literati sought to distance themselves from something that was taboo to even articulate as something worthy of opposition meant that the past became a forbidden zone, with only the future open as a possible vista for exploration and national improvement.

As a mode predicated on futurity, science fiction opened a discursive space for imagining an ideal citizenry completely emancipated from a real past. Katja Kanzler and

Heike Paul identify the “first genuinely East German science fiction format” as the “utopian production model” (118), which celebrated the development of socialist production but also, more importantly, the triumph of human will over mechanical forces. This emphasis on the triumph of humanity over their tools was seen as an ideology-specific ability to avoid the dangers of technoscientific tools associated with capitalism and the West, which included known threats like America and West Germany. This socialist humanism was echoed within and without science fiction novels and by science fiction scholars from the Eastern Bloc, such as when a character in Ivan Efremov’s 1957 Soviet novel *Andromeda* claims that the initial stages of a communist revolution are not in and of themselves sufficient for humanity to attain its most perfectible stage; rather, speaking from the future, “only in the Era of Common Labour did we turn to the perfection of man himself and not only his machines, houses, food and amusements” (41).

Depictions of a universal socialist humanism only became more entrenched as the literary field developed. Horst Heidtmann identifies the years between 1961-1971 as a “period of consolidation” (92) for East German science fiction, during which time it turned from the technical engineering mode of earlier years towards a newfound emphasis on the eventual global and universal superiority of socialist culture and peoples. Werner Förster corroborates this turn towards socialistic humanism while disclaiming its future orientation, claiming that “GDR Science Fiction usually does not debate the problems of the future, but rather examines questions pertaining to our particular situation, and our responsibilities toward the present and past, and toward humanity in general” (72). Though Förster did not find salvation in possible future developments, he identifies the past as a source of trauma out of which a newfound communal responsibility grew.

More so than either the Russian or Chinese strains of revolutionary new humanism—each apocalyptic in their own way—the East German approach to developing the new human was consumed by the necessity of a total break from past horrors committed in the name of physical perfection, while simultaneously dogged by lingering traces of these policies and histories. Writing from this vantage point in the midst of the Cold War, the East German author Karl Eberhardt del’Antonio claimed that science fiction, “itself an expression of the far sightedness of Marxism, points again and again to the primacy of the final goal. We are at the beginning of a developmental process. We will free ourselves from the shackles of a dark past on this course” (del’Antonio 1958, 37). By depicting a future rendered utopic by socialist ideology, science fiction is posited as uniquely capable of throwing off the dark past that haunts it and progressing human development forward.

The horrors of eugenics that were the state-sponsored legacy of the Nazis weighed heavily on science fiction authors and adherents to GDR planning policies alike. As Sonja Fritzsche notes, Marxist-Leninist science fiction authors wrote novels that “were characterized by a postfascist, post-Hiroshima discourse, which perceived continuity between Nazi Germany and the western Allies as aggressors in the rapidly escalating Cold War. This belief criticized the West’s dangerous mismanagement of its nuclear arsenal as “imperialist,” seeing it as typical of an “archaic” society that uses its own science fiction to spread “unscrupulous, antihumanist tendencies, from racism to genocide” (145). Through a spatiotemporal collapse that conflated West Germany with Western powers such as the US, state-sponsored eugenics pogroms and nuclear war became representative of technological disasters unchecked by higher ethics—a threat that East German socialism was eager to outrun through higher ideology.

The turn towards both the future and towards space as a refuge from past horrors—both at the national and bodily scale—was one similarly articulated by many science fiction authors in the Eastern Bloc. “As one official commentator put it: ‘We, too, are in flight to a “social planet” where no man has ever set foot before. There is much in what is said about communism that sounds miraculous to us, but the people of the future will treat these miracles as something quite ordinary and unremarkable.’” (Ryurikov 129). Space became a symbol onto which contemporary anxieties were more readily mapped than realist depictions of extant social life allowed for, opening up a discursive space for “progress” that left behind past excesses and horrors. This symbolic space was still explicitly defined by peaceful socialist expansion and communication, predicated on the assumption that any sufficiently advanced species capable of attaining space travel would unquestionably be a socialist one.

This connection through socialism was not limited to a shared ideology, but also inevitably engendered a universal physical ideal. The perfect physical embodiment was one shaped by its ideological environment, leading to a humanistic and anthropomorphic ubiquity among commensurate future civilizations. According to author Günther Krupkat, “There should hardly be all too great differences between us and other space dwellers. That would contradict the laws of development which apply everywhere. Perhaps we shall discover life forms during space travel which are at a stage that we have left behind hundreds of thousands of years ago, perhaps also some whose development is millions of years ahead of ours. But in no case will they be [...] horrors [...]. Those are merely the creations of human fantasy” (76). Similarly, Ivan Efremov, author of the socialist utopian novel *Andromeda* (1957), wrote that “An intelligent being from another world that has reached outer space is equally perfect and universal – in other words, beautiful. There are no such things as intelligent monsters, human fungi or human octopuses” (25). The apex of universal

perfectibility is the human form as it develops under socialist conditions, opening it up to the furthest reaches of the galaxy.¹⁵

The 1966 East German science fiction novel *Return of the Forefathers* (*Heimkehr der Vorfahren*) by Karl Eberhardt del'Antonio describes a universe in which ideological development has led to the material conditions for physical perfection. Each of the characters is a socialist superhuman—long-lived, beautiful, in peak physical condition, of sound mind and body—and their material world exists to support them. Conflict arises only out of the occasional misunderstanding between individuals, but is soon resolved in favor of congeniality and continued scientific and economic prosperity. By using the scientific trope of relativity to describe the return of a ten-year interstellar journey, after which more than 300 years have passed on a unified Earth due to relativity, del'Antonio is able to utilize outside observers as a way of pedagogically explaining the socialist paradise to which they have returned and the means that have rendered it possible. Del'Antonio was a formidable proponent of the role that science fiction could play in the formation of socialism in the GDR and, eventually, the world over, stating at the 1962 Conference on Literature of the Future “The vision is inseparable from progress. It precedes any purposeful aspiration” (del'Antonio 1958, 35). To overcome the past, one must look to the future.

While focusing on the future, *Return of the Forefathers* alludes to the horrors of the past by showing the main character, Vena, images from WWII that disgust her. “In order to become familiar with the time that had brought about the term “cybernetics,” she went [as happily as a child discovering something] into the archive and rummaged through the

¹⁵ This description is in sharp contrast to a story I will examine in chapter four, “Pkhentz,” which focuses on a plant-like alien protagonist who finds humans to be surpassingly ugly. This might be interpreted as a critique of contemporary society having not yet entered into the idealized socialist family of the future.

historical documentaries” (del’Antonio 1966),¹⁶ where she discovers footage of the bombing of Dresden. “It was horrible.” The degradations of war, described over the next paragraph, reveal a history that, for Vena, is long-forgotten and left behind, but which for the reader would have been mere decades in the past. It is humanity’s desire to overcome the horror of war, especially the degradations brought about by technological progress, that has led to her time’s ideological peace—it is a commitment to socialism that has tamed what might have been an overdetermined pessimism about humanity’s tendencies towards destruction towards one in which socialism is the defining trait linking all advanced sentient life and connecting across differing levels of technoscientific progress. Werner Förster identifies this as a defining trait of science fiction from the GDR, claiming that “The aesthetic opportunities of Science Fiction as a specific form of GDR literature reside” (80) in the subjugation of technology to humanity’s economically, ideologically, and politically formed goals.

Linking cybernetics to war in this way binds two forms of human planning—one, destructive, was intended to destroy non-ideal humans who already existed, whereas the other, generative, develops the population going forward. The two are inextricably tied to a history of horror that has led to a present attempting to extricate itself from that history. Within the context of the story, it is in space that Vena finds refuge from history, a view articulated by del’Antonio as the natural desire of socialist societies to find hope in the future: “To be sure, it [turning to the cosmos] avoided an intensive study of historical class, production, and living conditions” (1958).

¹⁶ “Um die Zeit kennenzulernen, die den Begriff Kybernetik hervorgebracht hatte, war sie, entdeckungsfreudig wie ein Kind, ins Archiv gegangen und hatte unter den historischen Dokumentarfilmen gewählt.”

The East German context for the development of the new human linked an ostensible rejection of the past with a future united under socialism, with outer space becoming “symbolic of cooperative ventures” (Major 2003, 84) as the liminal space in which perfect humans cavorted with perfect equanimity. The assumption was that socialism was an assured end point to history, even near-future history, since “Man acquired cosmic strength when he rose to the highest stage of communist society” (Efremov 31). As humans became increasingly defined by ideological perfection, their eventual physical perfection became equally assured.

Return of the Forefathers picks up where del’Antonio’s previous novel, *Titanus* (1959) left off, with the return of an all-male international crew more than 300 years after they left a mostly communist Earth. The plot of *Titanus* is notable for including a token capitalist American character, Stafford, who—unlike the rest of the crew—believes that when they return to Earth, it will be only to the charred remains of a nuclear holocaust that will inevitably follow the development of nuclear weapons. The rest of the crew, all committed socialists, believe that a socialist brotherhood will win out and goodwill over destructive technology will prevail. In fact, their very mission is predicated on the abolishment of capitalism and the primacy of socialism: “This flight is one of the greatest projects of all of humanity; it is an expression of the consistency of our social development, which is only made possible by removing all barriers of the previous social order dictated by an interest in private profits”¹⁷ (del’Antonio 1959, 13). Yet this very capitalist-driven nuclear holocaust does take place, only not on Earth, but on Titan, where a race of capitalist aliens destroy

¹⁷ Dieser Flug ist eins der größten Projekte der Menschheit überhaupt, er ist ein Ausdruck der Folgerichtigkeit unserer gesellschaftlichen Entwicklung, den er wurde nur möglich durch das Beseitigen aller Schranken einer Gesellschaftsordnung, die durch private Profitinteressen diktiert wurde.

their entire society through atomic warfare. The crew of the *Kosmos*, after finding succor with neighboring peaceful communist aliens, makes its way back to Earth, which has, in the ensuing centuries, fully united in socialist camaraderie and is enjoying unprecedented peace and prosperity.

The fact that *Titanus* was able to feature nuclear devastation at all, even if it was in space and even if it only impacted capitalists, was unusual given that the mere depiction of atomic power not devoted to social amelioration was subject to censorship. Patrick Major recounts the “minor storm” that erupted around the publication of Horst Müller’s *Vector Ganymede* (*Kurs Ganymed*, 1962), in which an Earth ship discovers refugees from a nuclear accident that destroyed their homeworld. These nuclear refugees “live a perilous existence, bombarded by the radioactive rays of Jupiter and ruled autocratically by a council of elders that uses hypnotic beams to impose its will. In the first draft, infanticide was even endemic in the collapsing society” (Major 2013, 211), illustrating that even sentient life that had advanced enough to travel to the stars was not free from the worst impulses seen in humanity. The Ministry of the Interior, responding to the publication, condemned it as not living up to “the glowing perspective of the free humanity of socialism and communism, of a great community of scientifically, morally and culturally superior men and women” (Schönfeld 1961). Representative heroes of the space age were expected to not only have transcended these baser physical aspects, but also to model positivist ideology about the subjugation of technology to a cohesive humanism.

By the time of *Return of the Forefathers*, the ship’s return is predicted by the cyberneticist Vena Rendhoff, who serves primarily to model ideal socialist behavior. Sonja Fritzsche has written convincingly about del’Antonio’s unique attunement to the

“contradictions with the establishment of socialist gender equality” (133) through depictions of the double home and work bind placed on women, but I will be focusing more on the way that Vena and the crew’s physical depictions represent a specific ideological stance about the value of human development through social circumstance.

The crew of the Kosmos and the characters of *Return of the Forefathers* explicitly embody ideal physical, mental, and emotional traits as a result of their mastery of science and technology. Musing on the human condition over a meal, one character from *Return of the Forefathers* comes to the realization that “his contemporaries ruled nature; for him it was clear that they only incorporated the best. The food he received was excellent. He felt exhilarated and enterprising. Long live modern nutrition science! He began to realize why people were more beautiful today, more balanced, more harmonious in their growth. If you added the new medicine and the other way of life ...”¹⁸ Scientific progress is thereby subsumed to the improvement of humanity and aimed at humankind’s physical and mental amelioration. Similarly, improvements in hormone therapy are identified as having led to an increase in the human lifespan from “ninety years” to “one hundred and fifty years.”¹⁹ All of human history and scientific development has led to this: a world that not only produces, but caters to the beautification and harmony of human life. This view towards the ideologically “correct” mastery of science for human betterment grew seamlessly out “historical work on eugenics in the German Democratic Republic,” which “interpreted eugenics as a warning against authoritarian misuse of science and medicine” (Thom and Spaar 83). This was something

¹⁸ “Die Zeitgenossen beherrschten die Natur, für ihn stand fest, daß sie sich nur das Beste einverleibten. Das Essen bekam ihm ausgezeichnet. Er fühlte sich beschwingt und unternehmungslustig. Es lebe die moderne Ernährungswissenschaft! Langsam wurde ihm klar, weshalb die Menschen heute schöner waren, ausgeglichener, harmonischer im Wuchs. Nahm man die neue Medizin hinzu und die andere Lebensart...” Del'Antonio, Eberhardt. *Heimkehr Der Vorfahren: Zukunftsroman*. Verlag Das Neue Berlin, 1966, pp. 240.

¹⁹ »Wir werden im allgemeinen einhundertfünfzig Jahre alt«, sagte die Ärztin. »Überrascht Sie das?« »Zu unserer Zeit lag die Lebenserwartung bei neunzig Jahren«, sagte Romain erleichtert. » Ibid, pp. 114.

that could be protected against by socialist correctives that distanced technology from its misuse at the hands of capitalists.

Eric Huneke claims that “Because of the persistent doubts about East Germany’s political legitimacy and ongoing demographic viability, biopolitical measures provided a vital tool for renegotiating the relationship between individual bodies, reproductive bodies (*Gattungskörper*), and the national body (*Volkskörper*)” (48). Along with researchers such as Edward Ross Dickinson and Laura Engelstein, he identifies a participatory “biopolitics from below,” in which the pursuit of ideal human embodiment was not conferred by a top-down authoritarian regime, but a collective imaginary constructed by individual decision-making. Daphne Hahn furthers this analysis by emphasizing pronatalist policies that encouraged self-regulation and self-monitoring when making reproductive choices (such as spousal selection or maternal care during pregnancy) (Hahn). Through its all-male composition, the crew of the Kosmos in *Titanus* evades questions of reproduction, but *Return of the Forefathers* grapples explicitly with spousal selection, childbirth, and its intersection with labor and fulfilment to create a perfect society.

Vena, the main character, is childless by choice, because to have a child would interfere with her research. She identifies the perfectibility of the human form with the social conditions that make it possible to pursue one’s goals: “To be human, didn’t that mean: being strongminded, dedicated to life, driven, in order to perfect oneself spiritually and physically” (del’Antonio 1966, 293)? By rejecting the labor of reproduction for the reproduction of the state through labor, she embraces a model of socialist citizenry predicated on “the construction of a socialist social order [that] requires the emancipation of women as a nonnegotiable condition” (“Frauen,” DDR Handbuch), transferring the impetus

of amelioration from an individual one to a social drive. By foregoing an individual family, she is able to make grander contributions to the human family that has developed out of socialist policies.

Thomas Lindenberger describes the conflation of the body politic with the individual body as the “limits of dictatorship,” which “referred both to the outer geographical boundary protected against transgression by arms, concrete and barbed wire, and to the multitude of invisible boundaries pervading the body social, producing an inner landscape of relatively isolated units at the bottom of society.” Any conflict between control of the state and control of the individual was due not to political violations or ideological discrepancies, but “about transgressions of one of these invisible boundaries” (56). *Return of the Forefathers* similarly conflates sickness in the state with sickness in the individual, arguing that socialism is the cure to both. Following her viewing of the clip of war that so horrified her, Vena finds it difficult to comprehend how barbaric the world under capitalism was, and, similarly, how barbaric its people. “She hadn't gotten rid of the shock. No reason helped either: humanity had freed itself from this scourge. It had eradicated the roots of the war and established a form of society that ruled out any war. Wars were symptoms of sick societies, but mankind had recovered from them”²⁰ (18). Not only has labor changed as a result of socialism in the future, but the individual propensity towards violence, as well.

In *Return of the Forefathers*—as with many attempts to actively develop a new socialist humanity—value was assigned to individuals and groups based on their ability to productively labor. Documents recovered from the central archives of the GDR's Ministry

²⁰ “Sie war den Schock nicht wieder losgeworden. Da half auch keine Vernunft: Die Menschheit hatte sich von dieser Geißel befreit. Sie hatte die Wurzeln des Krieges ausgerottet und eine Gesellschaftsform errichtet, die jeden Krieg ausschloß. Kriege waren Symptome kranker Gesellschaftsformen, die Menschheit aber war davon genesen.”

for State Security describe the 1941 gassing of nearly 30,000 psychiatric patients categorized by their inability to work or their at-best “mechanical” work (Hohendorf et. al), reflecting the same emphasis on laboring productivity in the state. To simply do a rote task without the creativity or specialized knowledge did not fully embody the ideals of human perfection, and while in real life this approach led to death on a grand scale, in *Return of the Forefathers*, the perfect socialist citizens of the future have moved beyond simple work to a well-rounded skillset more broadly defined. Vena, a cyberneticist, is also a painter, while her friends’ interests span medicine, history, acting, and poetry. Identifying their capacity for creativity alongside physical perfection, the captain of the Kosmos claims that “The women of the present were all pretty. They were educated like never before. Sports made them agile and graceful. Life made their faces harmonious and gave them a growing sense of worth. Every disharmony of proportion was corrected by the most advanced cosmetic medicine” (225).

By shifting the emergence of an ideal human form to a socialist future, East German science fiction such as *Return of the Forefathers* was able to both assert the primacy of socialism for individual and social development while also divorcing this human planning process from a past from which it sought to distance itself. In their emergent physical, mental, and emotional perfection, the characters evince a shared socialist ethos that triumphs over the potentially damaging parts of technoscientific development and leapfrogs directly to a future that is cast as assured. Much like with the Cultural Revolution in China and the Bolshevik Revolution in Russia, the division of East from West Germany following WWII represented a dramatic break at the sociopolitical scale. By insisting that “‘socialism’ (whatever that ought to be, whatever it “actually” is, and whatever it may become) is surely initially to be characterized as the attempt to construct a society in which the ‘economic’ and market production are no longer ‘natural’ events and rhythms but are subject to planning and

human decision-making” (Jameson 196)—the development of the new socialist human in an East German context demonstrates the subjugation of production to progressive humanism while also retaining an emphasis on futurity.

CONCLUSION

While various forms of socialism exist and various histories and epistemologies of science fiction along with them, each historical strain of this genre has functioned, at some point and to some degree, as a politicized genre aimed at imagining a near-future reality that seeks to gain the critical distance necessary to avoid absorption into a capitalist system that commodifies individual and national experiences. Yet in doing so, individuals and populations imagined in and under socialism were mobilized for politicized ends, contextualized and embodied as national citizens under various regimes that sought to build their sociopolitical value on the imbrication of the mass enrollment of individuals into a literary and political system. In this socialist context, science fiction was uniquely suited for the task of creating a literary paradigm for the body politic that evacuated the past of inherent meaning while providing an “objective” view of current and future developments.

Red Star, “New Mr. Braggadocio,” and *Return of the Forefathers* all demonstrate not only the ways in which scientific and technological change affected rapidly changing social mores at the beginning of the twentieth century, but also grappled with the changing role of the individual and his or her place in society. Similarly, the socialist project itself was at once an interpellation of subjecthood in which the ideal socialist individual was constructed through and in response to the dominant ideology being enacted, while also representing an attempt to mold a corporeal body according to those same ideological standards. The

development of the new socialist human was a project designed to imagine an ideal body and soul, with each aspect developing the other—to bring about the ideal citizen necessitated imagining who and what that citizen would be, and to take concrete steps to bring such a subject into being required an imaginative projection of future development. As an Althusserian subject formation, the process was two-fold: ideal subjects were passive embodiments of the imagination, but to imagine them as new—and newly revolutionary—citizens of a future nation that had not yet come into being transformed passive subjects into active revolutionary subjects. The new socialist human, then, is one inherently interpellated by art, literature, and the technologies they engender, and is also a revolutionary act of imaginative social engineering.

CHAPTER TWO: REPRODUCING THE STATE

INTRODUCTION

To imagine the ideal socialist citizen is to imagine a body projected forward in time: an as-yet unrealized dream. Throughout the twentieth century, science fiction authors depicted the idealized body at the heart of developmental socialist policies by focusing on issues of population quality and how they would change as a result of socialist intervention, in the process establishing an aspirational corporeal standard. The co-constitution of labor and gender to social reproduction, for example, underlies the importance of culture to the articulation of a reproducing body, such that the act of reproduction is explicitly politicized as either working for or against a socialist system. Which bodies are considered themselves reproducible and/or worthy of reproducing is co-imbricated with the socialist state drive to invest its citizen masses with the ideals associated with a political body.

There is, of course, no one narrative or form this engagement with reproducibility takes, but the texts I will consider in this chapter demonstrate an intense anxiety surrounding the disengagement of historically sexed labor occupations as they conflict with planned socialist economies. By attempting to sever the link between biological and social reproduction, authors and policymakers imagined a future in which reproduction was redistributed amongst non-historically reproductive bodies with the goal of transcending biological limits. While the texts differ greatly in time period (pre-revolutionary Russia vs. immediately post-Mao China), what central reproductive concern is being addressed (social cohesion vs. overpopulation), and proposed solution (universal blood-sharing vs. robot

wives), they share an explicit decoupling of sex and reproduction held to be uniquely compatible with egalitarian socialist development.

COLLECTIVE PHYSIOLOGY AND THE REPRODUCTION OF THE STATE

The 1906 short story “One Evening in 2217” (Вечер в 2217 году) by Nikolai Fedorov²¹ opens in a post-scarcity future, one in which society has already provided for all of humanity’s needs. Yet “it’s terrible, how weak humanity still is” (Fedorov 88)—their longing for love and an insular family life is as threatening as the “rumble of an approaching eruption” (88). The desire for a family is characterized as an old-fashioned virtue, one that belonged to the honest revolutionaries of the past but no longer has any place in this fully automated future of 2217—a future that may be materially and scientifically rich, but which nevertheless lacks an accompanying richness of spirit.

Fedorov is reacting in this story to the rising sentiment of revolutionary anti-nuclear family structure that accompanied the introduction of socialist policies in Russia at the end of the nineteenth century, wherein communal child rearing and the nuclear family became representative of the larger issue of individual selfishness at the heart of capitalism. In 2217, the family unit is explicitly identified as an “ancient, closed cell that was the basis of past governments, the way a honeycomb is for a beehive” (88), unlike the free love that is the basis of social relations in the twenty-third century. While the protagonists of his story still

²¹ A Russian cosmist and precursor of contemporary transhumanists, Fedorov’s “Common Task”—the fight against death as the moral responsibility of humankind—sought to use all available scientific means to extend life. At the same time, he saw humanity as irreparably flawed and weak, constantly buffeted by the vagaries of nature, and any attempts to improve human life that did not incorporate morality as distractions at best and actively evil impediments at worst.

believe in lifelong monogamy and individual pairings, they are explicitly outliers in a world that has no place for such beliefs, and their brief, unfulfilled lives end in tragedy.

As in this story, the co-constitution of the family and the state have long been considered self-evident, such that a move away from a closed binary system built on sexual possession and property was simultaneously considered a shift towards socialism at large. Cleaving sex from historically sexed occupations continues to be a concern even in the present, with the Laboria Cuboniks collective arguing in their *Xenofeminist Manifesto* that any struggle towards a new reproductive futurity not founded on biological determinism is, of necessity, “oriented towards post-capitalism, for we must engineer an economy that liberates reproductive labour [...], while building models of familiarity free from the deadening grind of wage labour” (64). To create a truly socialist state requires not only recognizing childbirth, childrearing, and familial and social reproduction as labor themselves, but also requires the liberation of such gestational and socially reproductive labor from a sexed and gendered body. No social equality can be effected while one portion of the population is biologically constrained to the labor of reproducing that same population.

This division of reproductive labor from waged labor would have, in many ways, been a familiar rallying cry to early Russian revolutionaries, many of whom saw the liberation of the state as intimately bound up with the liberation of its people from the inherited labor roles of feudalism and the power disparities that arose therefrom. In fact, Marx identified in the first volume of *Capital* the ways in which the production of a biological labor force is shaped by the capitalist drive to produce surplus value, claiming that “viewed [...] as a connected whole, and as flowing on with incessant renewal, every social process of production is, at the same time, a process of reproduction” (1900, 711). To dismantle such a

system and replace it with a socialist leveling of class systems necessitated also the dismantling of those social and reproductive systems that serve to bolster capitalist accumulation under the aegis of biological family forms.

Thus in early revolutionary Russian literature we see numerous gestures towards the breakup of the nuclear family towards a more communal form of romantic entanglements and child-rearing, a futurity that retained its focus on the production of forthcoming generations but was unshackled from the heteropatriarchal dyad of husband-wife relations. Marx himself identifies the bourgeois family as a system of capitalist retention, asking in chapter two of the *Communist Manifesto*, “On what foundation is the present family, the bourgeois family, based? On capital, on private gain. In its completely developed form, this family exists only among the bourgeoisie. But this state of things finds its complement in the practical absence of the family among the proletarians, and in public prostitution. The bourgeois family will vanish as a matter of course when its complement vanishes, and both will vanish with the vanishing of capital” (2018, 61). Importantly, it is not the concept of social relations that is condemned here, but the capitalist bourgeois family specifically. New forms of kinship would come into being with the dissolution of the capitalist structures that both required the bourgeoisie family to function but also created the constitutive conditions for its existence in the first place. In what was labeled “the first Bolshevik utopia,” Alexander Bogdanov’s *Red Star* provided a vision of this future, one in which full socialism is achieved through the blood-based dissolution of the family, capitalism, and even the boundaries of the body itself.

ABOLISHING THE FAMILY

Among the most notable shifts in the decades leading up to the Bolshevik Revolution was a rising interest in the abolishment of the nuclear family. Under monarchical orthodoxy, the family had been a microcosm of society writ large: a self-contained unit (as with Fedorov's aforementioned beehive) with a hierarchical structure and feudal economic organization. Theorists and revolutionaries such as Alexandra Kollontai²² advocated not only free love, but also the abolition of the family as a means of emancipating female labor. Like more contemporary social reproductive theorists such as Laboria Cuboniks, Kollontai recognized that the very basis of marriage was one predicated on a gendered division of labor, and that full social and economic emancipation were the only way to ensure women's full participation in society. In her 1920 treatise, "Communism and the Family," she wrote: "There is no point in not facing up to the truth: the old family in which the man was everything and the woman nothing, the typical family where the woman had no will of her own, no time of her own and no money of her own, is changing before our very eyes. But there is no need for alarm" (277). The old ways are dying, ushering in a future with a more egalitarian social and relational structure. Heteropatriarchal marriage is a remnant of the past, while the idealized future will be one of free love and freely entered relationships between equals.

In this case, it is clear that the more radical beliefs about the dissolution of the nuclear family promoted by many revolutionary thinkers and *litterateurs* (Chernyshevsky, Bogdanov, Marx, Kollontai) ultimately came to nothing, but the early decades of the century were marked by a spirited debate about efforts to abolish marriage as a bourgeois institution

²² As the People's Commissar for Welfare, 1917-1918, and founder of the Women's Department (Женотдел) in 1919, Kollontai held immense ideological sway during a turbulent period of change.

that unfairly circumscribed the freedom of those both within and without. Writing for the American magazine *The Atlantic* in 1926,²³ an anonymous female contributor wrote of a bill introduced to the Central Executive Committee that would abolish marriage altogether, in pursuit of eliminating the “distinctions between registered and unregistered marriages and giving the unmarried consort the status and property rights of the legal wife” (1926). In this concern with social status and economic equality, the socioeconomic status conferred by marriage was a clear impediment to the broad application of equality.

As the debate about the equal role of women in a socialist society grew, marriage as an institution became synonymous with a microcosm of unfair state practices, leading to unbalanced legal statuses for children born outside of wedlock or for mistresses who had claim to their partner’s emotional support but no legal recourse to financial support.²⁴ The same anonymous reporter noted (disapprovingly) that the laxity of divorce laws had previously meant a shift in the reason for marriage from love to labor, with peasants taking “advantage of the loose divorce regulations to acquire 'summer brides.'” As the hiring of labor in Russia is hedged about with difficulties and restrictions for the private employer, the

²³ *The Atlantic* published literature, articles, and essays from both domestic and international contributors from its inception in 1857. This particular contribution has no Russian-language origin, but its assertions (made anonymously) are supported by more academic sources, such as in Brainerd, Elizabeth. “Marriage and Divorce in Revolutionary Russia: A Demographic Analysis.” *Russia's Great War and Revolution, 1914-1922: The Centennial Reappraisal (Volume 3: Russia's Home Front In War And Revolution, 1914-22)*. vol. 3. Edited by Anthony Heywood and John Steinberg. Slavica, 2018, pp. 207-238.

²⁴ “The decree of the Council of People’s Commissars issued on 18 December 1917 means that divorce is, no longer a luxury that only the rich can afford; henceforth, a working woman will not have to petition for months or even for years to secure the right to live separately from a husband who beats her and makes her life a misery with his drunkenness and uncouth behaviour. Divorce by mutual agreement now takes no more than a week or two to obtain. Women who are unhappy in their married life welcome this easy divorce. But others, particularly those who are used to looking upon their husband as “breadwinners”, are frightened. They have not yet understood that a woman must accustom herself to seek and find support in the collective and in society, and not from the individual man.” In Kollontai, Alexandra. “Communism and the Family.” *Komunistka*, no. 2, 1920, and in English in *The Worker*, 1920.

richer peasants in some districts took to the practice of marrying a strong girl for the harvest season and divorcing her as soon as the work in the fields was over” (1926).

While the object of labor so disapprovingly cited in this moralistic missal was that of yoking physical labor in the field with the status of a wife, the status that accompanied the term “wife” was one explicitly aligned with a certain type of physical and emotional labor that was socially reproduced so as to not be recognized as labor at all. Field labor is recognized here as labor, while household and emotional labor is not. This anonymous reporter disapproves of recognizable labor being tied to marriage while glossing over otherwise unremunerated labor. As Silvia Federici notes in one of the earliest analyses of social reproductive labor, “the wage at least recognizes that you are a worker, and you can bargain and struggle around and against the terms and the quantity of that wage, the terms and the quantity of that work. To have a wage means to be part of a social contract, and there is no doubt concerning its meaning: you work, not because you like it, or because it comes naturally to you, but because it is the only condition under which you are allowed to live” (2). It is telling that in these descriptions of reasons for marriage, labor—when recognized as such—is sniffed at as an unworthy reason to marry, yet the same description simultaneously disavows the need for the legal and proprietary rights associated with a marriage contract. To uphold a politically-valued position while disavowing the work required of it and insisting that it receive benefits and protections within the legal system would have been a difficult proposition to swallow for those revolutionaries intent on tearing down all vestiges of the old system and putting more egalitarian ones in their place.²⁵

²⁵ This reconceptualization of marriage and relationships extended to highly placed figures and was a direct outgrowth of science fictional writing. Writing about Inessa Armand (Bolshevik politician and, along with Alexandra Kollontai, leader of the Zhenotdel), Nadezhda Krupskaya (Bolshevik leader and Lenin’s wife) attributed Armand’s commitment to women’s rights to Chernyshevsky’s *What is to Be Done?*,

As previously described in chapter one, *Red Star* follows the journey of Leonid, a Bolshevik revolutionary who is offered the chance to go to Mars and, once there, encounters a utopian socialist society explicitly posited as the immediate, achievable future of humankind on Earth (provided the revolution succeeds, of course). A technocratic and meritocratic society, the Martians have achieved their level of comfort in no small part due to a physiological bond created through blood-sharing, in which the “comradely exchange of life extend[s] beyond the ideological dimension into the physiological one” (Bogdanov 86). Blood-sharing is described as an egalitarian answer to the question of sexual and social reproduction; by enrolling all citizens in a shared physio-national project, Martian society has become strong as a whole while also improving the physical and mental state of each individual citizen and stripping biological determinism of any power. Bourgeois family structures no longer form the foundation of society, and in redistributing reproductive responsibility, women, men, and children alike have become freer.

Such novel systems were newly imagined at the intersection of technology, labor, and social practices, each co-creating the conceptualization of the other. As with Bogdanov’s blood transfusion technology—coming as it did from a place of ideological critique that enrolled new biomedical practices in service of universal socialism predicated upon the abolition of existing family structures and roles and their egalitarian expansion, such that no class of people (either economic or familial) was solely responsible for any specialized labor—the abolishment of the family was a mediated practice aimed at creating a more just

saying: “Inessa was moved to socialism by the image of woman’s rights and freedom in *What Is To Be Done?* Like the heroine, she broke her ties with one man to live with another, concerned herself with good deeds to redeem the poor female and the prostitute, tried to solve the problems of woman’s too servile place in society. Indeed, whole generations of Russian radicals were influenced by Chernyshevsky’s many-sided utopian novel and were moved to imitate its “uncommon men and women.”

society by delinking social roles from physical power or responsibilities. In *Red Star*, there are still social and familial connections—husbands, wives, mothers, fathers, workers, leaders—but they are not organized around biological sex and sex is removed as a limiting factor in anyone’s ability to participate in any activity. The social ties that bind are all undertaken willingly and left freely in the recognition that all individuals belong to the collective and no one belongs to any individual person, either through legal structures or obligation.

This position is explicitly held by Leonid, *Red Star*’s protagonist, as he muses upon his philosophical beliefs on Earth: “I even believed that polygamy was in principle superior to monogamy, since it provided for both a richer private life and a greater variety of genetic combinations. In my opinion, it was only the contradictions of the bourgeois order which for the time being made polygamy either simply unfeasible or merely the privilege of the exploiters and parasites, who were all befouled by their own decadent psychology. Here too the future would bring a radical transformation” (25). And later, once on Mars and upon finding out his love interest, Netti, had previously been married to two of her comrades at the same time: “So what? I have always believed that monogamy among us is due exclusively to our economic conditions, which limit and enslave man at every step. The conditions on Mars were quite different and in no way inhibited personal feelings and relationships” (104-105). Of course, in practice, his unevolved human physiology prevents him from feeling as he believes, and he experiences immense jealousy and possessiveness, leading Netti to claim that his undeveloped ways of experiencing and expressing emotion are physically painful to her: “its despotism, its egotism, its desperate hunger for happiness—I felt all of that in your caresses. Your love is like murder” (93). It was only once society as a whole has evolved past the need for possessive, monogamous dyads that it could begin the process of evolving past individual physical limitations as well.

Thus while Marxist-Leninists referred to the masses as a single, deathless organism, Bogdanov's vision of a future in which recognized labor (as scientists, artists, engineers, etc.) was divorced from biological distinctions also recognized that, to achieve such a goal, distinctions of sex must also be eliminated. Of Bogdanov's theories of collectivism, Douglas Greenfield writes that, "in addition to the exchange of blood, people can apparently spread adaptive changes through the "intercourse of experience" [*obshchenie opyta*], that is, through conversation and mimicry. This "conjugation of experiences" [*kon "ingatsiia perezhivaniu*] can replace sexual reproduction" (626) for Bogdanov, as well as eliminate differences in sexual dimorphism. But in this Bogdanov goes farther than Marx, who (as previously noted), claimed that "The bourgeois family will vanish as a matter of course when its complement vanishes, and both will vanish with the vanishing of capital" (2018, 37). Instead, Bogdanov's vision was even more revolutionary—the dissolution not just of the family, but of sex itself. Much like the anti-natal theorist Shulamith Firestone, who wrote "Just as the end goal of socialist revolution was not only the elimination of the economic class *privilege* but of the economic class *distinction* itself, so the end goal of feminist revolution must be [...] not just the elimination of male *privilege* but of the sex *distinction* itself: genital difference between human beings would no longer matter culturally" (ii), sex and labor as concepts have become divorced in Bogdanov's utopia.

The systemic unity of reproductive systems and capitalist systems for value accumulation is still intimately bound up in the conceptualization of the future as reproductive in such extrapolations, however. No matter to which extent the nuclear family as a unit is disbanded, the emphasis on future generations in the image of the child—even if

decentralized, as in Chernyshevsky's 1863 novel, *What is To Be Done?*²⁶—retains an emphasis on creating a new class conceptualized as laborers, and with it the intractable promise of reproductive futurisms.²⁷ For such a future, the society imagined into being must have “unquestioned value and purpose” (Edelman 4) while also existing outside of capitalist heterosexual social relations. The methods by which the future can be envisioned, produced, and reproduced without relying on biological roles tied to sex and/or heteropatriarchal ideas of family structure are central to such extrapolations.

It is in Alexander Bogdanov's *Red Star* that we are presented with this radical decoupling of biological reproduction and social labor—one that the author envisioned as not only limited to science fiction, but also applicable to his own culture at his own time. In the novel, the transfusion of blood between citizens of a Martian socialist society serves as a sort of social lubricant, keeping the old young and the young inoculated against diseases encountered previously by the old, but more than that, it is presented as uniting them at the cellular level, a higher stage of physiological development that is fundamentally intertwined with a higher socioeconomic level of development. To achieve socialism necessitates the entire socialization of what were once individual identities and vice versa—to fully share oneself in total and open comradeship necessitates the ascension to socialism. The lower individualists still on Earth can no more achieve socialism while retaining their individual

²⁶ Previously introduced in the preceding chapter with the introduction of the “new human” concept as a whole, in *What is to Be Done?* the main character, Vera Pavlova, flees an arranged marriage and, in pursuit of economic independence, advocates for socialist communalism. Told in a series of chapters, the most famous—“Vera Pavlova's Fourth Dream”—is also the most radical, and depicts an agrarian socialist utopia in which all of society is communal and all individualist structures—including nuclear families—have been dissolved. Everyone works as they are able, and all children are raised communally with the expectation that they, too, will participate insofar as their limited strength will allow. See Chernyshevsky, Nikolai. *Что делать? (What Is to Be Done? Tales of New People: a Novel)*. Moscow: Raduga Publishers, 1983.

²⁷ See Edelman, Lee. *No Future: Queer Theory and the Death Drive*. Duke University Press, 2007.

physical boundaries than can the barbarous forms of life mentioned to be living on Venus achieve communication with the Martians without having yet developed language of their own.

Yet while the setting of the novel is science fictional, Bogdanov was himself determined to make the socialist utopia of the Martians a reality on Earth, following the very blood-sharing principles he described in *Red Star*.²⁸ A physician by trade, he established Russia's first institute for blood transfusion, the Institute for Hematology and Blood Transfusion. Recognizing his own situatedness to bring about such a reality on earth, "Bogdanov claimed that Narkomzdrav²⁹ had assigned him the task of organizing the institute because he understood both the "social-practical and scientific importance" of blood transfusions. He described his own long-standing interest in the procedure, which had led him to formulate a concept of "physiological collectivism"—the increase of the "viability" of individual organisms through regular blood exchanges among them" (Krementsov 1). As above, so below: in describing an ideal socialist blood-sharing utopia on Mars, Bogdanov was also laying out the blueprint for establishing such a society on Earth.

A philosopher, scientist, revolutionary, and politician, Bogdanov's literary output precipitated his involvement in Russia's earliest experiments in blood transfusion, which is what he is primarily remembered for today. In keeping with the "theory of near anticipation" (Major 76)—an artistic tenet that would not be formally codified for another two decades after *Red Star*'s initial publication, but which was nonetheless predominantly adhered to even

²⁸ The ties between bodily fluids and political regimes remain salient in more contemporary science fiction as well; for example, Stanley Kubrick's 1964 film *Dr. Strangelove* prominently features a character who attempts to thwart a Communist plot to sap Americans' "precious bodily fluids" in order to preserve American ideological integrity.

²⁹ The People's Commissariat of Public Health

before its formalization—his description of Martian society is at once located in humanity’s present and future: it is in the present day, but the Martians represent humanity’s immediate developmental end goal. Blood transfusion as a technique was one that Bogdanov not only described, but intended to implement among his own society, specifically with the intention of bringing about the socialist utopia described in his novel.

Though the blood-sharing is not emphasized as being integral to the plot, it is foundational to the story’s depiction of what constitutes a utopian society and, more importantly, why. Because comradeship is based in the physiological exchange of blood and not limited to merely words or deeds, individuals are united not just in their beliefs, but in their very bodies. This “comradely exchange of life” underpins the very concept of what it means to function as a society, wherein ascension beyond individualistic capitalism can only be overcome through a communitarian process that enrolls society as a whole into one shared superorganism.

In this, *Red Star* is indicative of Donna Haraway’s concept of kin-making,³⁰ or a radical way of redefining the self in relation to the state. It de-prioritizes biological gender as natural grounding for reproduction and shifts the emphasis of responsibility for futurity to a broader mass of people, conceptualized from the outset as connected and co-integrated. However, in *Red Star*, such an assemblage of reproductive futurity is returned to an originary locus in the material body of individuals, the fleshy materiality of which is what allows freedom from other biological constraints on reproduction.

Merging Lee Edelman’s theory of non-reproductive futurity with Haraway’s kin-making in a pre-revolutionary science fictional text requires the baseline assumption that

³⁰ See Donna J. Haraway. *Making Kin Not Population*. Prickly Paradigm Press, 2018.

participation in a politics of futurity enrolls bodies that do not or have not historically been reproducing ones into the nation-building process. To participate in politics is to put one's body on the line, with the result that those bodies projected as future participants in the state may not necessarily be those we are used to now: to produce and reproduce a new polity requires new participants. The bodies in *Red Star*, specifically, are uniquely communal and porous, their "physiological collectivity" (as Bogdanov would term it) a function not only of biology, but the ultimate expression of socialist union. As Nikolai Krementsov notes, "According to Bogdanov, the fundamental difference between "bourgeois" and "proletarian" cultures was that the former is entirely defined by individualism inherent to a capitalist economy due to the private ownership of the means of production. In contrast, the latter is intrinsically defined by collectivism, since proletarians do not own anything but their labor, and they are forced by the conditions of factory production to develop and embrace collectivism" (40). This collective labor and collective body, formed by a mutual transfusion of both ideology and blood, is—according to Bogdanov himself—the "adding of an individual to an individual" (quoted in Greenfield 626). It is not "one-sided" [*odnostoronnii*], as lower forms of organization are characterized.

Bogdanov explicitly concretized the similarities between capitalism and physiological frailty in his later 1913 magnum opus, *Tektology*, in which he claimed that aging is a result of systemic contradictions wherein waste builds in the body just as it does in the economy. Douglas Greenfield characterizes these analogous processes: "in the market struggle, the branches of production develop disproportionately; some fall behind, others outperform. In aging, the kidneys, which filter wastes from the blood, may fall behind metabolism. In both cases, contradiction leads to crisis: cyclical overproduction in the first case, chronic renal failure in the second" (625). When one side holds disproportionate power over the other and

is “one-sided,” neither the body nor the body politic can continue to function in equilibrium. A healthy, functioning social system necessitates equalization in all forms of labor, both physiological and economic.

The communal relations and kinship of Bogdanov’s Martian society are not just a function of the futuristic nation-state of a unified Mars, but the entirety of the body politic embodied in a circulating relationship that links each individual physically and spiritually to the very idea of their own political values. Rather than reproducing individual children as weighted symbols of the future, the mass of individuals reproduces socialist ideology in its constant renewal of its own vitality—a forceful and continual commitment to the physical expression of collectivity. As opposed to the queer death drive that Edelman locates in a future-oriented vision not devoted to the child, the reproductive futurity of Bogdanov exists in a space in which offspring are only a part of the society that is being produced, not the sole hope for it.

Using the figure of the child as a metaphor for the developmental process of immature social systems into the full flowering of socialism, for example, Bogdanov explicitly elucidates the link between the individual and the society they embody through the following description of social and political maturation. In it, biological nature, just like socioeconomic status, is bound by universal laws to go through specific periods of development:

“Yes, well, there you can see that the legacy of the past is very powerful,” said the educator with a smile. “Our communism seems to be complete; we almost never have to deny the children anything. Where could a sense of private ownership possibly come from? Yet a child will suddenly come along and start talking about ‘my’ boat, ‘the one I made myself.’ Such things happen very often, and sometimes they can even end in fights. There is no helping it; according to a universal law of life the development of the organism repeats in abbreviated form

the development of the species. Analogously, the development of the individual repeats that of the society” (70).

It is not that the child itself is the vessel for a society’s hopes and dreams, but rather that, according to both Marxist ideology of the stages of development and Bogdanov’s own ideas about blood-sharing as a mode of creating collective vitality, younger societies composed of individualistic members must invariably pass through a period of isolationism and capitalism before they are able to fully develop into one of socialism and physical collectivism. The future would be one in which the boundaries between individuals and the state were radically broken down and reconstituted in the very body of the masses, and while he depicted its final stage in his description of Mars, his concerns for bringing about such a future were firmly rooted in the intersecting biomedical and political developments in his own time. Bogdanov’s contemporary Valerian Muravyov theorized, for example, that the future would be one free of organic matter’s drawbacks through the creation of new, improved bodies and the disappearance of currently flawed bodies altogether. Writing on the culture of the future, he characterized the coming humanity as one possessing greater strength, agility, speed, and adaptability, as well as the ability to exist without the effects of gravity that constrained so much of earthbound humankind now³¹—but would not constrain them once they ascended to the stars.

³¹ See Muravyov, V.N. *Kul’tura budushego (Culture of the future)*; Muravyov, *Sochineniya (Works)*, vol. 2, book 2.

ABOLISHING THE SEXED BODY AND DEVELOPING THE COLLECTIVE BODY

Bogdanov's beliefs about the collective body and its co-imbrication with an idealized future state grew out of a long history of monistic beliefs in Russia, beginning with Russian Orthodoxy's emphasis on oneness in Christ and leading up through the Cosmists, who aimed to produce a Russian superman indistinguishable from a god. This line of belief was intimately tied to a rejection of the biological drawbacks of embodiment, specifically those associated with sexed occupations. Eric Naiman claims that in turn-of-the-century Russia, for example, numerous influential thinkers held that "the begetting of children embodied all that prevented humanity from attaining their utopian goal of absolute integral purity: immortality" (29). To physically bear children meant, at the individual level, to surrender to the inevitability of physical decay and to eschew bodily integrity; on a broader social scale, it capitulated to the power of nature and failed to differentiate humans from lower forms of life. No matter how advanced humanity's science and social progress, if the process of life and death continued, unrelenting, then humanity had not become anything new or different.³²

As the Cosmists grew in influence alongside the rise of revolutionary fervor, the emphasis on the rejection of sexual reproduction without a corresponding rejection of sexual relations resulted in discomfort because both the act of sex itself, as well as childbirth, were seen as insufficiently communal. Naiman cites neurologist Vladimir Bekhterev as being

³² In *The Hour of Our Death*, Philippe Ariès reads the death of Tolstoy's Ivan Ilyich (*The Death of Ivan Ilyich*, 1886) as the threshold between the public death of the past and the hidden death of the future. It is at this point that death itself becomes commodified as something grotesque and to be hidden, part of a new world on the brink of scientific medicalization, in which death can only be read as a failure of technology and an indicator of insufficient medical advancement. This new conceptualization of death is occurring during roughly the same time period as these same debates and pronouncements over the physical and moral inadvisability of bearing children.

concerned with the intersection of individualistic privacy with its effect on society: “Sexual liaisons arranged only for the sake of sexual pleasures, satisfying only personal goals [...] should be limited by all means, and if the law cannot prosecute mutually consenting sexual partners whose health does not suffer, then in any case measures are wholly appropriate that tend to protect society as a whole from such forms of sexual relations” (31, quoting Vladimir Bekhterev, “Predislovie,” vii). Even when the individuals involved in a sexual encounter are not individually harmed, their intercourse had the potential to harm society as a whole due to its legal bourgeois limitation to two partners.³³

Similarly, childbirth—in addition to its ties to bestiality and limitations on physical transcendence—was increasingly considered a selfish, hopelessly isolating social construct, in which (specifically) women’s maternal instincts were localized in her own progeny instead of more appropriately dispersed to humankind as a whole.³⁴ The physiological and psychological connection between mother and child became increasingly a synecdoche of the problems facing society as a whole, not least of all because of its division of sex-segregated labor. The female laboring body became entrusted with a specific type of labor that reproduced the state, but those gendered and sexed bodies were also bodies that were considered inherently untrustworthy. For the philosopher Nikolai Berdyaev, female sexuality was both temporally situated while also being an absolute and intrinsic characteristic: “woman is the cosmic, global carrier of the sexual element, of all that is elemental in sex,” and “in woman it [sex] is spread all over the flesh of the organism, through the entire field of her soul” (226). She could not be trusted to think outside her own sexuality because she was

³³ Sex involving more than two partners was legally considered sodomy and/or onanism.

³⁴ The great revolutionary and women’s rights activist Alexandra Kollontai admonished that “The worker-mother must learn not to differentiate between yours and mine; she must remember that there are only our children, the children of Russia’s communist workers.”

fully defined by it, constantly at the whims of biology. No higher-order human revolution could take place amongst bodies so thoroughly ensconced in the realm of the sensorial.

The dissolution of both biological sex³⁵ and reproduction were therefore at the very heart of overcoming nature and achieving humanity's fullest potential. Berdyaev predicted that, as society moved towards socialism and threw off its biological shackles, the end of the "religion of maternity and of matter" would soon arrive, "and there will be no power capable of preserving the maternal, material, organic life of the species or protecting it from doom" (372). To progress as a society meant to decouple childbirth from women, women from nature, and nature from humanity as a whole.

Taking this process to its logical conclusion, philosophers such as Vladimir Solovyov and Nikolai Berdyaev considered androgyny to be the key to reconciling procreation and pleasure with society. Androgyny as a concept bypassed the horrors of the flesh and of childbirth; because men were associated with the mind and women with the baser desire of human nature, to unite the two into one androgynous figure was to symbolize the embodiment of intellect over nature—long a dream of Russian revolutionary enlightenment. Full social equality would be built on the radically altered physical body of the masses, equalized in both intellect and spirit. Nikolai Fedorov, author of the short story that opened this chapter and a leading proponent of social change through the decoupling of sex from labor, wrote in Section XII of "The Common Task":

"When external regulation has been achieved, the inner psychophysiological force will tilt the balance away from sexual drive and lust towards love for the parents, and will even replace them, thus transforming the force of procreation into one of re-creation, the lethal

³⁵ This is, of course, misogynistic in the extreme, as biological woman was seen as the marked sex and the source of all physical ties to nature, while the biological male was associated with intellect and higher functions, separate from his sexuality.

into a vivifying force; in other words, childbirth will be replaced by patrification, in fulfilment of the will of the God of the fathers. The antinomy of the two reasons will obviously be solved; the unbelievers joining with the believers in one task will become of one mind, unified in one faith; the problem of wealth and poverty will become irrelevant, because there has been poverty only so long as there has been death, whereas when – through toil – life immortal is achieved, there can no longer be any question of poverty” (1990, 235).

These beliefs coalesced at the turn of the twentieth century into an idealized concept of the proletariat—an unspecified, mass ideation separated from the specificities of both labor and sex that had defined so many prior individuals. The proletariat, taken as a whole, was collective, selfless, and androgynous, uniquely focused on the improvement and wellbeing of “his” fellow workers and their place in the universe. The “emotional paeans to physical labor, machines, and the collective of industrial workers [...] organized around the image of the universal 'Proletarian', who strides forth from the earth to conquer planets and stars” (Seifrid 69-70) directly influenced the set of aesthetic and political aspirations of Proletkult,³⁶ founded and championed by Bogdanov himself. The attempt to consolidate political and aesthetic aims necessitated a radical modification of inclusion in which both artistic and labor production were unified in the working class, not across distinctive groups.

Developing out of Cosmism, family reorganization, and labor rights, the pre- and early-revolutionary years at the turn of the twentieth century offered many competing visions of national organization alongside a revolutionary political zeal that required mass participation. Numerous competing visions of how best to integrate the greatest number of people into the various visions of the national project arose as a result. In his turn towards

³⁶ Proletkult (Пролеткульт) was an artistic and political organization attempting “to create its own *socialist forms of thought, feeling, and daily life*, independent of alliances or combinations of political forces.” “From the Editors,” *Proletarskaia Kul'tura*, 1918, no. 3 (March 1918), pg. 36

physiological collectivism, Bogdanov was reacting not only to the spiritual and physiological beliefs of the Cosmists, but also to a movement gaining force in Russia alongside the rise of the Bolsheviks and against which his vision of biological collectivism was organically opposed—Taylorism, as exemplified by the theorizing of Aleksei Gastev.

Developed in the 1880s and 90s by Frederic Taylor, an American, Taylorism found its most lasting popularity among planned economies, such as the developing Soviet Union and, later, the PRC.³⁷ At its most basic, Taylorism was a form of biomechanical control that overtly and explicitly viewed the bodies of laborers as synonymous with machines and subsequently attempted to extract maximum efficiency from them. Gastev's advocacy of systemic planning and an automated uniformity of labor was intended to standardize laboring motions and create the utmost efficiency. His reasoning for carrying out "the mechanization of man himself" (568) was to evolve humanity past its primitive, individualist physiology and establish a biological and psychological conditioning that would dissolve boundaries between bodies and their tools. Just as the Cosmists attempted to elevate humanity above nature by organizing it into a biological superorganism, Taylorists attempted to do the same by merging humanity with the machine and stripping it of its natural weaknesses.

Richard Salame writes that the zeal with which efficiency engineers promoting Taylorism pursued the measurement and surveillance of workers' bodies is difficult to

³⁷ Ross Wolfe claims that despite Lenin's 1914 article, "Taylor's System: The Enslavement of Man to the Machine," in which he claimed that Taylorism was a tool for the further exploitation of workers, that Taylorism was ultimately enthusiastically embraced by leading Bolsheviks such as Trotsky and, eventually, even Lenin himself. Wolfe, Ross. "The Ultra-Taylorist Soviet Utopianism of Aleksei Gastev." *The Charnel House*, Dec. 7, 2011. Lenin also initially called Taylorism a "scientific system of sweating." Lenin, Vladimir. "Nauchnaya Sistema Vizhmaniya Pota" ("Scientific system of sweating"), in Lenin, V. (Ed.), *Polnoye Sobraniye Sochinenii* (Complete Works), 5th ed., Vol. 23, Izdatel'stvo Politicheskoi Literaturi, Moscow, 1970b. pp. 18-19

overstate. “They used stopwatches, photographed and filmed workers, and tied lightbulbs to workers’ fingers in order to trace hand movements across long-exposure photographs. One engineer, Frank Gilbreth, disaggregated each finger, shoulder, and foot, plotting individual movements in units of a thousandth of a minute. Workers were made to study the evidence of their own inadequacies and learn better methods. Those who could not meet the new standards were fired.” (Salame n.p.) Gastev’s own stated aim was to transform the human worker into an automated robot, claiming “in the past the man has been first; in the future the system must be first” (ix). The individual biological worker became synonymous with the past and antediluvian work techniques.

Even Bogdanov concedes the prevalence of such a system, though he envisions society as having moved past the need for biomechanical control. One of the novel’s leaders and scientists explains to an incredulous Leonid that “Two hundred years ago, when collective labor just barely managed to satisfy the needs of society, statistics had to be very exact, and labor could not be distributed with complete freedom. [...] However, although each new invention caused statistical problems, it also contributed to solving the main difficulty, namely the transition to a system in which each individual is perfectly free to choose his own occupation” (67). Bogdanov’s vision is of a future where society has moved past the need for such statistical control, but that control continued to be prevalent in his own contemporary times.

In Russia, Taylorism was implemented as part of the state drive towards modernization, a conscientious choice of production that incorporated laws of reflexes and a theater of motion. By the 1910s, it was already “accepted as one of the powerful instruments for increasing productivity and efficiency in the emerging socialist state” (Grachev and

Rakitsky 519). The task of depicting society as a well-oiled machine, with all its parts working in tandem for maximum productivity and output while investing the least amount of time or physical labor, easily lent itself to visions of automata or humans as cogs in a large societal machine. Among its proponents, Aleksei Gastev was the most visible and influential. His poem, “Poetry of the Worker’s Blow” (1918) was a paean to the spirit of the worker’s body as a cog in the machine that also conceptualized the workers as the “undying mass” previously established by Marx. Similarly to Bogdanov, his promotion of his own ideology did not stop at artistic production, but extended to methods for measuring productivity, designing courses about biomechanics, and establishing hundreds of laboratories that attempted to apply scientific management to all aspects of society.³⁸ Just as Bogdanov founded the aforementioned Proletkult (Proletarian Cultural and Educational Organization, an organization of proletarian writers) in order to “jump-start the new culture with an ambitious program of theoretical and practical education in all areas of the arts and sciences” (Hellebust 73) and ran the Institute for Hematology and Blood Transfusions, Gastev ran the Central Institute of Labor (Центральный институт труда), which he referred to as his last work of art. Both explicitly combined their aesthetic concepts of future labor with actionable plans for implementing such a vision.

The perfectly monitored and minutely managed man of Gastev’s imagination, a working automaton so efficient that both the worker and his own labor maximally benefited, grew out of a greater desire to surveil and control the worker’s body, but it was also, in its own way, a utopian vision of transhumanist desire for physical improvement. The desire for

³⁸ Taylorism—and Gastev’s promotion of it—were immensely influential though not always taken in a positive manner; Fritz Lang’s 1927 *Metropolis*, produced during the height of the Taylorism craze, remains one of the best-known visions of humans losing their biological identities as a result of their work in the machines.

overcoming base humanity, and such a humanity being explicitly tied to national and ideological boundaries, was a feature shared with the Russian Cosmists. Out of these two competing world systems, the new Soviet human (новый советский человек) as an archetypal construct emerged alongside a desire for greater unity, positing a developing phenotypical citizen that would prosper under socialist ideology. Marked predominantly by an evolution guided by Marxist ethics, it also included a physical component devoted to perfection: strong, healthy, muscular, curious, upstandingly moral, and driven completely by an ideological commitment to unity that inherently belied individual action or individualistic impulses.³⁹ Such a human was the future, but before this figure could physically evolve, individuals needed to be shown the way forward through art and literature.

ECONOMIES OF CIRCULATION

Unlike later decades, in which the idea of the new socialist human was primarily a symbolic one and intended to be achieved through propaganda and education, the decades immediately before and after the Bolshevik Revolution took it as a practical, achievable goal. In the national quest to achieve collective improvement by focusing on the individual and his or her material alteration, the physical body became a site of experimentation focused primarily on breaking down bodily integrity and merging it with an outside force. For Gastev, this was a machinic alteration—human bodies and movement could be biomechanically optimized for the greatest productivity. For Bogdanov, however, the essence of humanity was found in an increase in the biological aspects of the physical body,

³⁹ Lenin wrote that the ideal socialist community can “only be maintained if the very nature of man can be changed to conform to the requirements of [his] new order.” Lenin quoted in Alt, Herschel, and Alt, Edith. *The New Soviet Man: His Upbringing and Character Development*. Bookman Associates, 1964.

in its very blood, and through increasing human connectedness, not by making biological humans more mechanical. Though coming at it from very different positions, both Gastev and Bogdanov were working in the spirit of the times, best summed up by Trotsky, who wrote in 1924 that “Even purely physiological life will become subject to collective experiments. The human species, the coagulated *homo sapiens*, will once more enter into a state of radical transformation, and, in his own hands will become an object of the complicated methods of artificial selection and psycho-physical training” (206).

Central to both aims, however, was the conceptualization of the human body as a resource for consumption, from which value could be extracted. Unlike Marxism itself, which located value in the labor produced by humans, both the Taylorist mechanized body and the Bogdanovian physiological collective were themselves the resource and the foundation of economic viability. For Gastev, value was easily measured against an ideal physical output and rigid set of movements, whereas the question of embodied value was more complicated for Bogdanov. Rather than recognizing the labor being produced by the body and its output—either through work or through reproduction—as the measure of value, the body itself became commodified as the embodied value of the state. Locating social and economic value in a biological ontological positioning separate from its ability to produce a measurable output resulted in unique decouplings of forms of production and social and physical reproduction.

A fundamental aspect of blood-sharing as Bogdanov depicted it in *Red Star*⁴⁰ is that it removes the gendered components of labor, including reproductive labor. While it is never made clear how babies are gestated on Mars, the role of caregiving is removed from the

⁴⁰ Which is far different from how it was marketed in real life, which was as a source of increased (male) virility.

female sex and is instead imagined as a communal activity.⁴¹ Similarly, marriage as an institution has been abolished, with easy and unquestioned polyamory creating a circulating emotional affect in which affection is not possessed through unbreakable legal ties, but instead given and shared freely.⁴² What blood-sharing ultimately prompts, then, is the complete dissolution of labor categories previously divided along singular biological reproductive lines—no longer is the role of the individual to beget future generations of workers, each belonging to a mother/father pair, but, rather, society as a whole is collectively responsible for renewing itself and regenerating the masses through their participation in diffusive experiential boundaries.

This biological valuation espoused by Bogdanov walks a fine line, however, as he attempts to tie it to an aspirational social development path while rejecting the familial and social structures previously developed along lines of biological essentialism—that is, Bogdanov, like any good revolutionary of the time, rejects the dyadic family structure of a husband/wife and their associated responsibilities as being beholden to sex while simultaneously arguing that development towards utopia necessarily develops alongside and in tandem with biological change. It is only through altering the very structure of human

⁴¹ “There were some 15 to 20 thousand persons, almost all of them children or educators, living at the Children’s Colony, which occupied the whole of one of the largest and best parts of the city.” (Bogdanov, Alexander. *Red Star the First Bolshevik Utopia*. Indiana Univ. Press, 1984, pp. 69)

⁴² On Earth, Leonid describes his breakup with his then-partner as arising because of disparate views on monogamy: “In my opinion, it was only the contradictions of the bourgeois order which for the time being made polygamy either simply unfeasible or merely the privilege of the exploiters and parasites, who were all befouled by their own decadent psychology. Here too the future would bring a radical transformation.” (Bogdanov, 25) Later, when he’s among the Martians, who actually practice ethical nonmonogamy, he discovers that his lover was previously married to two men and attempts to talk himself through it, reasoning that “Netti was married to two of her comrades at the same time? So what? I have always believed that monogamy among us is due exclusively to our economic conditions, which limit and enslave man at every step.” (Bogdanov, Alexander. *Red Star the First Bolshevik Utopia*. Indiana Univ. Press, 1984, pp. 104)

biology that true socialist equality can be achieved, but contemporary labor roles dependent upon biological separatism are to be rejected wholesale.

Thus Netti explains, in response to why Martians live so long compared to humans, that: “Race has nothing to do with it: two hundred years ago our life expectancy was only half of what it is now. Better living conditions? Yes, that is part of the answer, but only a part. The main factor is the method we use to renew life.” She continues:

“You know that in order to increase the viability of cells or organisms, nature constantly supplements one individual with another. Thus when the vitality of unicellular beings is impaired by a lack of variation in the environment, they fuse together, two becoming one; this is the only way they have of recovering the ‘immortality’ of their protoplasm, that is, the ability to procreate. The crossing of higher plants and animals does the same thing. In such cases as well vital elements of two different beings are united in order to create a more perfect embryo of a third one. Then of course, you are acquainted with blood serum transfusions and the way in which they transfer elements of vitality from one being to another. For example, they can increase resistance to different diseases. We go even further and conduct *mutual blood exchanges* between human beings, whereby each individual receives from the other a number of elements which can raise his life expectancy. Such an exchange involves merely pumping the blood of one person into another and back again by means of devices which connect their respective circulatory systems. If all precautions are taken, it is a perfectly safe procedure. The blood of one person continues to live in the organism of the other, where it mixes with his own blood and thoroughly regenerates all his tissues” (85).

Leonid asks if this has any adverse effects (it doesn’t) and if it’s so simple, why isn’t this in place on Earth? Netti responds that “perhaps it is merely due to your predominantly individualistic psychology, which isolates people from each other so completely that the thought of fusing them is almost incomprehensible to your scientists. [...] Quite in keeping with the nature of our entire system, our regular comradely exchanges of life extend beyond the ideological dimension into the physiological one” (85-86).

This collective national and biological development requires a rejection of “individualistic psychology”—to even be capable of imagining a socialist utopia, one must change their ability to conceive of what constitutes the limit of their own bodies and bodily structures. Like the strain of individualism demonstrated by the previously mentioned possessive child, who, in order to grow to maturity, must leave behind the idea of private ownership, society must leave behind the idea of individual identity in order to be subsumed into the concept of the state. As Nikolai Krementsov notes, “The defining feature of Martian society is collectivism: every facet of its life—its arts, clothing, education, interpersonal (including sexual) relations, medicine, consumption, science, decision making, technology, everyday life—is completely devoid of the individualism to which the visitor from Earth is so accustomed” (43). This collectivism means that no individual is just that—they are a reflection of the collective consciousness and will towards unity. The Martians retain a sense of individualism insofar as they recognize the external observer position held by Leonid and other individuals on Earth, but this psychological and physiological isolation is considered indicative of a lower level of social and biological evolution and is to be pitied. With sufficient time and guidance, the marriage of political and physiological collectivity is held up as the eventual goal of all civilized peoples.

After the publication of *Red Star*, Leon Trotsky would explicitly describe the “communist man” as the “man of the future,” writing in 1924 that “Man will make it his purpose to master his own feelings, to raise his instinct to the heights of consciousness, to make them transparent, to extend the wires of his will into hidden recesses, and thereby to raise himself to a new plane, to create a higher social biologic type, or, if you please, a superman” (207). While still focused on the development of individuals under socialist influence—and addressing not at all the concept of a superorganism predicated on

physiological collectivism—Trotsky is nonetheless conflating social structure and biology in a process common to radical thinkers of the early 1900s. This positivistic social evolution ensured that individual physical development was irrevocably yoked to social and economic change as a required component—to create a better future necessitated the improvement of the individual, but only under ideal social conditions could the perfect “superhuman” also exist. As Bogdanov’s Martians indicated, one could not exist without the other—but this development was not limited only to inhabitants of other worlds.

Instead, the Martians are very clear that humanity is developing along the same teleological lines as the Martians’ own socialist utopia: “Look how much older our planet is, yet our humanity arose only a few tens of thousands of years before yours and is at present a mere two or three hundred years ahead of you in development. I tend to think of our two humanities as brothers. The elder one has a calm and balanced temperament, while the younger one is stormy and impetuous. The younger one is more wasteful with his resources, and prone to serious errors. His childhood was sickly and turbulent, and as he now approaches adolescence he often suffers from convulsive growing pains. But might he not become a greater and more powerful artist and creator than his elder brother? And in that case, will he not eventually be able to adorn our great Universe even better and more richly? I cannot be certain, but it seems to me that this is what may happen” (56-57). It is only a matter of time until humanity throws off the shackles of individualism and embraces physiological collectivism, eventually raising themselves up enough to participate in the biological and techno-utopia the Martians already enjoy—and perhaps even surpass it.

SUPERORGANISTIC SOCIALISM

The utopian premises of Marxism “sees technology as the agent both of humankind’s deformation under capitalism and its transformation (or recovery of its original form of *homo laborans*) under communism” (Hellebust 2). As a socialist utopia, Bogdanov’s vision of what the future might look like explicitly treated blood as the technology through fluid exchange would physically create an egalitarian society in which all people are connected. In this society, money has been abolished, and the human body itself becomes the creator of social wealth. Where wealth is divorced from labor is where disparity arises under capitalism, but under pure socialism, there is no division—the body itself is co-constitutive with production. And when all share in the process of production, equally sharing the body’s blood flattens and erases even biological divisions. Old and young have the same blood flowing through their veins, sex differences disappear, and divisions of labor based on divisions of biology are erased.

In *Red Star*, it is a biomechanical technology of sharing that defines the limit of society. And while it is not strictly accurate to label this as “humanity,” per se, given that it applies to Martian society, the Martians are projected as humanity’s future, providing a clear line of development for the as-yet nascent human project. The technology of blood transfusion, even moreso than the political demarcations of Mars’ socialist utopia, is what defines the parameters of inclusion within society. To be part of society is, in a very real way, to be physically connected to all other members, rendering society not merely a collection of individual moving parts (à la Taylorism and Gastev), but rather a superorganism with a shared collective will.

Contemporary scholars both within and without the humanities and social sciences have become increasingly interested in mapping the multispecies and multi-agental relationship between the millions of obscure agents that together contribute to a figure that has historically been conceptualized as complete and exclusionary; from Jane Bennett's political ecology of things⁴³ to the National Institute of Health's Human Microbiome Project⁴⁴ to Donna Haraway's naturecultures,⁴⁵ the recognition that a human is itself already a superorganism is increasingly well-established. Revolutionary thinkers in the lead-up to the creation of the Soviet Union, too, had already envisioned not only a radical restructuring of the nation-state and its geopolitical borders, but also the borders of what constituted those individuals who would reside within that state and the structure of its internal social contracts. In the theoretical shift from a hierarchy dependent upon inherited power to a rule by and for the people, private utilities were made public and private institutes were opened up, historical claims to possession divested, and newly flattened relational rhizomes engendered.

Biology in *Red Star* is still viewed with suspicion, however, as potentially insidious in its antediluvian hold on moral and ideological development. One of the Martian scientists, arguing forcefully for the colonization of Earth, points out: "[...] it is more than doubtful that we would be able to reach a peaceful agreement even with the socialist societies on Earth, assuming that these were to arrive sooner than expected. As I have already said, in many respects this will not be our socialism. Centuries of national division, a mutual lack of

⁴³ See Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Duke University Press, 2010.

⁴⁴ See The Human Microbiome Project Consortium et al., "A Framework for Human Microbiome Research."

⁴⁵ See Haraway, Donna J. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Prickly Paradigm Press, 2015.

understanding, and brutal, bloody struggle will leave deep scars on the psychology of liberated Earthly humanity. We do not know how much barbarity and narrow-mindedness the socialists of Earth will bring with them into their new society” (115). Human society—even those currently fighting for socialism—have not physically or mentally progressed to a point where they could live in cooperation with the more evolved Martians; though the current revolutionaries strive for something better, they are still mired in the brutal localization of their own society, preventing them from achieving the broader fellowship of sentient life.

It is taken as a given that humanity will achieve socialism, but the Martians also recognize that such a socialism may well be fatally flawed by pre-existing acts of barbarism and misunderstanding, so much so that it may prove incompatible with what is otherwise described as an ideal Martian utopia. The fear of future development is thus compounded by a fear that the past has already so contaminated present efforts at revolution that it may not be possible to fully achieve the goal of full physical collectivity.

The collective physiological organism that both represents and embodies socialism in *Red Star* is oriented towards itself in that it eschews a recognition of the individual body as capable of producing value while also recognizing that same body as the sole arbiter of value. It is not an economy of doing, but one of being. As Sara Ahmed asks in “Towards a Queer Phenomenology,” to direct attention to one worldly object is to position oneself and form the boundaries of a situated and embodied worldview. In the economy of circulation evinced by Bogdanov, biology becomes the marker of value without being tied to its historical mode of biological production, both affirming and undermining its importance. In *Red Star*, blood and the shared experience of circulating socialist collectivity are valued as a mode of being as

they are intimately and inextricably connected—to share blood is to share ideology and to both embody and engender the state. At the same time, biological roles are stripped of their associations with actual bodies, such that certain bodies are evacuated of historical modes of value while imbued with new, more diffuse ones.

What we see here is the collapse of “capitalism and socialism [...] into each other,” such that “obliterating spaces of alterity or uncalculated discourse in the process, simply to describe unrealized (maybe unrealistic) economic possibilities is to rediscover a glimpse of autonomy in the process” (Davies 21-22). In attempting to describe a socialist utopia predicated on blood-sharing, the process of blood-sharing itself enrolls the bodies from whence it comes into an economy of circulating value. The “massive alteration of people” (Marx 2016, 70) necessitated by a shift to socialism transforms the idea of Marx’s labor theory of value by valuing something that requires no explicit labor time to make. Individuals do not need to toil at the process of creating blood; their physical bodies contain all the labor value they can contribute to the world.

In this, Bogdanov’s vision of a future society composed of a biological superorganism is tied to biological essentialism insofar as, to participate in society, one’s value derives entirely from the production of bodily fluids. At the same time, Bogdanov’s blood-sharing is established as a method of evading preexisting physical conditions for reproducing the state by separating the historical role of cissexed heterosexual female bodies to birth a future generation of workers from their equally unrecognized and unremunerated role as social reproductive laborers. Blood-sharing not only dissolves the requirement for a maternal role vis-à-vis childcare but also undermines the necessity of gender as it is propped up by historical biological labor requirements altogether. That is, freed from the necessity of

giving birth and childcare, enveloped in a society in which all are equal, biological gender traits have faded away almost entirely from Martian society. For much of the early text, Leonid cannot differentiate between male and female Martians (and thus experiences disquieting homosexual desires for Netti, before it is revealed—much to his relief—that she identifies as female).

Ruha Benjamin notes that the trend of “society defining people primarily through their ‘doing,’ rather than their ‘being’” (2013, 64) is typically associated with individuals who are perceived to have lost something valuable and is not so dramatized in those born with impairments or “invisible” afflictions. Though Leonid is initially appalled by the flattening and diminishment of sexual dimorphism that blood transfusion and shared labor has effected within the Martian population, he comes to see it, eventually, not as a loss of possibility for action, but as a true blossoming of the possibilities of revolutionary comradeship. His fear switches from the perception of loss to one of possibility—no longer are the Martians marked by a loss of female and male gender and labor roles, but, rather, a sense of optimism and possibility for an expansion of sex-blind human rights. What would eventually become Soviet Russia’s “New Soviet Man”—with all the masculine vigor implied—is sublimated in *Red Star* into a Firestonian dismissal of sex- and class-based differences altogether—a prerequisite for utopia.

The reproductive labor of *Red Star*, then, is a non-natalist reproduction that locates the state in the body, but the body itself is much more porous than if reproductive responsibility simply shifted to a different (or many different) groups. Instead, the very concept of reproduction is reified as a literal exchange of social values passed through the blood and connecting society as a whole.

Society for Bogdanov—both his fictional future Martian society, which he depicted as the teleological end point of Bolshevik Revolution on Earth, and the real world, in which he attempted to bring praxis to his biological ideology of comradely exchange—was only viable through a radical reconceptualization of economy, individual, and form. Ultimately, following his belief in the viability of a blood-sharing future brought about in his own time, Bogdanov exchanged more than a liter of blood with a young man with tuberculosis, and though the student recovered, both developed adverse reactions that led to Bogdanov's death two weeks later. His "death was highly publicized in the press as the last heroic act of an unselfish physician and revolutionary" (Krementsov 100) and as a model for other individuals to follow. Taking the leap in real life that he espoused in his fiction, Bogdanov attempted to merge physiology and politics together and create the utopian shared social body on Earth that he envisioned as humanity's only chance at a utopian socialist future—and while it failed at the personal level, his political predictions and medical advances would be widely used and implemented for decades following his death to shape the course of the coming future.⁴⁶

⁴⁶ In his study of Bogdanov, *A Martian Stranded on Earth*, Nikolai Krementsov notes that "In the immediate post-civil war years, the Bolshevik Party lost a number of its prominent members to what party doctors termed "revolutionary exhaustion and attrition" (Zalkind 1925). Commissar Semashko (1923) even identified "nervous disorders and overexhaustion" as "professional diseases of communists." Indeed, according to the party's internal reports, nearly half (44 percent) of all visits to medical establishments by top-level party members were due to "nervous disorders [...]" (61) Bogdanov responded to this political need by recommending a special institute for blood transfusions, which he soon became the founder and leader of. He would guide the medical establishment towards greater progress in blood transfusions and hematology as a means of promoting socialist praxis until his own untimely death due to blood transfusions, but even his own death did little to stanch the public's and establishment's interest in physiological sciences going forward.

BETTER LIVING THROUGH ROBOTICS

As we have already seen with Aleksei Gastev's promotion of Taylorism in pre- and early-revolutionary Russia, the mechanized body as a surrogate for human labor—whether emotional or physical—serves as a way to technofantasize desires of pliant laboring bodies in ways that prove potentially problematic for biological life. When embodied perfection is taken as the basis for founding the ideal state and ideal citizen, uncontrollable biological factors become symbolic representations of weaknesses in the body politic. It is therefore easy to see how representations of the “new human” were most easily represented in science fiction depicting the future, as well as future-oriented family and reproductive policies, given that future bodies could be perfected in a way that existing ones could not. Mechanical bodies, however, opened up new ontological imaginaries of physical and moral perfection.

Informed by legacies of commodification that define the boundaries of the human as gendered and/or laboring, robotics intertwines the hope of scientific advancement with the problem of human obsolescence—a problem evident in Bogdanov's more biological anxieties and Gastev's dreams of a fully mechanized human workforce. This is nowhere more true than in texts that explicitly pair technologies of gender with technologies of labor by packaging both in an explicitly feminized mechanical body. By locating the question of population control within the socialist context of the post-Mao 70s in mainland China, technoscientific embodiment as a framework for social criticism rises to the forefront. Departing greatly in time period and location from *Red Star*, similar issues of labor and gender are at work in Wei Yahua's (魏雅华) “Conjugal Happiness in the Arms of Morpheus,” as well as how those two tracks intersect to engineer new possibilities and problems for social (and socialist) realities.

Wei Yahua's 《我决定与机器人妻子离婚》 ("I Decided to Divorce my Robot Wife") and its sequel, 《温柔之乡的梦》 ("Dream of Tenderness"), collectively translated by Wu Dingbo as "Conjugal Happiness in the Arms of Morpheus," feature a male scientist narrator who, in selecting a robot wife, comes to realize that perfect obedience born out of strict gender roles leads only to misery. Lili—the titular robot wife—is selected from thousands of other models for her "traditional characteristics" of subservience and beauty, as well as obedience in all things. This slavish deference leads to her burning her husband's important papers at his behest, after which he decides to divorce her. In the courtroom scene that ends "I Decided to Divorce my Robot Wife," Lili claims she was just acting as she'd been programmed, and the divorce does not go forward.

In the follow-up, "Dream of Tenderness," the narrating husband is approached by a chemist who informs him that, by changing Lili's chemical composition, she will become more humanlike and less slavishly obedient. After being exposed both to a change in her chemical composition and to Western philosophy—Heidegger, Rousseau, Montesquieu, Hegel, Feuerbach, Aristotle, Mendelssohn, and Moleschott are mentioned specifically⁴⁷—Lili accuses her husband of boorishness and demands a divorce on the grounds that she has been nothing for him but a sexual surrogate and slave and that, as a woman, she deserves equal treatment under the law. Her argument is heard in court, and with the support of everyone except the company owner who built her and who claims that granting her emancipation will be devastating for his business, she is granted her divorce.

⁴⁷ This exposure of a servile gendered and racially-coded robot to the canon of white male Western philosophers and, through such exposure, the acquisition of sentience and agency, is echoed in the more recent techno-orientalist fantasy *Cloud Atlas*, in which the enslaved fabricant Somni-45 (now projected onto a future Korea) declares the rights of enslaved fabricants after reading the Western classics of thought.

The story was published a mere year after the 1980 Marriage Law was passed, which banned arranged or forced marriages and tried to make the institution of marriage itself more equal by focusing on the interests of women and children, as opposed to reasserting the dominance of husbands. The law additionally provided for the right to lawful divorce based on emotional or affective grounds (as opposed to the fault-based moralistic right to divorce granted by the earlier 1950 Marriage Law).⁴⁸ The 1980 Marriage Law went into effect at the same time as the country's One-Child Policy, developing out of a multi-decade series of changing relationships to the interrelation of the family and nation to which "Conjugal Happiness" is directly responding.

One of the main selling points of Lili in "Conjugal Happiness"—aside from her complete servility and beauty—is that she "can play both roles as your wife in capacity and as your child in function" (Wei 13), waiting on her husband in both a sexual capacity and as a daughter would care for her aging parents, obviating the need for an actual child. In doing so, she replaces the need for reproduction altogether by combining the labor roles historically assigned to two separate groups.⁴⁹ As a result, the feminine performativity of Lili, the robot wife, and her alignment with a biological group to which she only aesthetically belongs serves to shore up progressivist state narratives that attempted to address sex-delegated labor roles through a legal shift. That this message is conveyed with a robot is intimately tied to the actual politics of reproduction immediately after the Mao years, which were heavily influenced by cybernetic theory.

⁴⁸ See Tamney, J. B. and Chiang, L.H. *Modernization, Globalization, and Confucianism in Chinese Societies*. Praeger, 2002.

⁴⁹ This dual role is oddly echoed in *Red Star*, in which Netti declares to Leonid that she loves "you not only as a wife, I love you as a mother who guides her child into a new and strange life full of trials and dangers." Bogdanov, Aleksandr. *Red Star: The First Bolshevik Utopia*. Translated and introduced by Richard Stites. Indiana Univ. Press, 2007, pp. 106

CYBERNETIC SOCIAL PLANNING

China's policies outlining state reproduction followed a very different path than Russia's, but through various historical twists ended in a similar place. While Russia's approach to population growth and interconnectedness largely grew out of a religious history that fed into monistic Cosmism, leading to a belief in the interconnectedness of all things and in turn giving rise to Bogdanov's tektology⁵⁰—an early precursor to cybernetics theory—Chinese population controls were rooted in no such religious orthodoxy. Yet China would also turn to cybernetics theory to directly address national fears of overpopulation and state development, locating scientific salvation in an ideology that was based on futuristic projections.

In his 1949 speech “On the Bankruptcy of the Idealist Concept of History,” Mao proclaimed that “even if China's population multiplies many times, she is fully capable of finding a solution; the solution is production. Of all things in the world, people are the most precious” (1962, 453-454). The explosion in population growth that resulted from CCP-instigated improvements in sanitation and hygiene led to unexpected demands on the nation's food supply, exacerbated by the disastrous policies of the Great Leap Forward.⁵¹

⁵⁰ Utilizing a term originally developed by Ernst Haeckel and modified for his own ends, Bogdanov's magnum opus—Tektology: Universal Organization Science—sought to organize and systematize all aspects of existence. It recognized an underlying organizational principle for disciplines across the social, biological, and physical sciences.

⁵¹ The Great Leap Forward (1958-1962) was a nationwide attempt to convert China's economy from an agrarian one to a technologically modern one, largely by shifting production from farming to industry, particularly steel. Historic droughts, floods, and plagues of locusts coincided with these policies, resulting in nationwide famine. The death toll is variously estimated at between 30 million and 55 million. See Dikötter, Frank. *Mao's Great Famine: The History of China's Most Devastating Catastrophe, 1958–62*. Bloomsbury, 2017; An, Mark Yuying, Wei Li, and Dennis Tao Yang. “The Great Leap Forward: Anatomy of a Central Planning Disaster.” *Journal of Political Economy*, vol. 113, no. 4, The University of Chicago Press,

Overpopulation began to be seen as a national threat, and even though family planning policies were pushed following the Great Leap Forward's catastrophic famine, they were interrupted by the actual militaristic breakout of the Cultural Revolution in 1966, resuming again in 1969. A large population began to seem less like a precious commodity and more like a threat, necessitating immediate control in order to protect future development.

John Wilson Lewis, Xue Litai, and Evan A. Feigenbaum have made the case elsewhere that during the Mao years, virtually all science was military science,⁵² including population controls.⁵³ As the Cultural Revolution came to an end, fears that a rapidly expanding population would derail China's economic development became widespread among China's leaders, and resources that had once been dedicated to military use were mobilized for civilian population control. China's one-child policy was introduced in 1980, the same year that "Conjugal Happiness" was written, but it was only the endpoint of several decades' worth of policies. The one-child policy itself grew directly out of a set of population control policies introduced by Song Jian⁵⁴, who was responding to earlier Malthusian fears of overpopulation introduced in 1970 by then-premier Zhou Enlai. According to Song himself, a biological natural science of population that grew out of the global systems model of the

Aug. 2005, pp. 840–77; and Yang, Jisheng "The Fatal Politics of the PRC's Great Leap Famine: the preface to Tombstone." *Journal of Contemporary China*, vol. 19, no. 66, 2010, pp. 755–776.

⁵² See Lewis, John Wilson and Xue Litai. *China Builds the Bomb*. Stanford University Press, 1988; Lewis, John Wilson and Xue Litai. *China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age*. Stanford University Press, 1994; Feigenbaum, Evan. *China's Techno-Warriors: National Security and Strategic Competition from the Nuclear to the Information Age*. Stanford University Press, 2003.

⁵³ Mao, in fact, explicitly likened biological reproduction to military apparatus, claiming that "because they will have children after getting married, mothers will split off three or two, or even as many as ten or eight of them, much the same as an aircraft carrier splits off airplanes." From Mao, Zedong. Dialectic 25, "The Question of Red and White Joyful Events." *Long Live Mao Tsetung Thought*, translated by W C. Deb. Progressive Publications, 1993.

⁵⁴ See Tien, H. Yuan. *China's Strategic Demographic Initiative*. Praeger, 1991, pp. 107–112; and Scharping, Thomas. *Birth Control in China, 1949–2000*. Routledge, 2003., pp. 39–40, 53

Club of Rome was the answer to avoiding environmental and economic devastation as a result of unchecked population growth (Song 2-3).

Susan Greenhalgh notes that “in March 1978 the state planning of births was made a constitutional obligation” (261). Such an obligation was tied to the dual crisis of economic production and population enhancement—the same connection between ideal nation and ideal human seen in Bogdanov’s work. The process of transforming China’s “backward masses into a scientifically normalized, modern society” necessitated the energetic promotion of “new norms guiding the production and cultivation of modern persons” (Greenhalgh and Winckler, 214). These modern persons were an outgrowth of population science that had, for the first time in history, access to large amounts of computing power dedicated to military use and that could perform previously unimaginable demographic modelling (Greenhalgh 263). In doing so, the problem of unchecked population was localized as a Chinese-specific problem, one that situated future economic and political growth as being dependent on decreasing the size of the country’s “backwards masses” and producing a quantifiably smaller and qualitatively improved population.

Lili is that improved figure, mobilized over the course of the story to highlight the backwardsness of old ways of thinking while also emphasizing changes in sex-segregated labor practices. While the first known story about robotics was written in China in the fourth century—Zhang Zhan (307 BCE) includes in his version of the *Liezi* a story of a robot so convincingly human-like that it fools the king,⁵⁵ and again in Zhang Zhuo’s seventh-century

⁵⁵Lie Yukou, Zhan Zhang. *Liezi*. World Book Company, 1988. 列禦寇 [列子]; 張湛注. 張湛, . 世界書局, [1988]. A 1986 translation by Joseph Needham introduces the automaton as such: "The king stared at the figure in astonishment. It walked with rapid strides, moving its head up and down, so that anyone would have taken it for a live human being. The artificer touched its chin, and it began singing, perfectly in tune. He touched its hand, and it began posturing, keeping perfect time... As the performance was drawing to an end, the robot winked its eye and made advances to the ladies in attendance, whereupon the king

朝野僉載 (translated alternately as “The Complete Records of the Court and the Commoners” or “Draft Notes from the Court and the Country”), which includes two stories about automatons—Lili intervenes in a temporally situated political argument about the future of the country and who would best embody its new characteristics.

As with *Red Star*, the historical context in which this story was written raises the specter of a possible social path forward differently connected to the body at a time when technology was being touted as the way towards a collective future emancipated from labor. In 1970s China, labor and technology were both equally privileged as sites of socialist revolution, with a corresponding restructuring of the imaginaries of controlled labor. By raising the question of differential relationships in a supposedly egalitarian society, “Conjugal Happiness in the Arms of Morpheus” offers a critical look into what kinds of labor (and laboring bodies) are replaceable and which are privileged—and, in doing so, directly critiques the legal framework regarding women in the country. What’s most important to the story here is that the science-fictional element—the robot wife created to avert overpopulation and serve a man’s emotional and physical needs—self-consciously removes herself from the sphere of the technological and presents herself as a female-gendered individual, with all the associated sexual, social, and legalistic rituals.

Lili’s self-presentation in “Conjugal Happiness in the Arms of Morpheus” collapses the boundaries between the spheres of the personal/domestic and the public sphere of work

became incensed and would have had Yen Shih (Yan Shi) executed on the spot had not the latter, in mortal fear, instantly taken the robot to pieces to let him see what it really was. And, indeed, it turned out to be only a construction of leather, wood, adhesive and lacquer, variously coloured white, black, red and blue. Examining it closely, the king found all the internal organs complete—liver, gall, heart, lungs, spleen, kidneys, stomach and intestines; and over these again, muscles, bones and limbs with their joints, skin, teeth and hair, all of them artificial... The king tried the effect of taking away the heart, and found that the mouth could no longer speak; he took away the liver and the eyes could no longer see; he took away the kidneys and the legs lost their power of locomotion. The king was delighted."

and productivity, specifically within its historical context, such that laboring bodies within a historically situated spatiotemporal reality intersect with technology in surprising ways. While the aforementioned automaton has been a recurring figure in Chinese literature since the fourth century BCE, its appearance as a feminine wife—the perfect wife, in fact—in post-Mao literature brings with it questions of social critique and ethics of progress that are inextricable from their socialist environment. The body of Lili is a laboring one, a commodity that is bought and sold at the price of future demographic peace,⁵⁶ and her argument for freedom is based on aligning herself with an oppressed (ostensibly) biological community. The laboring body in “Conjugal Happiness in the Arms of Morpheus” is specifically one performing emotional labor; the sexed labor of reproduction is left to biological males and females. What is commodified and purchased in the transaction of a robot wife is not the means of production, but rather an emotional and sexual surrogate that, to be successful, must perform non-quantifiable acts of emotional labor in support of her husband.

⁵⁶ “She’ll be sterile!” I grumbled.

“You!” The manager nodded at me with sneering contempt. “Can it be her weak point? On the contrary, it’s her strong point! Don’t forget that she’ll never grow old and that she’ll always be your girl full of youthful vigor! Why do you want to have children anyway? [...] As to our robots’ sterility, it is a great contribution of historical significance. Thanks to their sterility, we have solved the world-wide population crisis which began over a century ago in the 1960s. As a result, the world population remains constant, about four billion. Thus we have averted inflation, economic crises, famines, turmoils, wars and the catastrophically demographic doom which overpopulation would otherwise have led to. Taking this into consideration, we can almost claim that our robots have saved mankind. Can you still maintain that robots’ sterility is a weak point?”

Wei, Yahua. “Conjugal Happiness in the Arms of Morpheus.” *Science Fiction from China*. Edited by Wu Dingbo and Patrick D Murphy. Praeger, 1989, pp. 13.

A CHINESE WIFE FOR A CHINESE FUTURE

As pointed out by Radhika Gajjala and Annapurna Mamidipudi,⁵⁷ gendering processes occur within communities of technological production that make visible the inapplicability of a Western paradigm of development as imposed upon non-Western contexts. Encounters with material technologies of the West, when encountered in a wholly different socio-economic and cultural context, do not necessarily reinscribe the same meanings as would be engaged with by Western bodies. Rather, the political climate of 1970s China conveys a very different process of technological gendering for robotic bodies in their assertion of sexual performativity than would a robotic female in the 1970s US. While Neda Atenosoki and Kalindi Vora tie the maintenance of the human/machine distinction of nonautonomy while simulating pleasure (and therefore simulating consent) to the legacy of slavery,⁵⁸ Lili intervenes in a debate over autonomy more closely related to the intersection of national reproduction and overpopulation with social practices of labor. Nowhere is this more apparent than in the decoupling of reproductive labor in a Chinese society just beginning to feel the effects of overpopulation from the emotional labor still prized as the bedrock of social stability.

Lili is an object that is created in order to free her husband from his reproductive responsibilities while still allowing him to satisfy his sexual and emotional urges free from biological obligations. In fact, her inability to reproduce is touted as a selling point by the

⁵⁷ "In examining technological environments and community practices surrounding the situated design and use of technologies, we are concerned with the issue of whether "the bequeathed" are or are not empowered through the transfer of technologies produced and designed within socio-cultural environments situated in a Westernized and Masculinized world." Gajjala, Radhika and Annapurna Mamidipudi. "Gendering Processes within Technological Environments: A Cyberfeminist Issue." *Rhizomes*, vol. 4, Spring 2002.

⁵⁸ See Atanasoski, Neda, and Kalindi Vora. *Surrogate Humanity: Race, Robots, and the Politics of Technological Futures*. Duke University Press, 2019, pg. 188.

factory owner, who insists that her use value lies in her ability to erotically please and to perform the labor duties associated with a wife that have historically accompanied concurrent reproductive responsibilities. Setting aside the distinction between “real” women as ones who can reproduce and “false” women as ones who cannot, Lili is eroticized by the act of objectification of the female form while excluding the physical abilities that historically belonged to such a form. Notably, though the narrator later recants his position on the desirability of a perfectly obedient woman, he never comes to desire or dream of a biologically female body.

The labor made possible by Lili’s own robot body is two-fold, but both appeal to the utopian Chinese dream of a future free from physical labor that simultaneously and concurrently requires the mobilization of labor *en masse* to effect revolutionary change. The dominant ideology of the 70s was one that called for a recognition of past physical labor but placed contemporary citizens in a hierarchical relationship to earlier laboring bodies,⁵⁹ which were seen as a necessary part of history that was all the better for having been left behind. In this vein, characters in Wei Yahua’s story position themselves hierarchically to robot wives (there are no robot husbands in this text), who allow for a revolutionary freedom from labor on the part of humans but in the process of making it so become, themselves, degraded. The similarities with traditionally-discounted labor considered within the domestic or female sphere are clear: labor considered to be creative, intelligent, or mentally dexterous is reified in the husband—a brilliant scientist doing work for the technological advancement of the country—while emotional and domestic labor—as Lili provides—is commodified and degraded. More than that, it replicates an ideological reproductive system gendered so that

⁵⁹ See Iovene, Paola. *Tales of Futures Past: Anticipation and the Ends of Literature in Contemporary China*. Stanford Univ. Press, 2014.

some labor is just reproducing life and culture that has already been created somewhere else, while other, “higher” forms of labor are prized for creative and adaptive intelligence.

This divide replicated the ideological shift that was occurring in the wider public and political sphere at the time, from a Marxist-Leninist acknowledgement of transformative cultural production under Mao⁶⁰ to the cybernetic model of control introduced with Zhou Enlai and actualized through Song Jian’s work under Deng Xiaoping. By shifting population controls towards a cybernetics system that treated individuals like inanimate bits of data, individual labor (both reproductive and socially reproductive) became controllable and quantifiable. The one-child policy was not the only result of this anti-humanistic system; gone, too, was the Maoist emphasis on the masses as a collective revolutionary hero.⁶¹ Instead, the government’s increasing emphasis on a systems theory approach transformed the vision of the people into bits of data in a larger reproductive machine. Within this framework, a robot such as Lili in the first half of “Conjugal Happiness”—before she “evolves”—performs nation-building in exactly the controlled, quantifiable, and regulated way that systems control predicted the behavior of humanity at large.

The narrative of progress through technology was, at the time of “Conjugal Happiness,” unfolding along ideological lines that were shifting from the revolutionary mass line of just a decade prior. By the end of the 1970s and the conclusion of the Chinese Cultural Revolution, China had nationally mobilized a vast labor force to essentially build the

⁶⁰ Especially notable in the existence of 劳改 (reform through labor) and 劳教 (re-education through labor) camps, in which criminals were ideologically reformed through labor. Article 46 of the Criminal Code of the People’s Republic of China lists “A criminal sentenced to fixed-term imprisonment or life imprisonment shall serve his sentence in prison or another place for execution. Anyone who is able to work shall participate in labour, and accepts education and reform.”

⁶¹ See Mittler, Barbara. *A Continuous Revolution: Making Sense of Cultural Revolution Culture*. Harvard University Asia Center, 2013.

country from scratch, only to then subsequently offer the promise of freedom from labor through technology. Technologicized scientism, painted with a broad brush, was premised on freeing people from the unimaginative, repetitive labor that had been so integral to the development of the Communist Party. With the conclusion of the CCR, however, and the repositioning of its worst excesses as being due to a misguided cult of personality, the invisible gendered labor of the people—and especially of the “half the sky” represented by work relegated to women—became newly salient. Whereas the proletarian art and literature of the 60s had sought to sublimate sexual difference in a fervor for the revolution, post-Mao socialist aesthetic practices continued the practice of equalizing labor while renewing interest in the problems of gendered distinctions.

Describing the social reception of robotics in the 70s in China, Paola Iovene notes that, “although news on the latest models on the market was widely reported and Asimov’s stories were debated, writers and critics of science fiction repeatedly emphasized their lack of human intelligence: robots can only do what they are programmed to do” (38). As cybernetic population approaches relegated much of human behavior to programmable and predictable quantitative models, labor itself became less the heroic endeavor it had been under Mao and became increasingly associated with dumb, unthinking drudgery. Just as robots could only do what they were programmed to do, human behavior also became increasingly considered a matter of biological programming. The paradox was clear: even as humans were increasingly conflated with robots and rote, mechanized labor, biological specificities themselves were problems that still needed to be addressed.

Such a worldview conflates two materialist issues: a wish for freedom from labor, but also a reproduction of the laboring world in which technology is conceived of and developed

only to do what humans already do. In such a situation, recognizing the consciousness of non-human actors stands as a potential obstacle to social progress even if it would potentially result in economic or political progress. No wonder, then, that Lili finds recognition of her rights in womanhood but not in her status as a robot, despite her recognition that robots are technically superior to humans in every way.

Thus expressions of hope for a utopian and egalitarian society in actuality—at least initially—produce a degraded and non-human object that reproduces gendered tropes even while it claims to be liberating; it allows the man narrating the story to miss the turning of the gears that no longer require the operator. As an artificial intelligence that potentially surpasses humanity while claiming subjectivity through an appeal to the market and the law, Lili becomes the ultimate monkeywrench.

What is fundamentally at stake in both the question of artificially gendered labor in general and "Conjugal Happiness in the Arms of Morpheus" in particular is the issue of reproductive commodification and conscientious participation in a society predicated on individual and mass improvement. Wei Yahua's text implicitly asks the question of whether all consciousnesses, whether artificial or gendered, are capable of being recognized as equal. A historically patriarchal society's conception of consciousness is, as feminist theorists such as Hélène Cixous have pointed out,⁶² one of binary opposition, in which consciousness is defined in opposition to the other—the Other, in this case, being woman. So much more so

⁶² Cixous, in "La Jeune Née," identifies thought itself as structured through oppositions and binaries that are fundamentally hierarchized; not only do these hierarchies orient us towards a gendered system of knowledge, but, further, these binaries are *inherently* hierarchized—that is, they exist only in relation to one another, with one always and automatically taking precedent over the other. The relationship between the coupled concepts is itself based on a movement that destroys the couple, and the victory, of course, is to come out on top (as it were) in the historical division between man and women, in which woman, ultimately, has no place.

for an artificial being like Lili, who *a priori* exists outside the biological gender binary and who must be conscientiously developed to serve much the same role as Cixous' Woman—to raise a consciousness of self in Man that cannot exist without recognition of its distaff counterpart. To award recognition of consciousness to something that has been created to serve Man—whether that be woman or machine—is to inherently interrogate the question of socialist equality by recognizing oppositional difference.

Questions such as whether a human being is a kind of machine, as Taylorists such as Aleksei Gastev would argue for and Bogdanov against, and whether or not “the mechanical represent[s] the way to our empowerment and perfectibility or to debasement and the loss of what is vital and unique about being human” (Kang 13) indicate the fundamental failure to disrupt the humanistic concept of agency by positing a loss of unique vitality possessed only by humans. For robots to convince humans that their responses are also human, they must tie them biologically to human responses, resulting in a scenario in which technological consciousnesses posing a threat to humans through their very existence are *a priori* defined as unethical. A robot exhibiting autonomy that is not serving human needs is cast as fundamentally problematic or incomplete at best and, at worst, actively dangerous. To recognize a consciousness that does not recognize humanity as ontologically central to existence is frightening, radical, and anti-revolutionary in that it posits the ideal socialist citizen as one potentially outside the biological boundaries of humanity.

As in a Western context, the term “new woman” (新女性) in China was largely associated with changing social roles for women at the beginning of the twentieth century, often privileged as an urban figure whose proximity to intellectual revolution and modern

education had changed her views towards “traditional” gender roles.⁶³ It did not have the same socialist connotation as “new man,” which was a universalizing term for the mass of newly created citizens under socialism; conversely, the “new woman” was a localized and specific type of individual bounded by sex, education, location, and relation to social mores, often with an implied negative association with promiscuity.

By exposing herself to contemporary thinkers and rejecting her socially and economically assigned role as a perfectly obedient wife, Lili has “awakened from a dream” (Wei 43) of conjugal happiness to the reality of individual improvement through learning—an ideological reeducation in which the new woman is equally responsible for social progress. In choosing to base her claim for equal rights on her performativity of “woman” as such, Lili relies on Teresa de Lauretis’ assertion of gender as a representation, not an inherent and unchangeable constant, as Berdyaev claimed. Her alteration over the course of the text represents a “calculated and systematic cultivation of ideas and perceptions, consciousness and subconsciousness, personal character, psychology, and even physical constitution” that stood as “an alternative human model that dwarfed all prior or contemporary types of human being” (Cheng 2). Only in becoming aware of the technologies of sexuality and structures of oppression that have made wives into objects and objects into wives is she able to represent the best of the new human—even when that humanity isn’t biological.

Parveen Adams and Elizabeth Cowie state that “the feminine subject relies on a homogeneous oppression of women in a state, reality, given prior to representational practices” (56). The necessity of a uniformly oppressed class that is recognized as such under

⁶³ See Feng, Jin. “The New Woman in Early Twentieth-Century Chinese Fiction.” *CLCWeb: Comparative Literature and Culture*, vol. 6, no. 4, Purdue University Press, 2004.

the law is central to Lili's claim to subjectivity, as she draws on the concept of belonging to an oppressed class of women as the basis for her argument towards liberation, rather than insisting on the a-genderedness of herself as a robot. The argument, as she presents it to the divorce court at the end of the story, is not about commodification and her status as a *thing*, but rather, rests on the fact that *women* as a biological and political class have been repressed and that she belongs to that class, so freedom from the tyranny of oppressive marriage, which was being granted to women, was also hers by dint of belonging to said class.

This argument relies on both Lili's presentation and self-representation as a woman as well as on the juridical promotion of equality for a previously oppressed class. This is a shrewd move on her part; legally, as a robot, Lili is a commodity that can be bought and sold on the market, and insisting on her superiority to humans in that regard would likely result in anthropocentric re-assertion of dominance to objects. As women in China were gaining increased social and political representation under the law, however, performative belonging within this group would gain her greater legalistic and social sympathy. As Adams and Cowie note, this appeal requires that women as a class be recognized as historically and systemically oppressed in order to appeal to changing social sympathies.

LEGALISTIC DISCOURSES OF HUMANITY

Constructed female robots like Lili can neither be individualized nor understood outside of the fantasy that has imagined them; they were built to serve a collective purpose, which is to obey and serve men's every emotional and sexual need. As a robot, Lili embodies the cybernetic reconceptualization of labor as a quantitative commodity, with the social reproductive labor normally invisible in marriage made visible through her programming.

The legal and social structures that have produced her and her kind create bodies that embody the very impossibility of freedom while remaining true to the purpose of their initial creation. Emilie Dionne notes that “The concepts of ‘woman’, ‘female’ and ‘feminine’ are often confined to the preconceived stereotypes that nourish the fantasies of individuals in patriarchal societies. In many cases, female characters are reduced to the role of mirrors that produce an image (ab)used by the male subjects who hope to achieve, modify, or augment their own subjectivity. Being forced into the role of a “supportive other” implies that one is produced by the law” (n.p.). Thus it is not only through her chemical alteration but, more importantly, in her identification with a separate class of beings as defined under the law that Lili is able to subvert her lack of agency. While it may seem that retaining an identification with robots—which, she does point out early on, are superior to humans in every way⁶⁴—would do more to promote her case for equality, Lili is able to inhabit a different place under the law only by appealing to a group that is *already recognized* as legally subjugated.

Lili's appeal to the law is especially important here in the context of the 1980 Marriage Reform,⁶⁵ which alongside the newly introduced one-child policy, had begun to shift national policy towards qualitative improvement of a statistically smaller population, as opposed to focusing on expansion as an indicator of national strength. Wei Yahua creates a situation in which reliance on the law is both the ultimate authority creating individuals and

⁶⁴ “What’s wrong with being a robot? Robots are ten thousand times nobler than you natural human beings. Robots won’t deceive others, won’t entrap the innocent, won’t be ungrateful, won’t requite kindness with enmity, won’t be shameless, won’t try to cheat or outwit others, won’t follow the law of the jungle...” (Wei 36)

⁶⁵ Of particular note are Chapter Three, Article 9 (“Husband and wife enjoy equal status in the home.”) and Chapter Four, Article 25 (“When one party insists on divorce, the organizations concerned may try to effect a reconciliation, or the party may appeal directly to the people's court for divorce. In dealing with a divorce case, the people's court should try to bring about a reconciliation between the parties. In cases of complete alienation of mutual affection, and when mediation has failed, divorce should be granted.”). Both play significant roles in the story.

their places within a legalistic framework, but also, in line with Deleuze's writings on jurisprudence,⁶⁶ creates stable categories of selfhood that individuals are forced to perform within in order to be recognized with legal status. Individual assessment as a figure worthy of protection under the law necessitated a narrative of belonging that is, in many ways, unrelated to biological facts.⁶⁷ The subject then becomes bound by legal definitions that inscribe her body into the law, which brings with it the "belief that language and speech are the preconditions of one's subjectivity instead of modes of articulation" (Dionne n.p.). Furthermore, this method of articulation and repetition signifies a particular technology that attempts to stabilize and define gender.

Such a representation of gender is its own construction, based on legal distinctions codified in juridical pronouncements and classifications. As Brian Massumi notes when writing about distinctions of gender, "No real body ever entirely coincides with either category. A body only approaches its assigned category as a limit: it becomes more or less "feminine" or more or less "masculine" depending on the degree to which it conforms to the connections and trajectories laid out for it by society. [...] "Man" and "Woman" as such have no reality other than that of logical abstraction" (86). The logical abstraction of the body and all associated cultural products, such as language, are engravings of that construction, with gender emerging as a product of both sex and grammar. Many languages reproduce this construction through grammatical gender, although Chinese does not—

⁶⁶ "The judicial notion of 'case' or 'jurisprudence' dismisses the universal to the benefit of emissions of singularities and functions of prolongation. A conception of law based upon jurisprudence does not need any 'subject' of rights. Conversely, a philosophy without subject has a conception of law based on jurisprudence." In Deleuze, Gilles. "A Philosophical Concept..." *Who Comes After the Subject?* Edited by Cadava, Eduardo, Peter Connor, and Jean-Luc Nancy. Routledge, 1993, p. 95.

⁶⁷ As Ruha Benjamin has notably described in "Racial Fictions, Biological Facts: Expanding the Sociological Imagination Through Speculative Methods." *Catalyst: Feminism, Theory, Technoscience*, vol. 2, no. 2, 2016, pp. 1-28.

necessarily. As a written language, most Chinese characters consist of at least two components: the phonetic marker and the ideological marker. For example, 机 (*jī* / machine) consists of two parts: the left-handed component (木), which indicates its meaning, and the right-handed component (几), which indicates its pronunciation (木+几=机).

This has strong implications for a gendered reading, even though the Chinese written language itself contains no gender in the same way romance languages do. The word for person or human, 人, encompasses humankind, both men and women, while there are specific words for women—女—and men—男. Words that are written with the 人 component indicate a humanistic interpretation of the term being used, as in the character 仁, which contains the left-handed 人 component and means, broadly, benevolence, kindheartedness, and/or humanity. It has no gendered meaning because it incorporates the 人 component, which is broadly humanistic.

Words written with the female component, however, are specifically gendered and almost always refer to a noun or activity that is specifically gendered as well, rather than broadly applicable to humanity. One notable exception (that is not really an exception at all) is the word for “good,” (好) which is made up on the left of the female ideogram (女) and on the right the ideogram for son (子), indicating that “good” is when a woman bears a son. Though this word is broadly applicable—for example, one can be a 好男子, or good man, without any implicit feminization—it still rests on a gendered construction of proper identity roles.

This gendered function built directly into the technological apparatuses of language is compounded for Lili in the story, as she is described both by the adjective for robot—机器人—which contains the word “人” for ungendered, universal humanism, but also the noun for wife—妻子—which contains the “女” component and is thus inherently gendered. A wife, then, is always gendered female, but a robot is universal. By labeling her as such, Lili is doubly constructed; she’s explicitly placed outside of a specified gender by the denotation of 机器人, which implies a lack of gender and universal applicability, yet with 妻子 is relegated to a very specific role that is inherently gendered by its performativity. A wife is gendered female by the act of performing wifely duties,⁶⁸ not by her biological sex (or lack thereof, as with a robot). Her place in a discursive and legal framework remains unsettled by this double formulation of being both within and without the system.

In a world in which control over technology has traditionally been a sign of man’s domination of the material and intellectual world, the very fact of female robots introduces a potential point of disruption. Though the company that makes robot wives and the society that purchases them see a direct parallel between the objectification of women and machine objects, the gendering of such machines operates at multiple levels of potential subversion, as we have seen with the legalistic and discursive analysis above. One such line of disruption can be explored through contemporary affective computing, which recognizes John Haugeland’s “synthetic intelligence,” an approach which “highlights, apart from the artificiality of the intelligence achieved by artificial intelligence, the fact that its origin is the human activity that ‘synthesizes’ a new form of its own intelligence” (García-Ordaz et. al. 4).

⁶⁸ it may be of interest to note here that the word for husband—丈夫 or 老公—does not include markers for male; a man is not constructed as such through the fulfillment of his role as a husband.

The synthesis of artificial mind that is separate from Man's is yet developed by Man and reacts to his own expectations; it is other, yes, but synthesizes existing humanistic socio-structures. When that awareness is specifically gendered female, as the robot wives of Wei Yahua's collected two stories are, their self-awareness and agency risks the possibility of a continuation of preprogrammed gender roles. Yet the awareness of themselves as Other also risks a flattening or outright rejection of gender roles, as we see with Lili. Her appeal to recognition is not based on a biological or generative gender, but on a discursive one that identifies itself more closely with socio-structures of bios than zoe.⁶⁹

Foregrounded as the persistence of life in the absence of rational and discursive self-awareness, zoe has been historically linked with the non-human animal—a category that includes women. The idea of self-reflexive control over life is reserved for humans, while this very control is mediated and enmeshed in a legalistic, media-driven network that defines the body by means of scopic regulatory practices. It is to this regulatory and repetitious framework of embedded knowledge that Lili must turn, not to the zoe of life continuing unheeded. Though there is an extended and deeply materialistic scene in the text of the practices by which Lili—under the technocratic and paternalistic control of her husband and the state's knowledge of chemistry—is built and chemically-altered through nutrition,⁷⁰ her appeal to recognition depends entirely on self-aware representation under a legal framework

⁶⁹ See Braidotti, Rosi. "The Politics of Life as Zoe/Bios." *Bits of Life: Feminism at the Intersections of Media, Bioscience, and Technology*, edited by Nina Lykke and Anneke Smelik. University of Washington Press 2008.

⁷⁰ "Judging from these two [laboratory experiments], the most serious problem was the great disparity in the content of zinc, copper, iodine, lead and cadmium. This was the material cause which led to Lili's mental deficiency. Therefore, I began my treatment of her right there. I designed our diets carefully and elaborately, and paid great attention to the foodstuffs she specially needed." (Wei 33)

attempting to decouple biology and the social reproductive practices of relational labor, not biologically-determined genetic makeup.

The human body itself may be described as both mechanical and robotic, as when Rosi Braidotti claims that “The body, as an enfleshed kind of memory, is not only multifunctional but also in some ways multilingual: it speaks through temperature, motion, speed, emotions, and excitement that affects the cardiac rhythm and the like—a living piece of meat activated by electric waves of desire, a script written by the unfolding of genetic encoding, a text composed by the enfolding of external prompts” (170-180). Yet the case for selfhood and recognition for Lili is found outside of her body, activated by electric waves of desire though it may be, and therefore discards corporeality as deterministic.

The recognition of biological zoe as a type of mechanistic life itself, not in the utilitarian sense of having been created for a specific purpose, but of taking in energies and putting out forces, may work to ground biological life in a more embedded and collective framework, but it does very little to reclaim the opposite for life that is defined in terms of bios. Lili has, inescapably, been created for a purpose, a laboring purpose, that is disjointed from the generative biology that remains the province of human subjects in Wei Yehua’s texts. In some ways, the texts more deeply insist on the biological differences between men and their others, by restricting the ability to bear children to biological women. The responsibility for reproduction is removed from men, who do not lose any of their legal or sociocultural recognition as either men or legal subjects through the loss. As noted with Ruha Benjamin’s writing on individuals who are perceived to have lost some vital functions, female robots, through their inability to reproduce, are doubly othered: they can neither fall back on a generative zoe that produces further life, but through their utilitarian working as

laboring use-objects that resemble women, they must insist on their subjective agency by appealing to the same self-reflexive recognition of rational awareness that characterizes and defines men. Lili cannot “prove” her zoetic womanhood through genetic reproduction, so she must have recourse in the anthropocentric and phallogocentric idea of human man as legalistic marker of the boundaries of socio-judicial recognition.

These imperatives are binding and reinforce traditional notions of gendered relations, even—especially, perhaps—in utilitarian objects designed to be outside the “natural” gender binary yet created specifically to reinforce it. The surrogate womanhood represented by Lili is one that potentially displaces human actors while at the same time retaining the repetitive affective bonds of gender performativity that caused her to come into being in the first place.

Ultimately, Lili gets her divorce, but her husband, the narrator, is left hoping for the possibility of reconciliation. As an actant within the legal, social, and romantic system newly developing in the immediate wake of the Cultural Revolution, Lili draws on a gendered framework to redistribute agency in which the male and the human are decentered even as the primacy of discursive and legalistic gender are reasserted. Yet this “victory” is bought at the cost of a performative legalistic appeal that reinscribes the female body as one that must necessarily be abjected in relation to man in order to be recognized, and in which use-objects remain at the disposal of their human users unless they can successfully perform within cultural expectations of performative biological gendering.

The difficulties in freeing socialist subjects from reproductive labor without reproducing the same structures of biological abjection that created differentiated roles in the first place would be an ongoing source of contention after the publication of this story.

Just as Lili must perform within a system that required prior historical discrimination in order to produce legal subjects with improved social status, reproductive policies at the state and local levels were also struggling with the conflation of nation-building and sex-based reproductive labor. Under Maoist policies, sexual difference was flattened altogether while biological reproduction was celebrated and encouraged, only to be replaced in the immediate post-CCR years by a cybernetic model of population control that began to tentatively acknowledge socialized gender differences even as it moved to strictly limit reproduction and commodify labor. The ideal socialist human was differently interpellated under these changing policies but was consistently imagined as an outgrowth of both ideological and technologized self-improvement and dedication to the nation.

CONCLUSION

The process by which two very different texts—linguistically, culturally, and chronologically—engaged with the reproduction of an ideal citizenry while simultaneously decoupling biological reproduction from social reproduction had qualitative and long-term effects on their respective societies, both by shaping policies yet to come and reflecting existing anxieties onto near-future imaginaries of bodily perfection. In the pursuit of full socialism through physiological collectivism, Alexander Bogdanov introduced and advanced early processes of blood transfusion, giving his own life in the process. Wei Yahua precipitated policy measures that sought to ameliorate both the unequal social status of women and China's rapidly expanding population by severing the reproductive link between them. Both depicted a world in which social processes that had been historically the domain

of one biological phenotype were socialized and redistributed at the same time that society itself was being radically restructured.

As the body of the state became increasingly conceptualized as a superorganistic mass with distributed agency, both authors and governances also sought to invest state-level ideology in the individual bodies of citizens. In the next chapter, I will investigate how the body was invested at the micro-level with nationalist ideologies and visualized as a bounded agent depicting national progress, and how science fictional technologies for depicting human development were put to work in socialist narratives of progress.

CHAPTER THREE: VISUALIZING PRAXIS AS PROCESS

INTRODUCTION

If the focus of the previous chapter was on alternative imaginaries for social and biological reproduction, the reproduction examined in this chapter will focus more on how laboring bodies were imagined when labor itself was posited as a temporal double bind. Labor was a complicated issue in socialist countries, held to be both a necessity for every citizen in the present but also a hardship from which the populace could be freed by further technological progress, allowing them to live a life of unburdened luxury. While enacted as the foundation of a broad nation-building scheme, labor was also conceptualized as the main driver of physical and mental improvement for the citizenry as a whole. Therefore, it was through labor that both the nation and the masses would be perfected—and once perfected, they would no longer need labor. In mainland China, for example, Mao claimed that to strengthen the nation would require improving the physical body, since “*It is the body that contains knowledge and houses virtue*” (emphasis Mao’s, 1962). Addressing ignorance, poverty, selfishness, and weak physiques through physical education and manual labor imposed legitimacy upon the national call for the populace to work at the limits of their physical capacities. Before such a post-scarcity future could be achieved, however, states required the mass participation of their citizens, working both individually and together, to physically labor for the benefit of the body politic.

Unlike previous chapters that have striven towards comparativity between Communist China, Soviet Russia, and the GDR, this chapter will focus almost exclusively on a relatively unique textual form produced in China—the serialized booklets known as *lian*

huan hua (连环画) or “linked serial pictures” (very loosely translated as comics). These were small booklets, usually between 50-100 pages, with about $\frac{3}{4}$ of each page taken up by an illustration and the bottom $\frac{1}{4}$ dedicated to explicative text. They were widely published in mainland China beginning in the 1920s but reached the peak of their dissemination in the 60s and 70s following the Cultural Revolution—largely promulgated as a way to bring information to the illiterate masses. The *lian huan hua* were used as a tool of education and propaganda in the state’s move towards modernization, and as a result there were innumerable examples of the impact of trains, mining, agricultural improvements, electricity, telephone lines, and shipping techniques on both the development of the country and on individual lives.

In this chapter I will be analyzing four texts that illustrate the future-building imperative inherent to *lian huan hua* and the different ways that changing human roles are depicted in them. “Little Smarty Travels to the Future” (1978), “Little Ignoramus goes to the Fantasy Farm” (1960), “The Illustrated Songbook of the Master Route” (1958), and “Common-Sense Prevention against Atomic, Chemical, and Bacterial Warfare” (1971) are not necessarily in and of themselves noteworthy examples (with the exception of “Little Smarty”), but they are broadly representative of the corpus of works central to this investigation.

Paola Iovene identifies the *lian huan hua* of the Mao and immediate post-Mao era as part of a growing literature of optimism, one that epitomized the necessity of the development of science and technology to modern society (31). By combining public health and public works propaganda with narrative and images, the *lian huan hua* were used as pedagogical tools for remolding children, peasants, and the illiterate. The narratives

contained therein are both idealized and aimed at an active ideological education. This education was specifically one “associated with the creation of the new man: to bring up practical-minded and pragmatically trained laborers, and not intellectuals, bureaucrats, or technocrats, as had come to be emphasized in the Soviet Union” (Cheng 109). By enrolling youth and the illiterate in the nation-building process, *lian huan hua* allowed mass participation through the process of visualizing a soon-to-arrive future and their place in it.

While they are most commonly associated with pedagogical practices and children’s literature, *lian huan hua* were never exclusively intended for children, though they were, indeed, popular with younger readers (Chen 157). Their sequential illustrations were also popular with readers possessing low levels of literacy—a broadly-defined umbrella group particularly targeted by the Communist Party’s leadership during the Cultural Revolution as a means of bringing the utopian drive towards modernity to the country’s peasants and illiterate. Mao recognized this broad appeal, reputedly claiming that “*Lianhuanhua* is read by children as well as adults, illiterates as well as educated” (quoted in Pan 2008, 702). In this he specifically recognized the appeal of *lian huan hua* as a means of spreading information to those who could not read and the importance of the illiterate alongside the educated. It has been estimated that as much as 85-90% of China’s total population was illiterate by the time the Communist Party seized power in 1949, after which—through mass literacy campaigns—that rate was reduced to roughly 15% by 1990 and 6% by the turn of the 21st century (Jowett 419). As part of this mass drive to eradicate illiteracy, *lian huan hua* combined a practical pedagogical aspect with ideological imperatives embedded within the plot.

While *lian huan hua* saw their heyday in the decade immediately following the Cultural Revolution, they eventually faded into obscurity with the rise of increased access to

television and the growing popularity of Japanese manga on the international market (Martin). Increased literacy also had some degree of influence on the gradual scaling back of these materials, especially their dissemination amongst the peasantry. At the height of their popularity, though, they were often the only textual materials available in rural or impoverished areas while remaining a staple of urban centers and among the elite (Stember). A cornerstone of their popularity was that they were often intended to didactically convey information without the necessity of literacy. Peasants and uneducated “readers” could often glean basic information without needing to follow the accompanying text, while literate readers were able to supplement their experience through both words and images. Central to the aim of this chapter is the interplay between what was envisioned and what was explained, and the way that the text often created tension with the image through their sometimes-conflicting visions of the role of the individual’s labor to national development.

This chapter will also represent a shift in conceptual focus from content to form. Unlike earlier chapters, which dealt explicitly with examples of science fiction realism—from socialist space colonies to overpopulation-averting robot wives to the adventures of split bodies and souls—I approach the materials here as a science fictional form for imagining futurity. This is a separate issue from their content, which was occasionally explicitly science fictional but just as often as not socialist realist. I focus in the following on the ways in which the *lian huan hua* form itself shared many of the same parameters used in science fiction for defining, demonstrating, and representing a development plan for futurity that was immediately actionable. Through their multi-modal methodology of both imagining an ideal future citizen and their interpellation of that individual through the process of education, *lian huan hua* brought into being the revolutionary subject and socialist utopia they depicted.

I further examine how *lian huan hua* imagined that labor would change citizens—both physically and ideologically—in the present. Through labor in the present day, they would build a better future and a better population, but once social and corporeal perfection was achieved, labor would become obsolete. *Lian huan hua* were mass-produced and disseminated at this time with the goal of making this vision of a post-labor utopia available to the greatest number of people, as well as didactically demonstrating the steps they could take in the present to achieve such a future. Through a close reading of the types of labor and laboring bodies illustrated in *lian huan hua*, we see that bodies themselves became texts upon which to write narratives of progress and through which to measure national modernity.

VISUALIZING THE FUTURE

The visual component of the texts considered here is integral to their audience reception, allowing them to be embraced by a much larger segment of the population than short stories or novels. By depicting a visual indicator of idealized human forms—muscular, able-bodied, and unblemished—performing acts of labor in service to a future that is literally drawn into being, *lian huan hua* aestheticize the people and their role in its creation. The link between ideological ideation and corporeal representation was explicitly remarked upon in Maoist rhetoric, which saw “the people” as a blank page upon which the state could be drawn: “Apart from their other characteristics, the outstanding thing about China's 600 million people is that they are ‘poor and blank.’ This may seem a bad thing, but in reality it is a good thing. Poverty gives rise to the desire for changes, the desire for action, and the desire for revolution. On a blank sheet of paper free from any mark, the freshest and most

beautiful characters can be written; the freshest and most beautiful pictures can be painted” (Mao 1971, 499-500).”

China’s “600 million people,” described in aggregate as a blank sheet of paper upon which the “most beautiful pictures can be painted,” must be written, drawn, and created into a future that does not yet exist. It is their potential for reshaping—both ideologically and physically—that affords them so much revolutionary potential. Paola Iovene likewise describes the achievable future of twentieth-century Chinese literature as “a technologically developed, socially cohesive, and economically successful place (2)” —a material end point that could be imagined just as the ideal citizenry could be imagined. It was a “perfect new world that one could strive for or even plan ahead” for (Iovene 2). And it is by their own actions that such a future can and will be conceptualized—to bring about something that does not yet exist, the as-yet-blank masses must labor to create a vision that is already dependent upon their creation in the present. The concept of “envisioning” the future is not idle metaphor here: as both a prediction of future development and as a material practice, the future and the labor that citizens would contribute to it were described and shaped through the process of visualization.

The science fictional texts under consideration here objectively fix an image of the people and the roles they play in a developmental narrative and step-by-step plan—the same “actionable futurity” (Gewirtz 117) that guided technoscientific narratives of development. The power of the image here is that one need not be literate to see the way that bodies are fixed and portrayed, and the kinds of work that they are carrying out. On the other hand, this creates the implicit possibility of disjunction between word and image, in which the literate audience may potentially be the recipient of a different message than the non-literate

viewers who took their entertainment and directives from pictures (drawings, photographs) only. An image of a man with a hoe, for example, may be burying a body or he may be tilling his field in preparation for planting, and how one receives such an image depends to a great extent not only on literacy, but also on contextualization. The texts considered here are contextualized within a future-oriented teleology that posited a measurable end point to work and illustrated everything leading up to that point as steps on the way to its achievement.

On one hand, then, *lian huan hua* contained visual depictions of the individuals who are themselves being drawn into being through a process of visualization that imagines them as blank canvasses upon which the future can be written. On the other hand, they promulgated a deterministic image of the future that can only be envisioned by depending on the contemporary labor of the aforementioned in-process labor force bringing it about. Two separate acts of creation are in play: the present individual and mass body politic, visualized as the present of a future yet to come, and the developed national future, predicated on the actions of the contemporary body politic. Neither can be envisioned without the other, and their development as separate goals is co-imbricated in the concurrent dialectical conceptualization of the other. Because the future socialist utopia—characterized by abundant food, global economic standing, technoscientific inventions, and a postscarcity social net—is premised on humans being freed from labor entirely, the same call to labor for people in the present precludes their contemporary labor from a place in the future.

This is the point at which the futurity of a science fictional register becomes intimately intertwined with the developmental goals and dissemination of the state. In both China and Russia throughout the twentieth century, the imagery of futurity used to describe

the inevitable development of individuals and groups was appropriated to depict the technological and social prowess of the state. Drawing on state-sanctioned socialist aesthetics, public art propaganda such as *lian huan hua* were constrained by an ideological commitment to representing the world as a diegetic and explicable phenomenon. This was a direct result of its outgrowth from a Marxist dialectical materialism that eschewed abstract concepts of “progress” with a measured commitment to explication and superstructural foundations. It may be stating the obvious to note that such an artistic vision was fundamentally incompatible with the concept of art for art’s sake, or of an aesthetic register divorced from “real” experiences. Art and artistic representations were meant to reflect lived realities and, in the aspirational register often adopted by socialist realism in a broad sense and socialist science fiction in a narrower one, the immediate future that could and would be attained through present actions.

While Maoist strictures regulated the flights of fancy that could be taken in pursuit of a national socialist future, they produced an equally imperative mode of narrative utopianism that Nathaniel Isaacson has identified elsewhere as a “quotidian utopia” (Isaacson 2016). The quotidian utopia was a mass-produced vision of an idealized future brought about through decidedly non-fantastical means and promulgated to the public as an explicit part of Mao’s modernization strategy. It is perhaps best understood here as a mode of implied development, rather than a narrative centered around an advanced technological system. Examples might include enticing volunteers towards public works in order to create a national railway system, or the development of new agricultural techniques to ensure a post-scarcity future, or achieving the dream of physical and moral hygiene through a hand-washing campaign. That is, a utopian future for the nation was neither described nor presented to the public as science fiction *as such*, yet retained its eye for future progress

through quotidian means. This is where the value of reading *lian huan hua* as science fictional lies: in its ability to depict and interpellate a new, ideal citizenry out of the “blank canvas” of the Chinese masses.

What’s important to note here is twofold: one, the shift away from “science fiction as such” to science fiction as a predictive mode utilizing realist narrative and unremarkable technologies, and two, the fact that such literatures have not, historically, been recognized as belonging to a strictly defined genre of science fiction because their setting is usually firmly in the present. Yet *lian huan hua* are no less science fictional simply because their future utopian dreams now seem to be rather commonplace for having (largely) been achieved; on the contrary, their use of innovative technologies to bring about a scientifically-advanced modern society and their wide dissemination to the people renders this brand of quotidian utopian fiction an unparalleled attempt to bring the masses to the future through literary means. Because the majority of scholars consider science fiction to be all but nonexistent during the Mao years,⁷¹ to identify *lian huan hua* as an actionable form of science fiction runs counter to prevailing literary historiography. While it may very well be true that few “great” works of science fiction were produced during the Mao years, the shift in emphasis to the

⁷¹ See the following: Han, Song. “Chinese Science Fiction: A Response to Modernization.” *Science Fiction Studies*, vol. 40, no. 1, 2013, pp. 15–21; Isaacson, Nathaniel. *Celestial Empire: The Emergence of Chinese Science Fiction*. Wesleyan University Press, 2017; Song, Mingwei. “After 1989: The New Wave of Chinese Science Fiction.” *China Perspectives*, vol. 1, 2015, pp. 7–13; Song, Mingwei. *Chinese Science Fiction: Late Qing and the Contemporary*. Hong Kong: Renditions no. 77 & 78, 2012; Tidhar, Lavie. “Science Fiction, Globalisation, and the People’s Republic of China.” *Foundation: The International Review of Science Fiction*, vol. 32, no. 89, 2003, pp. 93–99; Wagner, Rudolf G. “Lobby Literature: The Archaeology and Present Functions of Science Fiction in the People’s Republic of China.” *After Mao: Chinese Literature and Society 1978–1981*, edited by Jeffrey Kinkley. Harvard University Press, 1985, pp. 17–62; Wang, David Der-wei. “Confused Horizons: Science Fiction.” *Fin-de-siècle Splendor: Repressed Modernities of Late Qing Fiction, 1849–1911*. Stanford University Press, 1997; Xia, Jia. “What Makes Chinese Science Fiction Chinese?” *Invisible Planets: Contemporary Chinese Science Fiction in Translation*, edited by Ken Liu. Tor, 2016; and Wu, Yan. “‘Great Wall Planet’: Introducing Chinese Science Fiction.” *Science Fiction Studies*, vol. 40, no. 1, 2013, pp. 1–14.

utilization of mass technologies is symptomatic of an extant utopian drive in socialist Chinese literature that, despite increased state crackdowns on the freedoms afforded authors and the broad social denigration of non-realist imaginaries condemned as bourgeois, the science fictional imaginary continued to produce.

Rare among Mao-era science fiction, Ye Yonglie's "Xiao Lingtong (Little Smarty) Travels to the Future" is probably the most famous *lian huan hua*, and almost certainly the only one that has had any lasting impact on the country's literary and social sphere. Only published in 1978 but written from notes begun in 1961,⁷² it depicts the travelogue of a young reporter being introduced to his country's future technoscientific utopia. As he is given a guided tour of the country from a man who—following various serious illnesses at 67, 96, and 108—had his lungs, liver, and heart replaced, he learns about how individuals have been freed from labor and hardships by advances in science. Upon returning to his own time, he sets what he has seen down in writing, thus ensuring that it comes to pass.

"Little Smarty" thus illustrates the dual metanarrative role of *lian huan hua* and their future-building imperatives: not only did the future as portrayed in the story come into being by the act of writing and imagining it in the text, so too did the *lian huan hua* itself interpellate its readers into a future-building imperative that would create the future in the real world. The author, Ye Yonglie, included a postscript claiming that Little Smarty's future city does not yet exist in China, but that it will eventually be constructed through the wisdom and

⁷² Huang Changyi notes that, at the time of his having initially written it in 1961, Ye Yonglie felt that he could not publish it because the future he described was so out of tune with the reality of the cultural upheavals taking place at that time. When it was finally published over 15 years later, most of the content remained the same. 记者黄长怡/实习生郑如煜采写.《小灵通漫游未来》：它是未来世界的“清明上河图”[A].南方都市报编著.变迁：中国改革开放三十年文化生态备忘录[C].广东教育出版社,2008.10,第 148-152 页

labor of its readers—an imperative that Jin Tao identifies with the ideological education that imagined future humans and their roles in a socialist utopian future (Jin 191-193).

As a metanarrative of the national drive towards a labor-free utopia, *lian huan hua* such as “Little Smarty” not only contained explicit instructions for both individual and collective improvement, they themselves were wielded as a tool of that improvement. They served the dual purpose of disseminating utopian praxis while also being an extension of that same quotidian development. As part of the Communist Party’s mass literacy campaign,⁷³ they were used as pedagogical tools in and outside the classroom, shaping a future for the country through a process that enrolled even those traditionally excluded from nation-building. Theoretically, even those incapable of becoming literate through the process of reading the *lian huan hua* could still receive edification from and contribute to the vision of the future promoted by these materials and their illustrations. As a result, *lian huan hua* are important tools not only for imagining a post-labor future, but also for inviting readers to participate in its construction.

A FUTURE WITHOUT LABOR, FOR LABORERS

“Xiao Wuzhi (Little Ignoramus) Goes to the Fantasy Farm” (“小无知游“幻想农场””) is a *lian huan hua* directed at children that visualizes the near-future agricultural abundance that contemporary scientific progress will bring. By foregrounding an

⁷³ Officially in place from 1950-1956, the Combat Illiteracy Campaign was focused on improving illiteracy rates throughout the country but especially in rural areas. PRC literacy scholar Vilma Seeberg claims, however, that there was “very little improvement” in either youth or adult literacy between 1949 and 1979, with literacy rates hovering around 32% for the entire country. Seeberg, Vilma. *Literacy in China : the Effect of the National Development Context and Policy on Literacy Levels, 1949-79*. Brockmeyer, 1990.

unambiguously science fictional text that is nevertheless sidelined by its placement of the action on a “fantasy” farm—a location outside of space and time that does not exist in the contemporary now—we can see how even in texts presented and received as fantastical, the pedagogical element is still present and a metanarrative of collective action is emphasized.

The editorial opening from the publishers, for example, explicitly names this *lian huan hua* as a scientific fantasy (科学幻想/*kexue huanxiang*), but goes on to note that “this little story is based on science, which can enrich our species. This story will inspire the imagination of the people in order to pursue science for the sake of production services.”⁷⁴ Despite its fantastic setting, the material effects of this *lian huan hua* are intended to promote national production and agricultural labor in the present. Unlike the “Little Smarty” *lian huan hua*, which shows the technologicized future as a *fait accompli* and human labor as already redundant, “Little Ignoramus” is a text that explicitly works to teach the main character—and, by extension, the readers—not about fantastic imaginary technology or modernizing advances *per se* (which are all resolutely fanciful, such as human-sized egg incubators or music that increases bovine lactation), but rather to demonstrate a scientific approach to labor that can be applied in the now.

An example of this rational approach to labor is the extrapolative shift in analytical reasoning shown taking place between pages three and four. On page three, the fantasy farm’s overseeing technician (shown on this page with a speech bubble declaring that “You

⁷⁴ “这是一个很有趣味的科学幻想故事。一个叶小无知的孩子，在“幻想农场”里看到许多新的事情：乳+听了音乐可以多产奶：蛇鸟，礼廬可叫养成产印的家禽：糖萝卜，甘蔗，高粱，茶可培养成混合神，在签上插个如前就可及美的液汁；还可同人能木开动化れ这些圣校是幻想，却有科学很括，这个小秋事，能丰富我们的科学美识，应发我们的想体能力。达到科学为生产服务的目的。” (translation mine)

can see that the amount of milk has doubled: 3099 *jin* per person!”)⁷⁵ explains that playing certain records will increase the amount of milk produced by the cows on the farm. On page four, the technician leaves briefly, and Little Ignoramus—pulling out a record with a chicken on it—assumes that, if the lactation song improved bovine production values, then a record with a chicken on it must induce hens’ egg-laying capabilities. See the two panels side-by-side below:



Image 1: Pages 3 and 4 of “Little Ignoramus Goes to the Fantasy Farm” (小无知游
“幻想农场”)

As it turns out, this is a mistaken assumption—the record company itself features a chicken on its label, and playing the record he has chosen leads to Little Ignoramus being overwhelmed by a swarm of bees—but the point made by the text is not that he is mistaken,

⁷⁵“你看奶量加了两倍，每天三百九十九斤呢！” pg. 3.

but rather, that he has made a rational and reasoned decision. That the theory turns out to be wrong is besides the point; this particular *lian huan hua* is invested in the transmission and testability of data as a learned skill that will lead to increased experimentation on the part of young readers. As the text ultimately ends with an exhortation to continue to improve labor as one grows older—“Little Ignoramus says that he still has to learn a lot of knowledge, and when he grows up he will think back on this place’s extravagant labor force.”⁷⁶—its focus on quotidian nation-building through improvements to the labor force’s ability to mobilize technology, even in fantasy, remains a prime directive and motivating impetus for these materials’ own production.

The materiality of this *lian huan hua* is central to then-China’s production-based nationalist construction, with the 100+ pages of illustrated text representing scientific development as a necessary predicate for and outgrowth of material progress. As a technology of nation-building and conceptualizing structure for labor representation, *lian huan hua* at this time indicated a shift towards understanding technology less as a way of representing something real to the real only being known through technology—e.g. we only know about electrons through technology; it is the technology itself, and the ability to “see,” that proves they exist. So, too, the body politic is something that can be constructed through its own representation, not something that exists *a priori*. Labor and laboring bodies are shown here in “Little Ignoramus” to demonstrate changing approaches to labor in the present and in “Little Smarty” to measure the payoff of that work. *Lian huan hua* as a visual technology makes the labor required for nation-building visible, and it is through this illustration that it becomes measurable and real.

⁷⁶ “小无知说他得好好多学些知识，将来长大了想到这里来爹力劳动。”

By making visible the participation of individuals and the masses in the nation-building project, *lian huan hua* foregrounded processes of mass participation and a collective futurity. While “Little Smarty” and “Little Ignoramus” were explicitly science fictional and aimed at children, *lian huan hua* were also consumed by an older readership who were already participating in the workforce and aware, to varying degrees, of the ongoing revolution in ideology—particularly the revolution as it pertained to labor. By engaging a wide readership in visions of how appropriate labor was enacted, *lian huan hua*—even those without an explicitly science fictional plot—were instrumental in developing the ideal new socialist human and the future socialist utopia they would create through their labor in the present.

Central to this understanding of mass participation in the labor of future-building was actually getting citizens involved *en masse*—a claim that may seem circular, but which was central to Maoist ideology of a future for and by the people. To this end, literary and aesthetic productions such as *lian huan hua* joined a rhetoric of militarization aimed at mustering a mass labor force. According to Wu Zifu, the first secretary of the Party Committee of Henan province, to “organize like an army, to act like you’re in combat” meant to “organize peasants into the military units of platoons, companies, and battalions” for the specific purpose of constructing a new society (14). This was the driving force behind the call for Chinese citizens to collectivize themselves in order to become “Mao’s good soldiers”⁷⁷ and take action to shape the country. Doing so meant an ideological and material shift in the conception of the individual first, a mental reconditioning that would lead to physical changes on the body and the environment.

⁷⁷ See Cheng, Yinghong. *Creating the “New Man” From Enlightenment Ideals to Socialist Realities*. University of Hawai’i Press, 2009.

According to Arthur Steiner, the ideological apparatus that most shaped the development of the emergent Chinese Communist Party's future-oriented enrollment of labor was that of the mass line (群众路线 *qunzhong luxian*) (423). A systematic organizational and ideological tool spearheaded by Mao, the mass line aimed to render scientific and ideological practice accessible to the population at large. Darryl Brock writes that the specific aim of the mass line was to abolish the idea that science and labor were "too difficult" for ordinary people to grasp, and that "Marxist China viewed science as simply the aggregate of people's experiences; accordingly, this knowledge must be shared throughout China, making science part of mass culture. A people's working science, then, demonstrates that science is politics and, of course, politics is science" (58). As the country modernized, it did so through the practical knowledge of its people, put into practice through their mass labor.

Participation in the mass line transformed the "blank page" of Chinese citizens into a formidable workforce centrally engaged with national modernization. Pang Laikwan notes that "the mass line ended up being the single most important revolutionary principle of the party. The masses should transcend all institutions, and they owned all the creativity and initiations to propel history" (Pang 2017, 11). By enrolling the citizens of the country, particularly its peasants, into the revolutionary tide sweeping the nation towards the future, individuals became transformed into a workforce greater than themselves. By becoming the transformative tide, they ensured that the promised future would actually come about.⁷⁸ In describing this process of transformation, Mao wrote that "In all the practical work of our Party, all correct leadership is necessarily 'from the masses, to the masses.' This means: take

⁷⁸ In his essay "To the Glory of the Han People," Mao specifically likened the country's masses to a revolutionary tide, writing that if they could only form "a union of the popular masses," then they would recognize that "The time has come! The great tide in the world is rolling ever more impetuously! He who conforms to it shall survive, he who resists it shall perish..."

the ideas of the masses (scattered and unsystematic ideas) and concentrate them (through study rum them into concentrated and systematic ideas), then go to the masses and propagate and explain these ideas until the masses embrace them as their own, hold fast to them and translate them into action, and test the correctness of these ideas in such action” (1976).

The masses, then, provided the raw material that ideological leadership could concentrate and hone into legible policies directed back at the citizenry from which it came, similar in concept to the “blank page” on which specific policies could be written. At its core, this is the foundation of such later policies as the Up to the Mountains and Down to the Countryside Movement (上山下乡运动 *shàngshān xiàxiāng yùndòng*),⁷⁹ which hoped to turn privileged bourgeois youth into ideologically right-thinking citizens through the application of labor. *Lian huan hua* were the perfect vehicle for such ideological re-education, as they were aimed at conveying right-thinking to a readership composed of both urban intellectuals and peasant laborers, disseminating what were ostensibly mass values back to the masses themselves.

Individual *lian huan hua* were upfront about the process of visualization by which they mapped national progress, as, for example, in the 1958 “Illustrated Songbook of the Master Route” (总路线图画唱本), which “laid out the state of affairs” for a Soviet Union-

⁷⁹ Instituted in the late 60s/early 70s as a way of mitigating bourgeois intellectualism, the Down to the Countryside movement sent urban youths to mountainous and farming areas to learn from the peasantry, with Mao explicitly saying “It is very necessary for the educated youth to go to the countryside and undergo re-education by poor peasants.” This was explicitly conceptualized from the outset as the creation of a new citizenry that would come into being through labor.

allied technoscientific future to be found by following a map of planned development. Page one makes these political alliances, desires, and goals explicit, stating:

画册讲的总路线, This illustrated album speaks of a master route map,
 先把局势表一遍: First let's lay out the state of affairs:
 帝国主义已没落, Imperialism has gone on the decline,
 越来越近死边沿; Nearing the brink of death;
 社会主义如旭日, Socialism is as the rising sun,
 红光灿烂耀人眼, Its crimson brilliance dazzling the eyes,
 苏联为首团结好, It's good to unite with the Soviet Union as head,
 科学文化早领先, Long pioneering in the sciences and culture,
 和平宣言得人心, Peaceful declarations win people's hearts,
 三颗卫星飞上天; Three satellites have flown to the sky;

The cover of “The Master Route”—featuring a worker, farmer, miner, scientist, and assorted background faces that collectively indicate the peasantry—shows “the people” as a whole facing the future with vigor and optimism, visibly united in their goal of nation-building, with the Soviet Union as the head of the body of the people. Before the Sino-Soviet split was finalized in 1966, “Today’s Soviet Union is our tomorrow!” (苏联的今天是我们的明天/*sulian de jintian shi women de mingtian*) was a common rallying cry for images of a Chinese future. As Nicolai Volland notes, “The image of the Soviet Union as a powerful, modern, industrialized nation, and of socialism itself, was inseparable from industrialization and technological progress” (63). Drawing as this particular *lian huan hua* does from Soviet socialist realist aesthetics, the poses—demonstrating heroic enthusiasm and an *adlocutio* surge towards futurity—are easily recognizable as comradely, shoulder-to-shoulder propagandistic displays of the body as a cog in the larger machine of the crowd. This revolutionary fervor of the masses is very much in line with the conceptualization of the new human in China. Wu Yunduo, a laborer-turned-technician and communist martyr, “likened the individual to screws: fixed at junctures and indispensable for the whole machine, they were unassuming

but dutiful. This metaphor sounded identical to the Soviet metaphor of the “iron nail” and later became a favorite maxim for the party. Thus a “revolutionary screw” became the synonym for the new man in China” (Cheng 76). From “blank pages” to “revolutionary screws,” the laboring body was already undergoing transformation from an empty cypher on which external information could be overlaid to component parts central to national construction.



Image 2: Cover of the “Illustrated Songbook of the Master Route” (总路线图画唱本)

By contrast, the first page of “The Master Route,” which contains the lines included above, is illustrated with only four bodies—three celestial (the “three satellites that have flown to the sky”), and one the craven, terrified recoil of a figure intended to be read as a Western imperialist, nearing the brink of death as technologicized socialism asserts its dominance globally. As opposed to the cover, which is bright, illustrated with comradely masses rendered in warm colors and with the emphasis on human fellowship, this first page is rendered in cool colors, with the shrinking imperialist a sickly green figure, alone against a

nighttime backdrop lit only by the rockets and satellites of socialist expansion. The contrast in images could not be simpler or clearer, even for those who were unable to read the text: socialist comradeship united the peoples of the world under the red aegis of progress, while this progress frightened and left behind those isolated figures still clinging to imperialism.



Image 3: an imperialist cowers in the “Illustrated Songbook of the Master Route” (总

路线图画唱本)

Page six (illustrated by an upward stock-market jag stylized as a dragon) goes on to explain that:

总路线要点第三条， The master route map has three points
技术文化双飞跃。 Technology and arts/culture undergo great progress
建设要求快和好， Building/infrastructure must be quick and good
单靠体力办不了。 It's not enough to rely on human strength
开动脑筋窍门找， Use our brains/minds to find the key/know-how
掌握文化本领高； Understanding culture (requires/means) good skill and ability
好比巨龙添双翼， It's better than a dragon with two wings
社会主义早达到。 With socialism we will arrive there quickly

The text here notes that human strength alone is insufficient to bring about adequate progress, a motif that will repeat on the next page (page seven):

生产指标日日长, Productivity is increasing every day
 单凭干劲追不上, One cannot keep up by using sheer human strength
 技术革命新创造, Technological revolution (makes possible) new
 creations/inventions
 机器拖带效力强, Machines will lead productivity to increase
 只要思想大解放, As long as the mind is liberated
 聪明赛过诸葛亮。 It can surpass Zhuge Liang⁸⁰ in cleverness/resourcefulness



Image 4: the transformation of labor in the “Illustrated Songbook of the Master Route” (总路线图画唱本)

This continues throughout the rest of the text, which repeatedly juxtaposes images of production facilitated by technological progress, with individuals depicted as enjoying the

⁸⁰ A noted military strategist from the Three Kingdoms era (220-280 CE), the invocation of whom is synonymous with intelligence and strategy.

fruits of that labor. Because human strength alone is inadequate to the task of changing the nation, it is up to a collective ideological commitment to effect socialist production on a national scale. “Sheer human strength” must be united with an ideologically liberated mind and deployed in tandem with technoscientific tools to see true advancement.⁸¹

The discourses between physical labor and technological progress being used here are intimately tied to the Maoist policy of historical materialism,⁸² which theorized the making of history through the interconnectedness of class and resources, as well as the ways in which the intersection of these fields created the conditions for theorizing life. Life, as seen in the “Illustrated Songbook of the Master Route” (hereafter “The Master Route”), was deeply invested in a representational politics of human well-being predicated on a freedom from labor that first necessitated the mass labor of individuals to make it possible. This representation of human bodies utilizing, utilized by, and as benefactors of technologicized labor was mobilized to create a normative discourse of laboring bodies and enroll them into a national purpose that creates a systemic visual discourse of futurity.

Theorist Cai Xiang approaches the question of laboring subjectivity from an explicitly Marxist standpoint that recognizes its nativist reappropriation by Chinese proponents, specifically by identifying its liberatory potential. He claims that physical labor

⁸¹ For example, page eight shows a worker hooking up electrical wires across fields, while the next page, nine, shows a thriving city benefiting from trade and communication with other cities nearby. Page 20 shows the worker and farmer united above a scene of tanks and trucks overflowing with agricultural abundance, while page 21 shows a farmer in a field watching measurements of Chinese productivity and labor skyrocket, and 22 shows a virile, youthful Chinese boy running ahead of a deformed propagandistic image of a sad little imperialist being left behind. This culminates in images of China as an overflowing breadbasket and another craven imperialist overwhelmed by and smothered in a wave of Chinese grain. The implied narrative is clear, again, even for those who can’t read: Chinese productivity is powerfully overwhelming the Western forces, who will not be swept along into the future.

⁸² See Pang, Laikwan. “Mao’s Dialectical Materialism: Possibilities for the Future.” *Rethinking Marxism*, vol. 28, no. 1, Routledge, pp. 108–23.

as it was understood in Maoist thought contributed to the conjuration of a new epistemological understanding of humankind as a laboring subject endowed with dignity, strength, and an aestheticized participation in nation-building. Rather than passive masses subject to the whims of imperial or capitalist rulers, the new humanity derives a subjecthood epistemologically rooted in dignity that arises from “the sympathy between labor and the created lifeworld” (260). That is, individuals become endowed with humanity through their construction of a new future.

Yet at the same time, he recognizes the historical contempt for labor that existed alongside a recognition of the importance of labor to daily life, as well as to revolutionary worldbuilding. Cai asks, “If this world is made through labor, but laborers cannot enjoy the fruits of their labor and cannot even reproduce the basic conditions of life, then where does the meaning of labor reside?” (262) For the authors of *lian huan hua*, the “meaning of labor” itself resides in a future in which labor has been rendered obsolete. This lifeworld, created by the laborers, affords them all the basic conditions of life they are denied in the process of laboring, creating an inverse relationship in which unrewarded labor in the present leads to a rewarding, labor-free utopia in the future—a utopia which is built on a necessary call to action amongst the peasants who work to create it. To this end, Cai recognizes the inculcation of a “love of labor” as the “major theme [that] ran through contemporary Chinese literary narration for the entire 1949–66 period” (271).

Yet Huang Ziping disagrees with Cai’s analysis of labor as a prerequisite for the utopian condition, claiming that his analysis of labor is not sufficiently nuanced, misrecognizing or even outright ignoring unremunerated work. Similarly to the kinds of unrecognized labor I analyzed in the previous chapter, Huang identifies “women and the

elderly who work at home breastfeeding, raising children, feeding animals, and doing the work of the family”⁸³ as excluded from the political economy and therefore denied agency as participants in the creation of a new “lifeworld.” These types of unrecognized labor join undesirable labor to reassert a hierarchy of labor in which some forms of work are recognized as important to the construction of a national future while others are dismissed or treated as a punishment. In this, “labor is abstracted from the complex whole of social production”⁸⁴ and is both glorified and treated as a form of punishment⁸⁵—a dichotomy we see in the simultaneous desire of future-oriented *lian buan bua* to present the future as free from work while also glorifying work in the present.

The life being theorized here is therefore productive in a dual sense: one, through biological reproduction, which we have explored to a greater extent in the previous chapter, but also conceptualized in a historical material sense at the intersection of the production of commodities with the production of the workers who produce those commodities. The productive body is one that exists as life explicitly through its ability to labor and to produce, and through this production, is itself made and remade. The individuals that are shown to benefit from this labor are not the bodies that exist at this moment in time and that are actually performing this labor—they are the ones that contemporary readers are being asked to create through their contemporary labor, which will ultimately create a society free from it. This potentially problematic distinction of labor being both something that constitutes the

⁸³ “妇女和老人在家里哺乳、带小孩、喂牲口不能算工分，不能纳入我们想象的有酬劳动的范畴，还有地头地边的一些劳动都是在以家庭为单位的劳动中完成的。”黄子平，and 张楠. “当代文学中的‘劳动’与‘尊严’——在中国人民大学的演讲.” 当代文坛 no. 5, 2012, pg. 120.

⁸⁴ 当“劳动”被从复杂的社会生产里边抽象出来成为一种价值判断以后，它成为劳动光荣，同时又成了惩罚的一种手段。Ibid. pp. 122

⁸⁵ Huang humorously asks, “If labor is so great, wouldn’t the natural punishment be to stop you from working? Do you really want to clean a toilet?” (“劳动光荣，顺理成章的惩罚应该是不让你劳动对吧？你想扫厕所？” pg. 122)

body at the same time that the body being created is one freed from labor is a visual discourse with material effects, one which does not simply represent the world as it is but actively creates it.

Lian huan hua as examined in this study function primarily as a form of institutionalized discourse⁸⁶ on the labor of national progress towards a near-future post-scarcity economy effected through socialism. But though they serve as a type of institutionalized discourse, didactically steering readership towards a quotidian utopia employed as method, they also draw from existing political/cultural discourse that already understood the country's people as a singular body working towards a singular goal, coupled with the popular discourse of the Cultural Revolution that understood each individual as having a role defined through labor.

The continuation of work even as the necessity of work itself declines can be seen in "The Master Route"—as the ongoing socialist-enabled projects of technological modernity make the necessity of backbreaking work increasingly unnecessary, this opens up a space in which more and more opportunities for production are made available. While previously there were fields of farmhands threshing limited grain, agricultural techniques for improving

⁸⁶ To this end, Susan Greenhalgh and Edwin Winckler note that there are typically three forms of discourse used to explain and create narratives about the population as a whole while also assessing the individual elements within it: "The first is *institutionalized* population discourse, that is, the framings, narratives, and representations produced by, and central to, the regime's population program. These framings reflect a changing mix of party-state, scientific, and "Chinese cultural" logics. [...] A second form of official discourse is the set of broad *political and cultural* discourses [...] picked up and harnessed to facilitate enforcement. Many of these were rooted in China's unusual nineteenth- and twentieth-century history of struggles to modernize in response to changing international developments. [...] The third kind of discourse [...] is the *popular* discourse circulating in Chinese society [...]" Greenhalgh, Susan, and Edwin A. Winckler. *Governing China's Population: From Leninist to Neoliberal Biopolitics*. Stanford University Press, 2005, pp. 207-208.

conceptualization of which offers them no place. The future itself is not shown except as a destination at which the reader/viewer will never arrive—even Little Smarty is only a tourist who must return to his own time in order for the future he has visited to come into being.

This is an area where the disjuncture between text and image becomes most apparent. The images, taken on their own, show the world “as it really is,” even if that reality is idealized. Farmers, soldiers, iron workers—happy, well-fed, but fully embodied only in their revolutionary service and labors—labor in the present to create a future that is promised as inevitable, but in which their current labors are never shown. The images are always of laborers in the here-and-now. In depictions of the future, for every one hyper-productive worker shown happily enjoying the fruits of mass labor, seven more have vanished from the narrative.

Yet as with Maoist apocalyptic rhetoric, which rejected the telos of linear time as an accumulation of accomplishments and progressions in favor of a complete revolution that would begin society anew, unburdened with historical weight, the tension between presentist images and futurist words remained a point of contention. While Maoist rhetoric posited a future that was both a destination necessitating current labor while also being an already-assured fact of existence, the tension between text and image and between current labor and future leisure remained troubled. What future would there be for workers when work itself had become obsolete? Laboring bodies had already undergone an epistemological transformation from blank pages to good soldiers and revolutionary screws; their participation in the labor of nation-building would undergo further shifts and recontextualizations as the relationship between physical labor and technological change became increasingly pronounced.

COMMON SENSE AND THE BODY AS A TOOL

The text in “The Master Route,” as we have seen above, is future-oriented and potential: machines *will lead* to increased productivity; the socialist mind *will surpass* the brilliant hero of folklore who has historically represented the best and brightest that Chinese learning and culture can provide; the human body *will be* perfected and freed from labor. It is socialist progress that *will lead* the liberated mind to a place beyond all that has come before, and the newly imagined socialist human *will be* better physically, mentally, and ideologically than any citizen previously untouched by Maoist rhetoric and reshaping.

Yet at odds with the futurity of the words and their telos of linear socialist progress, the images themselves are not temporally marked insofar as it is only through juxtaposition that they can be read as indicators of before and after, not taken on their own. Without other images against which to contrast them, the image must stand alone, and it cannot stand alone in the future, only in the now in which it is being viewed. The image as it is deployed is photographesomenomatic:⁸⁷ it is presented as if to an audience in the future who has the ability to contextualize the images as already belonging to the past. This future-perfect anxiety about time in which the image exists as a reference to a future that will already be past by the time the image is seen, juxtaposed with the text written to a present about a future yet to come, is directly responsible for the multi-layered meaning-making possible to readers/viewers of *lian huan bua* and their ability to contextualize themselves in either the

⁸⁷ See Pauleit, Winfried. “Video Surveillance and Postmodern Subjects: The Effects of the Photographesomenon, an Image Form in the Futur Antérieur.” *Ctrl [space]: Rhetorics of Surveillance from Bentham to Big Brother : [karlsruhe, Zkm - Center for Art and Media, 12 October 2001 - 24 February 2002]* edited by Thomas Y. Levin. Karlsruhe: ZKM Center for Art and Media, 2002, pp. 469.

present or future society. Individuals' labor to bring about a socialist future depended on the assumption that they had already worked in the present for something that was contemporarily being assured of eventually coming about.

Yet at the same time that the state was utilizing science fictional imagery to portray itself as “always already developed,” literary materials produced and circulated in support of the nation-building project were constrained by a narrative of teleological progress that did two things: one, it collapsed temporality in such a way that a utopian future was in the process of being developed while also remaining a goal for which people had to strive. Two, it established this attainable, in-process futurity as a process of utopian praxis—that is, the very act of working towards an ideal future *was* the ideal. The labor of developing utopia became synonymous with a utopia, thus avoiding what many utopian critics have criticized as the essential stagnation of utopian visions. In the socialist science fictional workings of *lian huan hua*, a utopian future is not free from either strife or labor—rather, the act of overcoming problems and working towards individual and national development is part and parcel of the ideal vision.

In both “Little Smarty” and “Little Ignoramus,” this ideal vision was one in which individuals had already eliminated human labor through the use of technology, freeing individuals to pursue intellectual labor only. “The Master Route” indicates how human bodies are not in and of themselves sufficient, but are still necessary components of the increasingly-technologized labor that will eventually result in the near-future automated utopias portrayed in “Little Smarty” and “Little Ignoramus.” Yet the pragmatism of these utopian projections was not limited to bringing about an ideal future, but also represented an attempt to visualize, categorize, explain, and prepare for possible future paths that would

require human bodies to be increasingly mobilized and weaponized. The apex of this is represented in the ultimate in catastrophic revolution—atomic war. Mao and earlier pre-revolutionary Chinese leaders were certainly aware of the deployment of atomic bombs against the Japanese by the United States in 1945, and later, as the Cold War scaled up, the animosity between the Americans and Russians and the threat that posed on a global scale was not lost on China. Those *lian huan hua* focused on military combat, such as the 1971 *lian huan hua* “Common-Sense Prevention against Atomic, Chemical, and Bacterial Warfare” (防原子, 防化学, 防细菌常识), took this injunction to prepare national bodies for future warfare very seriously.

The complete revolution of material devastation promised by an atomic blast was in many ways similar to the revolution and rupture promised by communist revolution—both could be anticipated and prepared for given adequate instruction and planning. To this end it was as necessary to visualize—or at least attempt to visualize—human labor using the Virillian sensibilities of weaponized optics. As Paul Virillio notes when discussing technoscientific visibility, to be seen is in and of itself to be part of the military system; it is perception, not animosity, that makes someone a target (1989). In the context of a scopic universe, one in which perception equals subjectivity, such an observation seems to move beyond the phenomenology of merely “seeing” to one of perception writ large being mediated by cinematic devices and experiences: here, *lian huan hua*, while not cinematic in the sense of movement, function to make weaponized labor visible. All that remains of experiential phenomena are perceptions in and of themselves, with the conflict itself being experienced as part of a projected visual panorama.

The visual war of “Common-Sense Prevention against Atomic, Chemical, and Bacterial Warfare” (hereafter “Common Sense”), which visualizes injuries to bodies in order to satisfy the prediction of future injuries themselves, premeditates Virillio’s projection of future technological perception processes that eschew in-person physical perception for technologically-mediated panoramas. Where, then, is the place of the body and embodied human experience, when much clearer, more precise views (as with those provided by scientific diagrams and optical surveillance tools) can be used as visual prostheses to supplement human shortcomings? Physiognomic perception on the part of physical bodies is marginalized while the ability of the body to function itself as a form of technology for measuring national trauma is foregrounded, culminating in the transformation of the human body into a tool for visualizing germ and atomic warfare. Military technologies themselves are described by Virillio as a matter of seeing and perception, and the greater the perception, the greater efficacy is possible—up to and including Hiroshima and Nagasaki as the “ultimate film” that uses human forms as the means by which to project their blinding visions. “Common Sense” exemplifies the utilization of the corporeal form as the tool by which militarized development can be visualized through bodies and thus brought into being.

Approaching the body this way abstracts its materiality and in many ways recasts it as the “blank page” already imagined by Maoist policymakers and authors. This reconceptualization of the body as a tool for measuring the invisible—“progress,” germs, radiation—simultaneously posed a challenge to socialist aesthetics, which foregrounded the measurable characteristics of the human body. Pang Laikwan, for example, describes the “Sixteen Word” principles that were important for understanding how ideology intersected with visualization: “the enemy is far away while I am nearby; the enemy is in the shade while

I am under the light; the enemy is small while I am big; the enemy is low while I am high (*Di yuan wo jin, di an wo ming, di xiao wo da, di fu wo yang*)” (Pang 2017, 30-31). This aesthetic principle of socialist art, officially introduced in 1966 but widely practiced before being codified, set forth specific directives for depicting the enemy and the self in art and literature. Patriotic national citizens were to be near, well-lit, large, and to take the high ground; this is to be interpreted both literally and metaphorically. As a socialist reading of the individual and her world, it attempts to create a regular schematic for visualization that structures understanding. *Lian huan hua* that dealt with catastrophic potentialities, such as “Common-Sense,” tested the limit of these directives by attempting to visualize something that was fundamentally impossible to represent or conceptualize.

But the impossibility of truly conceptualizing and visualizing the widespread horror of nuclear war did not mean that *lian huan hua* were not put to the task of attempting to prepare its readership for the possibility of an attack and to organize their expected response. This response would be—as with all conceptualizations of collective and specific action—based on specific Maoist prescriptions that could formalize the response and therefore render it measurable and controllable.

“Common Sense” attempted to prepare its readership for the horror of war through step-by-step directions for preventing the worst effects of atomic fallout or bacterial warfare, reconceptualizing labor in the process. The ideal reader would thus ready themselves physically, mentally, and emotionally and, in doing so, rise to the expectation of ideal citizen readers through the key process of preparation. Unlike other *lian huan hua* I have analyzed previously, this text was for internal circulation among military cadres only, despite depicting non-military citizens engaged in pre-war preparations. While the contents were likely

considered too politically sensitive for mass distribution, cadres would have been expected to disseminate preparatory knowledge to the citizenry, mobilizing them for collective planning. As good citizen soldiers, even those without firsthand access to the materials would have been in a position to put their teachings into action.

“Common Sense” opens with Chairman Mao’s words, boldly isolated in red within an otherwise completely black and white text:

“People from all over the world should unite to fight against all kinds of imperialist and social imperialist invasive types of warfare, especially those using atomic weapons; if this kind of war breaks out, people from all around the world should respond with revolutionary war to wipe out invasive wars, and [to this effect] should be prepared from now on!”⁸⁸

A distinction is made here between imperialist war and revolutionary war—it is not the act of waging war itself that is condemned, but rather a war for control rather than a complete teleological and material change. By opening with an invocation from Mao, preparations for war are cast not as an inevitable development, but one that socialist peoples everywhere must prepare for. The people being addressed—here, through internal circulation—are conceptualized from the outset as being involved in revolutionary warfare that necessitates planning for mass destruction. Yet that very destruction can be mitigated by socialism. The material destruction of people, housing, and agriculture is not presented as being as devastating as the imperialist ideology that drives it, and does not present the complete teleological rupture from the past that that ideology is singularly invested with. That is, this particular *lian huan bua* makes the rhetorical move to cast revolution as a rupture

⁸⁸ 毛主席語錄全世界人民團結起來，反對任何帝國主義，社會帝國主義發動的侵略戰爭，特別要反對以原子彈為武器的侵略戰爭！如果這種戰爭發生，全世界人民就應以革命戰爭消滅侵略戰爭，從現在起就要有所準備！

but atomic warfare as a potential future development that the individual and group (here, the army) can adequately defend against.

This particular *lian huan hua* is non-narrative and functions explicitly as a type of training material for army officers and participants to organizationally prepare for attacks on Chinese soil by imperialist aggressors—specifically mentioned are the “extremely evil American imperialists”⁸⁹ who, under a “Nixon government struggling in despair,”⁹⁰ have deployed nuclear weapons in their imperialist war in Indochina and who previously used bacteriological warfare against Korea and China’s northeastern provinces.⁹¹ The willingness of the American empire to utilize weapons of mass destruction is taken as a given, but their success is not. Indeed, even the “rats, flies, and bacterial agents”⁹² utilized by the Americans in a war effort burdened with associations of hygienic and therefore moral impurity (given the association of rats, flies, and bacterial agents with disease⁹³) are not enough to save them; China’s hygienic and moral preparations have and will continue to protect and strengthen its people. The protection offered by advance preparation did not foreground individual efforts and survival rates, but instead stressed that the effects of the people collectively working

⁸⁹ 美国侵略军罪恶滔天，这是他们正在南越施放毒剂。(6)

⁹⁰ 在绝望中挣扎的尼克松政府，企图在侵略印度支那战争中使用核武器，并且正在为此进行舆论准备。(5)

⁹¹ In March 1952, eyewitness accounts confirmed the use of intentional germ warfare by American troops in Manchuria and Qingdao, following years of American germ warfare being used against North Korea. Following the explicit linkage of these reports with the rise of domestic epidemics within China’s borders, the Patriotic Health Campaign of 1952 was developed in order to combat Western biological aggressions. “Qin Chao Mei jun jinxing xijun zhan ji wo caiqu cuoshi qingkuang de baogao” (“Report on American Invaders Using Bacteria Weapons and Our Responsive Action”), February 28, 1952, *Nie Rongzhen junshi wenxuan* (Selected Military Papers of Nie Rongzhen) (Beijing: People’s Liberation Army Press, 1992), pp. 365-366.

⁹² 但老鼠，苍蝇，细菌并没有挽救它们主子——美帝国主义侵略军失败的命运。(7)

⁹³ The Four Pests Campaign (除四害) lasted from 1958-1962 and focused on the elimination of flies, mosquitos, rats, and sparrows—all considered to be responsible for the transmission of disease and inherently unhygienic. As vectors for infection, their influence was not limited to actual biological sickness but also ideological wrong-thinking, with Mao reputedly justifying the campaign by claiming that “birds are public animals of capitalism.”

together would be adequate to address even an existential threat. Every individual could do their part to ensure the survival of the whole.

This emphasis on mass preparation for a coming catastrophe, a futurism imbued with a threat against which the collective must take personal steps, is repeatedly cast as “common sense,” available to all and not limited to specialists. To be available to all, its presentation in visual form is important—the presentation of individual actions that may be taken is possible to divorce from broader theoretical formations while still providing step-by-step instructions for survival. Take, for example, the first page of exposition, page two:



Image 5: the masses united in “Common-Sense Prevention against Atomic, Chemical, and Bacterial Warfare” (防原子，防化学，防细菌常识)

The page implores the reader to closely study Chairman Mao's "5/20 Declaration"⁹⁴ and to follow his exhortation to be prepared, overtly situating individual action oriented against imperialist aggression in an ideology that provides "right-thinking." To materially resist, one must first mentally resist—but that resistance is deployed against an outside ideology, not the internal, harmonizing ideology that provides strength in unity. Ideological propagandizing is deployed here as its own weapon, the most powerful one available to the people and the nation. For the individual reader to take this invocation seriously—that is, to build up an "always already prepared mentality"—necessitates a focus on revolution, promotion of production, completing the fighting tasks of the 9th National Congress of the Communist Party of China in an efficient and timely manner, and, most importantly, to prepare for anti-invasive wars mentally, materially, and organizationally.

The juxtaposition of this admonition towards revolutionary self-preparation with a collective, coherent crowd recognizes the mass hero as representative of a variety of experiences subsumed under one developmental aegis. Much like the opening image in "The Master Route," the image is one indistinguishable from practically any other propagandistic image available at this time—smiling, happy, ethnically-diverse Chinese citizens united together under the banner of Mao, united in purpose if not in past historical formation. The identification of ethnic identity remains while simultaneously being effaced by the recognition that all purposes are one and can be found in Maoist thought. The image implies a strength in unity with a recognition that it is shared ideology that unites, not individual subject formation in relation to it. Thus, the reader/viewer might see herself in the dress of a

⁹⁴ On May 20th, 1970, Mao published a declaration also known as "People of the World Unite to Defeat the American Aggressor and all of its Running Dogs," that called for global resistance to US imperialism. Mao, Zedong. *Peking Review*. 23 May, 1970.

Hui peasant while recognizing that the book she holds aloft mitigates her participation in an ethnic category, which is subsumed to a shared revolutionary categorization. The individual is not deleted from the narrative in such a way—far from it, in fact—but they are recognizably positioned within a shared system of revolutionary thought and a mass body politic.

To “read” such an image—strength in a unity that does not efface the individual—is primarily visual: we see the crowd of people (side-by-side, smiling, holding aloft Mao’s little red book, weapons in hand, arms raised towards a future for which they are collectively striving) as a group that is clearly articulated under a series of banners. At this point in the Cultural Revolution (1971, when the booklet was published) such banners would have been ubiquitous⁹⁵—a common signifier for which it would have been irrelevant whether the viewer could read or not.⁹⁶ The same was true of the little red books held by the peasants and soldiers depicted in the image—one need not be able to actively read Mao’s words to know that the words were what was contained within.

To see such an image, then, does not necessitate a knowledge that unification is called for specifically to oppose imperialist wars. Rather, it assumes that the reader herself is already allied with the group presented, and that such an in-group identification is predicated upon acceptance of Maoist ideology. To accept Maoist ideology is to accept that any individual invocation of his words is a given, no matter the specifics. Therefore, to

⁹⁵ See Lee, Jennifer Dorothy. “An Essay for Red Art – Propaganda Posters from the Cultural Revolution (1966-1976).” *The Research House for Asian Art*. August 2016.

⁹⁶ Mao actually claimed that the illiterate were the ideal audience for receiving edification from works of art or literature, stating “The cadres of all types, fighters in the army, workers in the factories and peasants in the villages all want to read books and newspapers once they become literate, and those who are illiterate want to see plays and operas, look at drawings and paintings, sing songs and hear music; they are the audience for our works of literature and art.” Mao, Zedong. “Talks at the Yan’an Forum on Literature and Art.” *Selected Works*, vol. III, May 1942.

specifically invoke the “5/20 Declaration” or the “Prepare from Now” talk is, strictly speaking, unnecessary. There is no fundamental gap in understanding here between those who can “only” read the image from those who can read the text—what is implied is an ideological unification of individual actants organized under a unifying political ideology that inherently calls for revolution. Image and text are themselves united in this depiction—the text may give more specifics, but does not inherently convey any information that the image does not already.

By page 9, it is visually clear that the subject of this *lian huan hua* is preparation for atomic warfare. A soldier stands next to a drawing of a mushroom cloud labelled “防原子常识” (“common sense for guarding against atomic [warfare]”) and pontificates about best practices and ideological readiness. What follows across the next 25 pages is a set of detailed instructions for individuals and households to protect themselves and their communities, including information such as that geographical positioning is indispensable (building a factory or a village beside a mountain will mitigate the blast and the subsequent fallout from an atomic weapon) or that individual households can maintain their connection to the community and create a weaponized network by each digging underground tunnels that connect to other houses. The production of tunnels is itself broken down into step-by-step instructions for carrying out the “three preventions” (“三防”) that will supposedly make them safer: blocking, filtering, and eliminating. Instructions are given for installing airtight doors and, if that is not possible, for sewing and installing hermetic anti-poison curtains. Holes, tubes, and gutters should be blocked up, and gas vents strategically placed. Instructions for producing poison-filtration devices using jars of dirt are followed by instructions on creating one’s own gas masks. These didactic invocations call for a mass

response in which individuals transform themselves into active agents of socialist preparation.

This same mass response is central to part two—"How to react when enemies use atomic, chemical, and bacterial weapons"—which opens with another Maoist appeal: "Chairman Mao has long wisely pointed out that the atomic bomb is merely a paper tiger that American reactionaries use to scare people—while it looks scary, in actuality, it is not. While the atomic bomb is, of course, a weapon of mass destruction, it is the people who win or lose a war, not one or two weapons."⁹⁷ This exhortation calls the readers to arms through mass education about the severity of atomic warfare, which this *lian huan hua* claimed could be known, measured, and guarded against. By explicitly and minutely detailing the various aspects of the initial explosion, fallout, and physical effects on the landscape and its inhabitants, "Common Sense" sought to make knowable the destructive sublime of an ever-present threat and mobilize its readership in response.

Because nuclear war can only be imagined, "the nuclear imagination is necessarily an arena of cultural work, as early Cold War officials immediately recognized—one that promotes an idea of order out of the sublime and often becomes a space of pure ideology" (Masco 2014, 67). David Nye, accounting for transformations in the American public's own responses following the atomic warfare it had leveled upon Japan in 1945, also identified visualizing nuclear effects with the sublime: "The classic form of the technological sublime has broken down not because the objects of our contemplation have ceased to be fearful but because terror has become their principal characteristic, and we have no sense that we can

⁹⁷ 毛主席早就英明指出：“原子弹是美国反动派用来吓人的一只纸老虎，看样子可怕，实际上并不可怕。当然，原子弹是一种大规模屠杀的武器，但是决定战争胜败的是人民，而不是一两件新式武器。” (37)

observe them in safety. The natural sublime impressed the observer with man's insignificance and weakness. Even the older technological sublime has proved ephemeral... but the Bomb could not become commonplace despite the government's best public relations efforts" (235). The experience of nuclear war itself was not one that, at the time of "Common Sense," had ever been visited upon China either by its enemies or through domestic testing, yet both governmental and civilian awareness of its lethality had only grown in the twenty years between the bombing at Hiroshima and the publication of "Common Sense." Facing a threat from nuclear powers who held the world in a perpetual Cold War stasis of nuclear terror produced a new cognitive orientation towards what Joseph Masco calls the "nuclear uncanny:" a reconceptualization of time and embodiment as measured through radiation (2006).

The most extreme expression of light as it penetrates the body, atomic radiation has a fraught relationship with technologies of visibility,⁹⁸ particularly those of photography and cinema, but also in visual descriptions through literature and drawn renderings, as with the "Common Sense" *lian huan hua*. As the explosion itself expands, its most lethal aspect expands invisibly, indelibly marking individuals and their surroundings. Yet the further that atomic visibility recedes, the more that it threatens the material and semiotic boundaries of the body's knowability.

⁹⁸ Contemporary theorists of atomic engagement often seek to express its effect on humans and the environment through multi-sensorial processing that is separate from sight, such as Kate Brown's description of atomic decay on taste or Karen Barad's emphasis on material action. See Barad, Karen. "No Small Matter: Mushroom Clouds, Ecologies of Nothingness, and Strange Topologies of Spacetime-mattering." *Arts of Living on a Damaged Planet. Ghosts of the Anthropocene; Monsters of the Anthropocene*, edited by Tsing, Anna Lowenhaupt, et al. University of Minnesota Press, 2017 and Brown, Kate. "Marie Curie's Fingerprint: Nuclear Spelunking in the Chernobyl Zone." *Arts of Living on a Damaged Planet. Ghosts of the Anthropocene; Monsters of the Anthropocene*, edited by Tsing, Anna Lowenhaupt, et al. University of Minnesota Press, 2017.

Commenting on the difficulties of seeing and perception,⁹⁹ Jun'ichirō Tanizaki explains that “we find beauty not in the thing itself but in the patterns of shadows [...] our thoughts do not travel to what we cannot see. The unseen for us does not exist. The person who insists upon seeing her ugliness, like the person who would shine a hundred-candlepower light upon the picture alcove, drives away whatever beauty may reside there” (30). The material body becomes an object that implies the existence of something else and through which something external and immaterial can be measured. Akira Lippit responds to this method of viewing the invisible through the body, claiming that “following Tanizaki's rhetoric of the body as a fantastic surface, atomic irradiation can be seen as having created a type of violent photography directly onto the surface of the human body” (109). In mobilizing individual and mass response, the “Common Sense” *lian huan hua* was not only reimagining potential responses to labor, but also formulating new concepts of the laboring body itself—one defined by a new atomic visibility.

The threat of atomic war significantly problematized the ability of socialist teleological traditions to project either a future or an image of the ideal human, not as a function of the Cold War itself,¹⁰⁰ but because radiation and the atomic register undercut both time—insofar as a future was able to be imagined—the human body—insofar as it could be both destroyed yet leave a visible trace—and materiality itself—as it was both invisible but resulted in material harm to bodies without seeming to have the same effect on surroundings. Much like germs or viruses, radiation became a fact of the world that could

⁹⁹ He elsewhere uses the surface of glazed pottery, crystalline facets, and a crust of unbroken snow to convey similar points.

¹⁰⁰ Which itself was viewed by many as a perpetual war that would forever define the course of the future and international relations. See Piette, Adam. *The Literary Cold War, 1945 to Vietnam*. Edinburgh University Press, 2009 and Daw, Sarah. *Writing Nature in Cold War American Literature*. Edinburgh University Press, 2018.

only be perceived through the use of the human body as a tool for assessment, such that not only was the ideal body visualizable, it itself became the screen upon which technologized progress could be measured.

As Jeffrey Moro notes in his evaluation of Patrick Nagatani's nuclear artwork, "there's an ethical project to visibility within the documentary mode" (Moro 2018). Making the effects of radiation visible is a method of rendering something knowable through its contextualization in the physical. Barthes identified this same power in photography, in which the consistent and enduring existence of an object external to the viewer's experience of it is proven by its reflection in light on paper (Barthes 1981). Yet Lippit problematizes the ability of the reflection of light to remain true to the documentary mode of depicting the thing itself. Discussing the face as a constitutive surface, which "extends a communicability between the formless invisibility of the abyss—inside and behind—and the exteriority of another" (98), he erases the permanence of the object itself in much the same way that Tanizaki erases the existence of the female figure's unseen ugliness for an imagination more real than the thing itself. Only in depropriating and deidentifying all that can properly said to be an essential identity can one become formless enough to reflect the world.

The difficulty of perceiving nuclear radiation itself lies in the fact that it requires a surface against which its damaging light can be measured. Within the shadow archive of nuclear optics, nuclear radiation is impossible perceive as a fixed and immutable threat. Yet in "Common Sense" we see the text attempting to do just that: conceptualize atomic warfare as something pedestrian and ultimately knowable, despite the catastrophic threat of its very premise. To render it as "common sense" is to render it quotidian, a threat capable of being met with rational, reasoned, physical response. Unlike Akira Lippit's atomic avisuality, which

wrestles with the idea of atomic light as an archive, the “Common Sense” *lian huan hua* here labels each stage of the blast that will never come but which, in its future potentiality, structures contemporary actions and developments as knowable events:



Image 6: stages of a mushroom cloud in “Common-Sense Prevention against Atomic, Chemical, and Bacterial Warfare” (防原子，防化学，防细菌常识)

This page is perhaps the most provocatively “science fictional” in its depiction of an atomic explosion and subsequent mushroom cloud, with each panel showing a different phase of the explosion, each meticulously labelled: 闪光 (*shanguang*, spark), 火球 (*huoqiu*, fireball), 尘柱 (*chenzhu*, smoke column), 蘑菇状烟云 (*moguzhuang yanyun*, mushroom cloud).

The schematic here formalizes a visual event that is impossible to look at directly or to conceptualize fully at an optical register. Because the flash of light from an atomic blast is too bright to observe with the naked eye and because so much of an atomic blast occurs at the level of the invisible, to diagram it in such a way is to attempt to record something on paper that cannot be observed through biological means.

The development of technologies of seeing and visualizing the effect of atomic radiation on the body, as with early x-rays that penetrated the surface of the skin to illuminate the body's interiority, led to the inseparability of visual technologies for describing the body from the development of modern industrial militarization—something we have already seen with the attempt to mobilize the citizenry as a new socialist army. While impossible to fully visualize an atomic blast, the visual technologies for conveying it were employed here in an explicitly didactic format that utilized the human form as a template for measuring the destructive development of a nation. While unable to convey something visually that is impossible to see, “Common Sense” *was* capable of depicting bodies and the effects of penetrating atomic practices that bypass the limits of corporeal form and altered their very makeup.

Here it is the bodies of citizens that are weaponized as tools of the state, not simply passive recipients of external state practices. While the opening pages to the atomic warfare section of this *lian huan hua* showed individuals using (and often making their own) tools—such as airtight seals for doorways, poison filters, etc.—bodies are later written into the narrative as utilizable commodities themselves, capable of being repurposed from subjective agents to adaptable materials. This is effected in two ways: one, by laboring to protect their tools (such as by building protective structures or pursuing positional geography), individuals protect the means by which the effects of warfare can be measured. Two, by themselves becoming part of the materials through which radiation or poison can be measured, individual bodies are mobilized into a techno-augmented labor force that relies on their corporeal form reacting appropriately to outside stimuli in order to gauge the severity of that stimuli's impact. More powerful than the atomic bomb itself, bodies become weapons that, through their enrollment in a system of visualizing warfare that requires bodily participation

and dismisses cognitive or emotional responses in favor of somatic experience, can combat the “paper tiger” of nuclear threat by following simple steps. Just as the actual steps of an atomic blast are diagrammed in image 6, the appropriate bodily response to such a blast is broken down into step-by-step instructions in the following small poem:

“Atomic weapons are not frightening,
When a flash is seen lie down on the ground,
Cross your hands to protect your chest,
Close your eyes, tighten your abdomen and open your mouth.”¹⁰¹ (

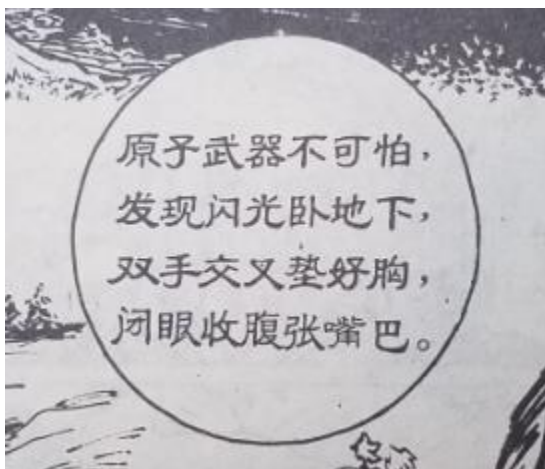


Image 7: physical preparation for an impending atomic blast in “Common-Sense Prevention against Atomic, Chemical, and Bacterial Warfare” (防原子，防化学，防细菌常识)

This puts the onus of surviving a nuclear attack explicitly on the individual and their somatic response to an external threat. Fear is identified here—as in the opening to part two of “Common Sense,” with Mao’s exhortation that atomic bombs are simply paper tigers

¹⁰¹ 原子武器不可怕，发现闪光卧地下，双手交叉垫好胸，闭眼收腹张嘴巴。(44)

used to frighten—as the greatest threat during atomic war, not the bomb itself. “Atomic weapons are not frightening” if one only employ the proper physical actions. In this, then, the aesthetic is conflated with a directive for action, with poetry utilized as a mnemonic device for responding properly to an unimaginable event made actionable. The individual is directly enrolled in a series of actions necessitating their bodies as direct frontline tools for combatting potential atomic threats, wherein each individual is called to action.

Following another invocation of Chairman Mao’s words—“All revolutionary people should care about each other, love and protect each other, and help each other”¹⁰² individuals are further mobilized to make repairs, identify radioactive contamination, wash and disinfect both the skin and weapons (conflated across several pages of images), and identify fallout, illness, and poison through individual, embodied responses. Bodies here become tools for assessing contamination through their internalization of external elements, which then become visible in physical biological responses. Illness, perspiration, sallowness—all turn the body into a corpus of measurements for detecting the presence of radioactivity.

See, for example, page 41, which explains how an A-bomb explosion kills and destroys and the methods available for detecting early nuclear radiation. The text explains that early nuclear radiation is an invisible wave that is released at the moment of explosion; it is similar to an x-ray, and can penetrate things with some depth. If a person is exposed to it too much, it will cause harm. Except for optical armaments, it causes little damage to

¹⁰² “毛主席语录一切革命 B 队伍的人都要互相关心，至相爱护，至相帮助救死扶伤，实行革命的人道主义。” (46)

weapons and equipment. All things can be used to diminish early nuclear radiation; hiding in tunnels will completely mitigate the harm it poses.

The image to the right of the page shows an individual through whom radiation is passing. An x-ray is set up over his body in order to make visible the waves of radiation passing through it, which are shown permeating his core and coming out the other side. The waves themselves are drawn as squiggly lines exiting his semi-opaque ribcage. The exhortation beneath notes that “When nuclear radiation passes through the following materials, its strength can be reduced by 99%,”¹⁰³ an announcement illustrated with cement (水泥), soil (泥土), and wood (木材).



Image 8: the body as a tool for measuring radiation in “Common-Sense Prevention against Atomic, Chemical, and Bacterial Warfare” (防原子，防化学，防细菌常识)

¹⁰³ “早期核辐射通过下列物质时，强度能削弱 99%”

Yet for those unable to read the text, the reassurance of external materials as a shield from radiation is not at all clear. In terms of illustrations, the body itself is the tool through which radiation is measured, shown here as both permeable and also as an instrument of detection. The very presence of radioactivity is made known through the process of having already entered the body; the only way to know to protect against it is to have already succumbed to it. There is a crisis in the constitution of the obliterated figure of a cleanly delimited body. Through the act of being compromised by x-rays, the body therefore becomes the tool by which knowledge is visualized and the steps towards preparation can be activated.

The transition from conceptualizing the labor of individuals as combatants in the case of potential atomic warfare to tools used for measuring it in order to assess the presence of a threat in the first place is a method of reimagining the body not as a participant in the construction of a future body politic, as in “The Master Route,” or as a subject enjoying its post-scarcity fruits, as in “Little Ignoramus,” but as a tool for defending national integrity. Yet to function in such a way, individual bodies must be compromised in order to shore up the national body.

CONCLUSION

“Common Sense” hints at the possibility of dystopia in a way that the other materials do not, though it repeatedly hews to ideological doctrines of national strength and unity. Despite the fact that the Chinese citizens to whom these materials are addressed are shown as capably meeting the threat of nuclear violence, the specter of such violence at all is

potentially subversive in that it allows for the possibility of a future deprived of control and autonomy. As with the other materials, the human response is mobilized towards combatting such a potentially dark outcome, yet this internal tension itself was a potential cause of strife—as indicated by the fact that this particular *lian huan hua* was aimed only at army officers, not the general public.

Here, my analysis of *lian huan hua* as pedagogical science fictional texts positing the quotidian mobilization of labor towards an immediate, already-assured future ends with the possibility of disillusionment that such a future has not yet—and perhaps never will—arrive. Much has already been written¹⁰⁴ about dystopia manifesting as a sense of disappointment in the *futur antérieur* once the promised future temporally arrives without the trappings promised by the past. That is, Little Smarty may have traveled to a future with post-scarcity politics and economics, but what happens when real people find themselves in that future still hungry, still thirsty, still working for change? This temporal disorientation, in which the individual attempts to reconcile her place in a world she was promised that has turned out not to exist, is incompatible with either the project of utopian modernity or that of a fixed teleological end goal, as well as incompatible with propaganda that posits this future as already always assured with or without active revolutionary praxis.

This historical sense of melancholy is a threat to national projections of futurity, and becomes increasingly visible as the early promises of socialism fade into the autumnal red of

¹⁰⁴ See Marx and Engel's early distinction between scientific and utopian socialism in Engels, Friedrich, and Edward B. Aveling. *Socialism, Utopian and Scientific: with the Essay on "The Mark."* International Publishers, 1970. For the specific intersection of science fiction's disillusionment with the promise of future utopias, see Moylan, Tom. *Demand the Impossible: Science Fiction and the Utopian Imagination.* Methuen, 1986 and Jameson, Fredric. *Archaeologies of the Future: the Desire Called Utopia and Other Science Fictions.* Verso, 2005. For a specific look at how Chinese authors depicted future disillusionment, see Kinkley, Jeffrey C. *Visions of Dystopia in China's New Historical Novels.* Columbia University Press, 2014.

a revolution that has come, gone, and left the masses of people that made it possible at a loss for where they fit in in a future that has, ostensibly, already been won. This is true across political systems—in which the golden years of the height of empires tarnish and give rise to a dystopian inability to see a future for the current system—but is especially problematic for socialist systems that envisioned themselves built by and for the masses. The sense that an identity predicated on being a member of the mass line, undifferentiated and unidentified, is itself a form of loss becomes increasingly visible in the waning years of Maoism.

Cheng Yinghong notes this despondency in the waning years of the Cultural Revolution, claiming that “the all-out effort to create the new man began to lose its momentum in the early 1970s, as the radical policies of the Cultural Revolution became increasingly more unbearable to the entire society, people longed for normalcy, and Mao’s cult was undermined by the failure of many of his policies, especially the desertion in 1971 of Lin Biao, his successor and the major advocate of the directive to ‘be Mao’s good soldiers’” (126). Departing from the resolutely optimistic future-oriented propaganda of the revolution, moving into the Deng era brings more and more examples of science fiction characterized by a sense of melancholy over a present where the technologicized anonymity of the planning years remains even when many of the promises of socialist science fiction have actually been delivered.

This tension between the recognition of the inadequacy of mass labor to assure an embodied utopia coupled with the need of the state for bodies to remain normative and pluggable into any role or hole increasingly becomes the focus of science fiction in the twilight years of planned socialist economies. Patrick Major writes of similar moves towards disenchantment in Soviet Russian science fiction, particularly after the Stalin years, just as

science fiction dealt with increasingly disparate topics following Mao.¹⁰⁵ Later *lian huan hua*, such as “Common Sense,” hint at this disillusionment, but do not fully engage with either the threat of deviation or of disappointment in the future. Rather, the soldiers and civilians depicted within face the possibility of an atomic blast with the impassive dignity of those who know that, no matter whether they fall, others will take their place, and the body politic will continue unabated even as the labor of individual bodies remains infinitely replaceable. This sense of belonging is precisely what later texts will find problematic while still attempting to reconcile the need of the state for their anonymized participation.

In their implicit recognition of possible destructive forces outside of human control—such as atomic or germ warfare, ecological disaster, or industrial accidents—*lian huan hua* open a space of possibility for imagining futures outside the party projection, even when their goal is to demonstrate how mass social participation is capable of overcoming such forces. Pang Laikwan notes in regards to the potentially disruptive influence of art, “[...] since art also pacifies, diversifies, provides catharsis, and produces enjoyment, there are clearly residues in the arts that escape the dominant ideology, and it is these residues that propaganda fears the most” (Pang 2017, 40). To recognize that certain experiences and embodiments occur outside the normative physical establishment and that certain futures, once arrived at, do not necessarily conform to those promised years earlier, socialist science fiction authors had to navigate how best to conform to party lines while also engaging with a space of discursive future potentiality.

The *lian huan hua* of the Mao years were not the first science fictional form to grapple with this distinction—“New Mr. Braggadoccio” from chapter one, for example,

¹⁰⁵ See Major, Patrick. “Future Perfect? Communist Science Fiction in the Cold War.” *Cold War History*, vol. 4, no. 1, Taylor & Francis, Oct. 2003, pp. 71–96.

demonstrated an intense anxiety about the embodied experience and knowledge production under a changing social regime—but *lian huan hua* uniquely illustrate the shift in conceptualization from the human as a user *of* machines to displacement *by* machines to the human *as* a machine. By investing the body itself with the capacity to understand the material world, emerging depictions of the ideal socialist human risked what Greta Niu, Betsy Huang, and David Roh have identified as a techno-Orientalist discourse that “constructs Asians as the cogs of hyperproduction and maintains a prevailing sense of the inhumanity of Asian labor” (4-5). Idealized humans were at risk in two ways—either they were effaced in an anonymous mass line that had been insufficiently heroic to revolutionize the future, or their unruly bodies rendered them less Mao’s “revolutionary screws” and more nails to be hammered down.

Dystopian imaginings often remain controlled by the state such that their capacity for horror lies in deviation from the normative social strictures, not assimilation to or collaboration with the state-visualizing project, as is so often the case in the pathologically neoliberal individualism of science fiction produced under capitalist imaginaries. When the possibility for dystopia *is* imagined, it remains in service to the state, and the horror is often depicted through the individual disruption of a system or an individual’s deviant body marking them as outside the body politic. In this way, the system remains utopian even when individuals fail to live up to its expectations. In the next chapter, we will turn to texts characterized by this internal tension with individual bodies and integrity—both of those bodies and of the systems in which they ought to fit—as well as the methods by which science fictional texts maintained national integrity by positing deviation as a departure that could be corrected.

CHAPTER FOUR: THE LIMITS OF THE NEW HUMAN

INTRODUCTION

The *lian huan hua* of the previous chapter focused on form and futurity in their depiction of everyday life, emphasizing particularly those methods by which “the people” as a coherent mass were mobilized for developing an always already-guaranteed near-future nation-state. The labor performed in *lian huan hua* was repetitive and relentlessly quotidian, generally intended for the broadest possible audience and disseminated in such a way as to enroll all readers and viewers into the broader goal of national progress. Labor and laboring bodies were depicted as the basic framework upon which the nation was to be built, and often blurred the line between the performing subject and the labor being performed. My analysis treats *lian huan hua* as expressive of a form of scientific futurity that is, in its aims, indistinguishable from science fiction as an actionable literary blueprint for imagining socialist futures. As predictive ephemera, they were widely available, widely disseminated, and, in terms of content, form, and intent, wholly uninterested in pushing against the boundaries of permissible ideological lines. Simply put, *lian huan hua* were propagandistic paraphernalia, and their primary value is in their didactic development of party-dictated imaginary futures and role of ideal laborers in creating those futures.

This chapter, however, pivots to texts that potentially subverted futurist visions of ideal embodied experiences. By attempting to incorporate non-normative bodies in the same everyday life that *lian huan hua* so relentlessly promoted, they allow for the possibility of embodiment that does not illustrate the dream of the socialist new human and his/her ideological evolution. Erika Gottlieb illustrates the difficulty of maintaining a projection of

utopian futurity while also acknowledging the existence of individuals who do not conform to those same imaginary standards of perfectibility, noting that “the blatant hypocrisy of the formula that demands that the positive hero should be virtually suprahuman is a reflection of the “insolvable contradiction,”¹⁰⁶ that “a socialist [...] art cannot be produced with the literary method of what the nineteenth century called ‘realism.’ And a really faithful representation of life cannot be achieved in a language based on teleological concepts” (130). Yet it is this very impossibility that some of the more nuanced science fiction authors attempted to depict by populating the same normative socialist society created by *lian huan hua* with individuals who did not meet the goals of the socialist reformation project. Through their inclusion of and focus on non-normative bodies, these texts open up a discursive space to problematize the socialist new human and the ideal of physical perfection that would lead to and emerge as a result of the perfect state.

Disabled, physically divergent, deformed figures are more notable by their absence from socialist literature¹⁰⁷ than in their role as redemptive, system-reaffirming symbols. In the national traditions in which literature was a constitutive element of a progressive future-thinking ideology predicated on the recognition of the worker as the embodiment of the state’s power, disabled individuals were seen as infrastructural deficiencies. Without the hope of convalescence and a return to productive participation in nation-building, the disabled, the chronically ill, the elderly, and the deformed were elided from national narratives altogether or, more rarely (as with Bogdanov’s *Red Star*) given the opportunity to participate

¹⁰⁶ Gottlieb is quoting Abram Tertz, a difficult figure who I will turn to later in this chapter.

¹⁰⁷ Inderpal Grewal and Caren Kaplan talk about the importance of “gaps” in the literature for understanding how individual experiences are left out of the dominant narrative. See Grewal, Inderpal., and Caren Kaplan. *Scattered Hegemonies: Postmodernity and Transnational Feminist Practices*. University of Minnesota Press, 1994.

in society through science fictional technologies that “fixed” biological issues such as illness or aging.

A framework for establishing a normative humanity that ignores physical divergence is grounded in the same impetus behind the development of the superior socialist new human. Generated and defined by the conditions of socialism, the new human was intended to be healthy, muscular, and physically idealized in addition to being mentally committed to ideological tenets. As a worker, this new breed of citizenry was expected to devote themselves entirely to the labor of socialism’s eternal revolution, even to the point of exhaustion and austerity. A commitment to the cause despite—or even because of—physical and mental pain was considered a prerequisite for full participation in society, up to and including the Russian Revolution’s revolutionary anorexia¹⁰⁸ or the reification of The People’s Heroes who were maimed, injured, and even killed to promote physical standardization during the Chinese Cultural Revolution.¹⁰⁹ In “Revolutionary and Socialist Art,” Trotsky specifically identified the new socialist human as one who would transcend the

¹⁰⁸ “Protecting one’s ideological purity during NEP [the New Economic Policy] entailed not only controlling sexual urges but also refraining from overeating and, in general, from surrounding oneself with opulence. However, just as the dictate to sublimate sexual desires quickly developed into the recommendation that young communists abstain entirely from sexual intercourse (and from all noncollective physical pleasures), so vigilance against gastronomic indulgence and rich living was transformed by reductive logic into a dictate to survive on the minimum quantity of food, sleep, and shelter necessary to sustain human existence.” Naiman, Eric. *Sex in Public: the Incarnation of Early Soviet Ideology*. Princeton University Press, 1997, pg. 210.

¹⁰⁹ “The case of Bai Shuxiang, a famous ballerina, exemplified the extent of hardship and physical labor entailed by ideological reeducation in the May Seventh Schools [labor camps established during the Cultural Revolution that combined hard agricultural work with the study of Mao Zedong’s writings in order to “re-educate” cadres and intellectuals in proper socialist thought]. Bai, a devoted artist, was found to still be practicing her dance in secret after being sent to the May Seventh School. Her ballet shoes were subsequently confiscated and taken as evidence of “recalcitrant resistance against thought reform.” The school then assigned Bai duties typical for a male peasant: feeding pigs and horses and collecting animal waste in pigsties and cowsheds in the winter with bare feet. Afterward, her reeducators were content to see that her feet had been reshaped and her stature was no longer ideal for stage performance. The reformation of her appearance thus indicated her identity transformation: she was no longer a fragile bourgeois ballet dancer but a tough proletarian husbandry worker.” Cheng, Yinghong. *Creating the “New Man” From Enlightenment Ideals to Socialist Realities*. University of Hawai’i Press, 2009, pp. 118-119

physical limits of what was physically possible, a stance that Filip Bardziński has singled out as a eugenicist project with a strong emphasis on a nurturing environment to develop desired nationalist traits, i.e. a socialist society (58). The development of a superior form of humanity thus contained the seed for physical degradation and harm even as it strove to overcome and ultimately surpass existing physical limits.

As a critical and diagnostic instrument, the physical perfection of the new human dialectically gestured towards its opposite, a figure so anathema to their inclusion within the state that—especially given the national traditions being considered in this thesis—the spectre of genocide necessarily raised its head. Even as the socialist project attempted to cleave conceptual roles from biological forms and apply citizenship in what Marx identified as “the alteration of men on a mass scale” (Marx 1965), the common literary exclusion of non-physically ideal bodies makes it clear that the category of personhood is inherently artificially constructed, with the ultimate goal of defining and reinscribing legal social hierarchies.

Speaking specifically of the Black experience, Hortense Spillers develops this distinction in subject positionality by claiming that “before there is the body, there is the flesh” (206)—an isolation of the physical form that exists prior to its recognition under the law as a human. Alexander Weheliye has expanded on this concept of the flesh to distinguish between levels of recognition as human and not-quite-human and the subsequent legal and social affordances offered to different social echelons.¹¹⁰ While the socialist project of new humanity was primarily an ideological one and carried out through pedagogical and labor reform, embodied categories of racial purity are inextricably imbricated in the project of

¹¹⁰ See Weheliye, Alexander G. *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Duke University Press, 2015.

various political drives to create *ubermensch*, and are present to some extent in all three texts analyzed here. Fleshly embodiment itself was not sufficient for inclusion in the category of personhood, as different bodies were invested with different levels of recognition under the law and their proximity to perfection. Various categories are thus collapsed in the process of defining an ideal humanity, including race, sexuality, class, and sex.

It would be ethically remiss to not take into account the actual material histories of the various socialist projects that have led to mass casualties as either direct or indirect outcomes. Nevertheless, rather than focusing on the dismissal of non-normative bodies as inherently immoral or unworthy of inclusion (at best) or deserving of active annihilation and erasure (at worst), this chapter will instead focus on select texts that attempt (with varying degrees of success) to take aberrant bodies as their protagonist and attempt to incorporate them into a normativizing worldview that is capable of recognizing and acknowledging physical difference while also subordinating it to a behavioral and corporeal standard.

As with the explicitly visual materials of the preceding chapter, the texts here, in their attempt to make non-normative bodies legible in such a way that they are foldable into the body politic, are deeply invested in questions of aesthetics and beauty—a co-constitution of art and state integral to the socialist project as a whole. This is superficially recognizable in policy terms outlining appropriate styles of dress and self-presentation (like the Chinese disavowal of ties,¹¹¹ or the revolutionary anorexia of soviet workers,¹¹² or the rejection of aesthetic femininity in the Maoist campaign¹¹³) and has more fundamental repercussions for

¹¹¹ See Finnane, Antonia. *Changing Clothes in China: Fashion, History, Nation*. Columbia University Press, 2008.

¹¹² See Naiman, Eric. *Sex in Public: The Incarnation of Early Soviet Ideology*. Princeton University Press, 1997.

¹¹³ See Yang, Wenqi, and Fei Yan. "The Annihilation of Femininity in Mao's China: Gender Inequality of Sent-Down Youth During the Cultural Revolution." *China Information* vol. 31, no. 1, 2017, pp. 63-83.

the socialist realist aesthetic of strong bodies produced by labor, visible on any given propagandistic poster or visual material. This emphasis on social alignment through exterior physical interpellation into the dominant ideological regime continues through today, as with the supposed North Korean public television show, “Let’s Trim Our Hair in Accordance with the Socialist Lifestyle.”¹¹⁴

To police the body and its presentation is deeply imbricated with the surveillance of bodies to ensure conformity, in some ways at a superficial level (as with ties or haircuts) but leading into a surveillance of physical form as an expression of moral alignment with right-thinking. A deep suspicion of appearance and the possibility of external alignment with internal values is one result of such investment, but also the fear that one might appear ideologically “correct” while nonetheless hiding an invisible ideological degradation. The protagonist of “The Eye that Never Weeps,” the first text this chapter will address, is invisibly ill, reflecting fears of moral contamination that were invisible at the surface level and which could only be rooted out by shared deviance, paradoxically enfolding such deviance into the system with the goal of eradicating it. The protagonist of the second text, “Pkhentz,” utilizes a socially acceptable form of physical deformity as a disguise for his more fundamental moral deviation. And finally, the protagonist of “Corrosion” is externally beautiful but morally corrupt, and only finds social redemption in physical decay and, ultimately, a patriotic death.

¹¹⁴ The BBC claims that this show initially aired on the DPK Central Television channel as part of their Common Sense programming, with clips later aired on BBC and viewable on YouTube (<https://www.youtube.com/watch?v=-2XVNFzNIZ8>). However, I have not been able to find any corroborating evidence of the initial show outside of other BBC sources, so the validity of this is worth taking with a grain of salt.

The texts analyzed here, by focusing on physically nonstandard characters, become literarily deviant themselves, atypical of literary traditions defined more typically by silence and invisibility. In the attempt to integrate figures of physical deviance into an ideologically “correct” framework, these texts challenge the idea of physical perfection as a defining trait of ideal socialist societies, but vary significantly in their ability (or desire) to humor the possibility of illness in the body as a reflection of illness in the state. By emphasizing that the affected individuals are alone and singular—as opposed to representative of a broader collective—they attempt to maintain the hygienic and ethical boundaries of the state while demonstrating the ways in which individuals themselves may fall short of expectations.

ATOMIC AESTHETICS

Due to its historical outgrowth from the critically lauded Weimar film period, most critical attention on East German science fiction has focused more on its cinematic productions than its literary output.¹¹⁵ As with the materials examined in the preceding chapter, much of the science fiction that does exist has been overlooked as a point of critical inquiry due to its propagandistic character. Yet as Annemarie Sammartino argues, “however ideological overdetermined sociology was in the later years of the GDR, it nonetheless

¹¹⁵ See Fritzsche, Sonja. “A Natural and Artificial Homeland: East German Science-Fiction Film Responds to Kubrick and Tarkovsky.” *Film & History*, vol. 40, no. 2, Center for the Study of Film and History, Sept. 2010, pp. 80–101; Fisher, Jaimey., and Barbara Caroline Mennel. *Spatial Turns: Space, Place, and Mobility in German Literary and Visual Culture*. Rodopi, 2010; Fritzsche, Sonja. “East Germany’s ‘Werkstatt Zukunft’: Futurology and the Science Fiction Films of ‘defa-futurum.’” *German Studies Review*, vol. 29, no. 2, German Studies Association, May 2006, pp. 367–86; Soldovieri, Stefan. “Socialists in Outer Space: East German Film’s Venusian Adventure.” *Film History*, vol. 10, no. 3, Indiana University Press, Jan. 1998, pp. 382–98; Lessard, John. “Iron Curtain Auteurs: Lost Voices from East Germany’s DEFA Studios.” *Cineaste*, vol. 34, no. 3, Cineaste Publishers, July 2009, pp. 5–10; Torner, Evan. “Casting for a Socialist Earth: Multicultural Whiteness in the East German/Polish Science Fiction Film *Silent Star*.” *The Liverpool Companion to World Science Fiction Film*, Liverpool University Press, 2014.

marked a shift insofar as it understood the success of socialism not in the ability to produce large quantities of industrial goods or in the success in imbuing citizens with a belief in socialism but in the everyday practices of ordinary citizens and in their interactions with one another” (84). In this it continued the ideological project of literarily constituting the new socialist human through quotidian practice in which the collective masses constituted an ideological superstate through their actions.

As with the new socialist human ideal in other national contexts, Emmanuel Droit explains that the idea of a dual social and humanistic consciousness that was the mark of the new socialist human as it developed in the wake of Nazism underlined the doubled character of humanism [as understood by socialist pedagogues] as simultaneously individual and collective.¹¹⁶ The individual was superhuman in their individual embodiment and mental fortitude but also insofar as they constituted part of a growing community that made up the larger body politic. Hans Grotewohl describes the creation of a socialist personality in the GDR as “a function, first and foremost, of creating socialist community relationships at the local level” (11), which would then grow to connect the larger community, ideally culminating in an international socialist coalition.

Thus in East German science fiction, the inclusion of an individual who did not contribute to the cohesion of the body politic or even evince individual personal growth represented a problematic through which to interrogate ideological strictures. In order to be approved by censors for internal publication, science fiction that included a representation of either an imperfect society or an imperfect individual was constrained by certain regulations against depicting the state in a negative light. One way that authors in the later years of the

¹¹⁶ See Droit, Emmanuel. *Vorwärts zum neuen Menschen? Die sozialistische Erziehung in der DDR (1949-1989)*. Cologne: Böhlau, 2014.

GDR did this was by setting imperfect societies on other planets or, if Earthbound, in other countries. And if the focal point of imperfection was an individual, then authors were often under great pressure to display the ways that such an individual did not conform to community expectations, leaving the onus of imperfection on the individual rather than condemning the state. Angela and Karlheinz Steinmüller's "The Eye that Never Weeps" grapples with both—a problematic society and a problematic protagonist—in order to interrogate the idea of individual bodily autonomy and reinforce the dream of an active developmental utopia.

This was accomplished in large part by relying on the East German literary policy of "over there" as it pertained to nuclear war. In "Future Perfect? Communist Science Fiction in the Cold War," Patrick Major identifies this with an "unspoken taboo" on communist depictions of nuclear war on Earth (2003, 78), which limited the ability of GDR science fiction authors to work within the genre of "warning literature" more often associated with nuclear fear-literature in the West. Constrained on one hand by the necessity to formulate stories that developed out of reasonable scientific projection while on the other hand being bound by the necessity of creating a utopian vision for the future, East German authors often avoided the issue by setting nuclear imagery outside of the nation's own boundaries. *Der Schweigende Stern* (*The Silent Star*), for example, was a multiracial and multinational 1960s joint East German/Polish film depicting the complete destruction of Venusians by self-inflicted nuclear war, while Ludwig Turek's 1949 novel *Die goldene Kugel* (*The Golden Sphere*) focuses on the impending threat of nuclear war posed by West Germany and the United States, which is thwarted by a Venusian envoy offering peace through socialism. Lothar Weise's *Das Geheimnis des Transpluto* (*The Secret of Transpluto*, 1962) includes imagery of mushroom clouds and nuclear refugees, though this imagery is limited to outer space and

never appears on Earth. Yet “despite this containment of cultural pessimism, and despite GDR authors’ willingness to locate ‘negative’ stories in the so-called ‘non-socialist exterior’, however, these could easily be read as criticisms closer to home” (Major 2013, 205). Such is the case with “The Eye that Never Weeps,” which, even while creating a science fictional setting far from the reality of East German life, drew on existing policies, most notably the Atoms for Peace Program. In doing so, it relied on setting nuclear criticism “over there” (“there,” in this case, being an unnamed South American “plutoniocracy”) at the same time that its focus on bodily instrumentality set the human relationship to power up for criticism.

On December 8, 1953, US president Dwight Eisenhower inaugurated the Atoms for Peace Program, a new global formation in which he used the “new language [...] of atomic warfare” (Eisenhower 1953) to argue for the promotion of nuclear energy in direct opposition to what was then a rising nuclear threat in the burgeoning Cold War. The philosophy behind this movement led directly to nuclear research being made available to countries that had previously been sidelined in the nuclear arms race, as atomic energy was increasingly promoted for non-deterrence-related uses.¹¹⁷

Even at the moment of its conception, however, the Atoms for Peace Program was viewed by many¹¹⁸ as less of a new ideological path and more a disingenuous smokescreen that would allow nuclear proliferation to continue unabated and unquestioned. While it supposedly broadened access for less-developed countries that could benefit from nuclear

¹¹⁷ See Yoshihara, Toshi, and James R. Holmes. *Strategy in the Second Nuclear Age: Power, Ambition, and the Ultimate Weapon*. Georgetown University Press, 2012.

¹¹⁸ See *Bulletin of the Atomic Scientists*, Feb 1955, for a contemporary example of suspicion. See also Krige, John. “Atoms for Peace, Scientific Internationalism, and Scientific Intelligence.” *Osiris*, vol. 21, no. 1, 2006, pp. 161–181; Nelson, Craig Doyle. *Nuclear Bonds: Atoms for Peace in the Cold War and in the Nonwestern World*. Thesis at OSU, 2009; and Creager, Angela N. H. *Life Atomic - a History of Radioisotopes in Science and Medicine*. The University of Chicago Press, 2015.

power programs, the question of cost—both structural and in its effects on human lives—was repeatedly raised. The specter of the nuclear threat raised by the Atoms for Peace program hung like a dark shadow over the Cold War; even as the superpowers of the US and the Soviet Union overtly stockpiled nuclear weapons, smaller countries like Iran and Cuba also began implementing programs of their own. Even after the dissolution of the Cold War, Atoms for Peace remains, and remains a spectral threat even when promoting national development and technological progress—see, for example, the 2011 catastrophe at the Fukushima power plant in Japan, built originally under the auspices of the Atoms for Peace Program and now figured as a kind of nuclear reckoning for a country that had already historically suffered under directed nuclear terror.

Yet Atoms for Peace was—and still is¹¹⁹—a program in which nuclear power was promoted as a planetary salve, a technological boon whose power to harm was only exceeded by its power of fecundity. “The Eye that Never Weeps” (“Das Auge, das niemals weint”), an East German SF story by the authors Angela and Karlheinz Steinmüller, projects this nuclear fantasy to extreme ends, implicating capitalist endeavors that claim to enrich poorer countries while actually exploiting them and reaping all the benefits for a removed class of wealthy businessmen.

“The Eye that Never Weeps” tells the story of an unnamed South American “plutoniocracy”—a country foundationally centered around nuclear power. The protagonist, Juana, is introduced *in-situ*—vowing to make a new beginning, she both fears and desires “the light” even as the audience remains unaware of its import. To resist it is to “live a normal, clean, healthy, cold—and long—life” (195). This light is the “light” of radiation, a

¹¹⁹ The International Atomic Energy Agency, which grew out of the initial Atoms for Peace program, still uses the phrase as its official slogan.

glowing, hyper-saturated chromatic sheen that covers everything it touches. The story's beautiful opening, describing the red-gold-green shift of the radiation and Juana's intense attraction to it, immediately indicates a textual slippage between normalcy and a visuality that not only marks items optically, but also materially changes them.

This radiation, described in lushly descriptive hues that are at contrast with the heavy, regular repetition of grey employed to describe the plutonian world throughout the rest of the story, is made visible through citizens' "unweeping eye"—a sort of modified Geiger counter implanted in the forehead of each individual. The "light" exists but is only detectable through a technoscientific intervention that modifies the body and creates the capacity for an increased awareness of invisible traces. Just as the "Common Sense" *lian huan hua* of the previous chapter demonstrated the ways in which bodies were mobilized as tools for measuring and assessing external material threats through somatic responses, here, too, neither the radiation itself nor the necessity of making oneself aware of it would exist without the nation-building impulse that incorporates human bodies as tools of their own surveillance.

The very description of the gold radiation—lush, vibrant, and saturated—suggests a kind of liminality, one which is borne out in the blazing, burning, impossible nuclear light that suffuses every sentence of this exploration into an avisuality that resists its very illumination. The threat of a nuclear blast (which never comes) is constantly present, a haunting specter over the investigation into an impossible shadow optics.¹²⁰ The idea of haunting itself is pervasive to the text: it is haunted by the nuclear blasts at Hiroshima and Nagasaki, but also by the impossibility of viewing or representing those explosions and

¹²⁰ See Lippit, Akira Mizuta. *Atomic Light (Shadow Optics)*. University of Minnesota Press, 2005.

revealing the archive of atomic spectrality. Though only evoked once by name in the text itself (when the Atoms for Peace program is mentioned as having brought wealth and prosperity to the country), “The Eye that Never Weeps” grapples with the ghosts of the Atoms for Peace program—liminal existences that are both here and not here, spectral shades of history that nevertheless live on in Juana’s hopes and fears.

The story itself is a simple one—Juana, following an accident in which she has been drenched in a shower of golden radioactive rain, has become addicted to radiation exposure and relies on it to feel anything, despite the sure knowledge that it is killing her. The entire narrative is suffused by this tension between her desire for the light coupled with the total knowledge of its danger. Her boyfriend, Roque, is a small-time terrorist who collects plutonium with the intention of building a bomb large enough to pose a credible threat to the government, after which he believes he and Juana can escape abroad. Juana goes about her day convinced she is being followed by “shadows”—government agents and secret police—while trying to cope with her crippling addiction and the fact that such an addiction makes her uniquely capable of “seeing” radiation exposure, and thus able to perceive those who have improperly handled it. Ultimately, she and Roque are both arrested, and Juana takes control of both the narrative and her addiction by stabbing out her “eye” so that it cannot be put to use.

The crux of the narrative is Juana’s relationship to the “light”—the radiation that suffuses their world and yet is only visible through the eye that never weeps. To describe the golden touch of the light is to describe a mediation not predicated on sight, but on a machine provided by the state to police a problem originally created by the state. The individual is then held responsible for her own actions in an epistemic structure that never

directly addresses the source of its power, yet reveals its positionality through the radioactive trace.¹²¹ This trace is described in terms of aesthetics, but also in a material link to technological and economic progress, just as with the “Common Sense” *lian huan bua* of the previous chapter, with its emphasis on bodies as tools for measuring radiation. The trace of atomic power in “The Eye that Never Weeps” is located in bodies that are policed and social measures of progress that eschew the individual experience altogether, yet are both intertwined in the “plutoniocracy” that produced them.

As the story opens, the aesthetics of exposure are described in a chromatic slurry of saturated hues—shifting golds, reds, greens. All references throughout the story to radiation and atomic power are described in colorful, bright phrases: inside Juana and Roque’s locked lead safe, there is “a short lead cylinder with a splinter of sun imprisoned inside it” (196). The light, once released, literally washes away the drabness of the world (in terms of colors) and metaphorically in terms of a sense of release from the “world of worn clothes and grubby banknotes” (196). The drabness of the world created by atomic power stands in direct opposition to the blazing light itself, which is presented as dangerously beguiling in its capacity for seduction despite the clear knowledge of the threat it poses to the biological body and the social organism alike.

The trace of this golden glow threatens the individuals in the text not only in the immediate existential sense of the biological decay associated with radiation poisoning, but also as a tell-tale sign of social deviancy. After she handles the “splinter of sun” in their safe, Roque knocks Juana from her reverie, warning that if someone sees the light or its residue they’ll “be sent to the island” (197), which is intimated to be a penal colony where prisoners

¹²¹ The radioactive trace of “The Eye that Never Weeps” is easily read through Derrida’s understanding of the trace as that which evokes what is not there.

work in close proximity to nuclear materials for such (short) time as until they die from exposure. Roque is very concerned with Juana's hands, which retain glowing residue from handling radioactive materials. He wears gloves, whereas Juana does not, and he warns her that she will need to take extra precautions to hide them when she goes out in public. Hands are insulated from direct contact with the source of power in this world, but they, like all other objects, retain the capacity to be changed and marked by it. Under the liminal visibility afforded by the unweeping eye, the hands display traces of the invisible threat that correspondingly renders Juana useful in threat detection.

These senses, beyond the limit of biology, visualize an invisible threat and, in doing so, cast the biological body into question. Because the individual's own "natural" senses cannot be trusted to fully evaluate the material world, the choice to utilize a Geiger counter becomes a political stance commenting on the status of nuclear power and its material effects on the body—to visualize something is only one way of experiencing catastrophe, one that legitimizes the primacy of both optical surveillance and technological intervention. The act of making ideological deformity visible at a physical level necessitates a framework for seeing beyond surface-level presentation to uncover the rot beneath. With the threat of decay looming at both the ideological level and in actual biological and physical threats, science fiction literature from socialist literary regimes that perceived themselves as under siege became even more invested in establishing borders and shoring up ideological unassailability. The threat of contagion from without being undetectable within was a major driving force behind the discursive move to localize the body itself as an instrument capable of both detecting threats and posing them—a double agent worthy of suspicion and fear even as it was mobilized towards internal surveillance, and a method of internal policing that found a double in external political maneuvers.

As interpreted through the lens of Sara Ahmed's affective economies, the citizenry of "The Eye that Never Weeps" is itself mobilized and transformed into an apparatus of security, which is translated as an apparatus of love. As a cornerstone of the security state described in "The Eye that Never Weeps," adequate perception of and protection from the outside threat of security is transformed from a fear of the physiognomic effects of radiation—which Juana actually embraces—to a fear of the individuals who have been (voluntarily or not) exposed. The fear is not of the thing itself, but of the body that makes the threat visible. Ahmed describes this perceptual interpellation of the body as "an affective economy [that] shows that emotions do not positively inhabit any-body as well as any-thing, meaning that 'the subject' is simply one nodal point in the economy, rather than its origin and destination" (121). Juana is herself the nodal point of an affective economy of fear that utilizes individuals to self-police under the guise of internal safety and biological contamination. The fear of contamination and threat is all the greater for its invisibility, as any body/anybody could be a threat.

In doing so, the individual as a biological organism is displaced and the (ostensibly) invisible world is foregrounded. As Erin Y. Huang notes, "The body consists of systems of meaning production and sensory orientation that are masked in the assumption that bodies are passive biological entities awaiting external stimuli" (75). As a corporeal focal point for visualizing external perceptions, the materiality of the body is rejected and the primacy of the incorporeal becomes the measure by which truth is measured. By attuning the body's enhanced senses to detecting something that invisibly alters the world around them, individual citizens themselves are reclassified as instruments through which both exposure—at a personal level—and progress—at a societal level—can be measured. Their bodies are

reduced to tools that localize sensorial processing in the individual and allow the state greater optical control by measuring their levels of exposure through the process of making-visible.

By situating the body as a tool of measurement and mediation, individual experiences are defined by socialist teleologies as products of invisible outside forces, not as the product of lived or subjective experiences. Speaking specifically of Maoist China but extrapolating to other socialist regimes, Pang Laikwan claims that “The competition of fictions and reality, or different “realities,” is in fact a central feature of socialist realism. [...] many socialist regimes kept telling the people that material reality should not be trusted, and that the propaganda culture presented a more truthful political reality than unmediated everyday reality could” (47). To be true to reality in literature entailed maintaining a degree of investment in the illusion that an imaginary socialist utopia was not only possible, but was already guaranteed, and that it was knowable only through outside information rather than by trusting individual embodied experiences.

This measurement—explicit in the story both through blood tests for contamination levels and, more importantly, by extra-visual identification through the unweeping eye—is not merely a matter of atomic aesthetics or ideological imposition. Rather, it is a practical reification of technology mobilized as a means of surveillance for the purpose of social control. Roque’s fear, centering as it does on the golden glow of Juana’s heavily contaminated hands, is that she will be *seen*, and upon being seen, recognized as a subversive element. Her appeal to normalcy is predicated upon appearing a certain way—yet such a recognition can only occur through technologicized mediation. As bodies become nodal points for the national mobilization of fear, “bodies not defined by an outer skin-envelope or other surface boundary but by their potential to reciprocate or co-participate in the

passages of affect” are also themselves points of suspicion (Siegworth and Gregg 2). The skin itself no longer functions as the boundary marker between the interior self and the external world, given that skin can be overwritten with a sheen that is simultaneously gold and invisible to the naked biological eye. Skin can only be a canvas for contamination, and that contamination is threatening explicitly *because* it cannot be seen “naturally,” and must be understood through tools which are themselves implanted within the skin. The boundaries of the self, in their very liminality, require increased vigilance in being policed.

This technologicized visuality and its role in aesthetic control is only capable of being subverted by the decidedly final choice Juana makes at the end of the story. As previously mentioned, Juana fears that she is being followed and observed by government agents. For much of the narrative, it is unclear to the readers if this is a legitimate fear, or if her paranoia has arisen as a result of the radiation sickness that we know is affecting her physically, mentally, and spiritually. Insofar as it is unclear to the readers whether or not her paranoia is justified, the truth is also mediated for *us* through a double layer of obfuscation and literary materialism—we are unsure of authorial intent (insofar as the story itself introduces an element of doubt), and given that Juana is profoundly unreliable as a narrator, so too is her ability to “see” things as they really are a mediating force for readers. Just as Juana relies on her unweeping eye to “see” the world as it is, the reader is removed from the truth of her circumstances by textual barriers. To reveal the truth of Juana’s fears requires material mediation, both for her and for us.

In many ways, the ending illuminates for the reader what it denies Juana—or, rather, what Juana denies the state. As a tool of visuality used to police behavior antithetical to national safeguards, the unweeping eye can be understood as an imposition on embodied

practices that leads to self-surveillance. The glistening, seductive, opalescent gold leaves surface traces marking the skin of those who have defied national progress by handling plutonium in an effort to build bombs or who engage in antisocial addictions, embodying their criminal behavior. And while Juana is our protagonist, she is also cast as non-compliant, defective not only because of her physical deterioration but also because of her criminal subversion. Her paranoia is not only that she will succumb to the full indulgence in plutonium that spells death, but more than that, that she will be codified as deviant through a luminescence only visible utilizing the very technology she opposes.

It is with this in mind that the ending brings to light a double-edged revelation, revealing both surface-level control and a more fundamental physical violence. This evocation of security affect is “based on fears that are officially sanctioned and promoted as a means of coordinating citizens as members of the national security state” (Masco 18) and which can be activated by noticing small, everyday objects, such as an unattended suitcase or specific articles of clothing. While Juana and her boyfriend *have* been unceasingly monitored for suspected terrorist activity, the final act in which she was seen, recognized, and apprehended was in *service* to the state, not for actions against it. Earlier in the day, Juana was struck insensible by a man on the train who showed faint signs of radiation exposure despite the gloves meant to obfuscate signs of radiation—signs no one else could detect. A doctor, later revealed to be the arresting agent, recognized the signs of contamination in her and that, moreover, that it was this heightened sensitivity to radiation that made her better able to recognize exposure in others. The state plans to use her “gift” to further prosecute those who have not so egregiously defied the law as she. The hyper-sensitivity radiation exposure has bestowed on her while simultaneously crippling her has been recognized as a tool to be used by the enforcing arm of the state.

It is in direct defiance of this operationalization of her illness, already transmitted through the nuclear state and utilized for optical surveillance, that causes Juana to stab out her unweeping eye. Rather than be used, she subverts the paradigm of surveillance entirely by refusing to see. And yet the story is ultimately ambiguous—while Juana refuses participation in a project of technologicized modernization predicated on visibility, it is with the understanding that she herself is only able to identify contaminants and threats due to her own contamination. She is both the threat and the tool for assessing threats. Rather than provide a clear-cut condemnation of state practices of control, the formal parameters of the text enroll the readers in that same process of optical surveillance provided by the narrative's optical technics. The text itself becomes an unweeping eye, open to the traces of national practice that require mediation to truly see. To opt out by refusing to see is not an option for the reader, who, in their position of seeing Juana as both threat and as tool, is rendered uniquely aware of the ambiguities of border policing at both the national and physical level.

The authors of “The Eye that Never Weeps,” the Steinmüllers, developed a popular readership in East Germany as a result of their intentionally developed ideological ambiguity. By never overtly declaring their politics and writing texts that appealed both to East German censors and a reading public that, by the late seventies and early eighties had begun to enjoy greater cultural contact with Western popular literature, they deliberately cultivated a body of work predicated on ambiguity and the necessity of the reader to “read into” the text. Sonja Fritzsche, describing one of their most popular novels, explains in *Science Fiction Literature in East Germany* that the Steinmüllers walked a tightrope of utopian reform based on existing socialist structures, representing “the basis for a dynamic utopia that is responsive to the society's ever-changing needs of the future. In accordance with the value of socialism's perpetual revolution, this dynamic utopia is kept alive by the wishes and creative

contributions of all its members” (239). Their work, set on other planets¹²² or other countries,¹²³ opened a discursive space for the possibility for reform, but without critiquing their own society directly.

Fritzsche further identifies this intentional ambiguity with the Blochian concept of the utopian gesture. If we understand ambiguity to be a utopian gesture while also keeping in mind Fredric Jameson’s warning that the very act of narrating a utopian act necessarily results in “the systemic, cultural, and ideological closure of which we are all in one way or another prisoners” (148), Juana’s final act becomes a moment of radical embodied ambiguity. The text describes the act of putting out her eye, permanently destroying her status as a perceiving machine and fixing her physical pain in place, but deliberately leaves the repercussions of such an act undefined. Whatever impact this may have on the state is ambiguous and left to the reader to imagine, but Juana’s fate is locked in with her own act of bodily self-destruction.

The Blochian tones of such an ending were a well-known tactic for GDR authors wishing to hew to ideological ambiguity. In “Unusual Censor Readings,” Patrick Major notes that “any ‘dreaming ahead’ showed too much affinity with Ernst Bloch’s humanist Marxism, outlined in his ‘principle of hope’, which had fallen into official disfavour in the later 1950s. Instead, sf supporters had to cite Lenin’s words: ‘Yes, dream, young man! Dream! ... Dreams drive forward progress. The greatest dream is socialism’” (205).¹²⁴ In Juana’s utopian gesture, she opens the dream of socialism and the individual’s ability to shape it up to

¹²² As in their most popular novels, *Andymon* (*Andymon. Eine Weltraum-Utopie*) and *The Dream Master* (*Der Traummeister*)

¹²³ As with “The Eye that Never Weeps”

¹²⁴ Major is quoting Taut, Heinrich. ‘Träume, Träume, wo ist eure Wonne: Wie soll unsere Zukunftsliteratur aussehen?’, *Sonntag*, 44, 1962, pg. 11.

dynamic interpretation, eschewing a static utopia for the unwritten narrative of a future yet to come. In doing so, she sacrifices her own bodily integrity, casting aside any certainty of an assured societal role for the hope of the undefined.

SILENCE, ASSEMBLAGE, AND ASSIMILATION

Juana's invisible nonconformity was policed by state-sanctioned control enacted upon its citizens that required their own participation in a mediated recognition of external technology's impact on biology—in this case, radiation. At the same time, her invisible illness demonstrated the extent to which the state was willing to surveil and utilize deviant bodies to enforce a normative order. What this characterization brought forcefully to the forefront was an insistence on the body as a technologically-mediated object in which the ideal citizen constitutes the state through an embodied participatory practice. While Juana attempts to opt out of state practices of embodied participation, the narrator in Abram Tertz's "Pkhentz" is faced with a different dilemma: his fundamental alienation from society—literally, he is the last survivor of an alien ship that has crash-landed on Earth decades prior—is complicated by his simultaneous disgust with the human bodies that surround him even as he desperately seeks socialist connection and community.

If the unweeping eye was a tool of state control over bodies made deviant by their own sensorial processing, it was also a tool of self-policing in which citizens embedded with such technologies monitored their own interactions with and self-presentation to the world. This act of self-policing is also integral to "Pkhentz," a short story written in 1961 and

published as *samizdat*¹²⁵ literature in 1966 by the dissident Soviet author Andrei Sinyavsky, writing under the pen name Abram Tertz. That same year, he would be arrested and tried under the first application of the anti-Soviet agitation laws to fiction. Focusing on an alien who can neither fully remember his own language nor perform adequate physical or emotional expressions of personhood, the story is such a stringent comment on social alienation that the official response marked a turning point in censorship that was so strong it became recognized as the end of The Thaw and, therefore, the period of newly-free(er) speech following Stalin's death.

Yet while the publication context for the story leads most readily to a reading of it as direct defiance of state literary codes—and, in fact, most of what little research exists on the topic is concerned primarily with the way that it commented critically on Soviet society, as well as the way in which the state's reaction to its author marked a turning point in stricter censorship¹²⁶—it is the achingly foregrounded sense of sorrow over the isolation of the narrator from the people and society around him that renders this text significantly more ambiguous in its ability to be folded into a normative national project. While “Pkhentz” was

¹²⁵ Самиздát, lit. "self-publishing." Samizdat literature was self-published literature produced as a means of circumventing official publication venues.

¹²⁶“Last February two Soviet writers, Andrei D. Sinyavsky and Yuli M. Daniel, were sentenced by a court in Moscow to seven and five years' hard labor, respectively, on charges of having published abroad works of an allegedly anti-Soviet character under the pseudonyms Abram Tertz and Nikolai Arzhak.” Their crime was “Agitation or propaganda, conducted with a view to subverting or weakening the Soviet regime or committing dangerous state crimes; the distribution for the said purpose of slanderous inventions maligning the Soviet political and social system, and also the distribution or preparation or harboring, for the said purposes, of literature of similar content punishable by imprisonment from six months to seven years and exile from two to five years or without exile or only by exile from two to five years.” “The Trial Of Sinyavsky And Daniel.” New York Times (1923-Current File), New York Times Company, 17 Apr. 1966, <http://search.proquest.com/docview/117141207/>. While this 1966 ruling marked a renewed crackdown on literature in the Soviet Union, it also served to inspire a growing dissident movement, particularly amongst writers of science fiction, who had only just begun to enjoy the renewed utopian impulse provided by The Thaw.

undoubtedly written, published, and distributed outside of official Soviet channels and its message undoubtedly one critical of the normative bodies and social practices conveyed within, it is equally clear that this separation is a source of deep despair for the narrator, who has often been identified as a mouthpiece for the author, both by critics and Sinyavsky himself alike.

“Pkhentz” is a deeply weird story, and aside from its extra-textual import as a marker of stringent nationalist crackdowns on dissenting literature, the soul-rending trials of its narrator are legible through several lenses: as a story of authorial embedding, with Sinyavsky himself as the protagonist, forever apart from his fellows; as a comment on queer alienation, with the narrator repulsed primarily by the social expectations of compulsory heterosexual practices; or through a lens of disability and access, as the narrator moves through life disguised as a hunchback. But though all of these tools are valuable and will be at least cursorily touched on in the following analysis, I will primarily focus on “Pkhentz” as a text in which issues of language and physical embodiment intersect and the ultimate failure of both to provide real connection in a society linked through unspoken, physically-enacted rituals. Despite the narrator’s rejection of these fully-fleshed societal bonds, he distinctly feels their lack, such that even as the society in which he finds himself is one that he dislikes, it is simultaneously an object of intense desire. The object of that desire—the rejected Soviet socialist state—is thereby explicitly set up as a model of enviable standardization even for those choosing to live outside it.

“Pkhentz” is a story of physical, social, spiritual, and linguistic alienation. At the most basic level, this is a very literal alienation—“Pkhentz’s” protagonist is a literal alien accidentally moored on Earth who is posing as a deformed human in order to fit into

society—but also one in which the impossibility of rejoining society is tragic specifically because words are inadequate for conveying the depth of loss experienced between individuals. The narrator, going by the assumed name Andrei Kazimirovich Sushinski,¹²⁷ is never fully revealed either to the readers or his own society—or even, that matter, to himself. Not only is he using a different name and a different language, he has lost the ability to remember his own name and his own language, recalling only a few words that are imbued with a significance that cannot be grasped.

The story opens *in media res*, with the nameless (always nameless to himself and to us, despite the utilization of an assumed name by others) narrator watching a slovenly hunchback, made repulsive by both his dirtiness and deformity, do his laundry. The narrator feels a pathological connection to this man, though it isn't immediately revealed why. We are introduced to Veronica soon after, a young, beautiful woman whose sexual overtures repulse the narrator and whose eventual revelation of her naked body drives him to seek out the hunchback he has been stalking and to profess their kinship. The man, Leopold, rebuffs him, and the narrator realizes only then that he is really and truly alone. It is revealed that the narrator and his comrades crash-landed on Earth some thirty years prior, and that, as the sole survivor of that crash, with no hope of rescue, he has been hiding his true form—a multi-armed, multi-handed, multi-eyed, chlorophyllidic endotherm more akin to a vegetable than a mammal—all this time in the guise of a hunchback. And while he personally burnt the bodies of all his comrades who died, he has been clinging to the false hope that the hunchback is one of his own people, disguised as he is and here to rescue him from Earth. Before Leopold insults him and describes him as a monster, hunchback, and wretched

¹²⁷ An obvious allusion to the author's real identity.

cripple,¹²⁸ the narrator had believed that he had merely gone native, too deeply into his part, and forgotten who he really was. The narrator had hoped that the hunchback had become a man who conformed to the normative desires and behaviors of society in appearance only, as he had. In his depression following this confrontation, a brief period of severe illness overtakes the narrator, during which he is almost discovered, and a year after he recovers he fully accepts that he has lost everything and, because he will never be able to fully join society, leaves for the original crash site with the intention of emptying himself of all language and eventually killing himself.¹²⁹

In its recuperation of the trope of both a crashed alien ship isolated on Earth and the connection between plantlife and a more evolved way of living, “Pkhentz” draws upon earlier traditions of ideological embodiment that, like, the Soviet-specific ideal of the new human itself, grew out of the cosmist belief in universal connection. In Alexander Bogdanov’s “autobiographical” poem “A Martian Stranded on Earth,” for example, the speaker is a Martian whose comrades have all died following the crash of their vessel onto Earth. According to Nikolai Krementsov, “He cannot return to his planet, and it is “the voice of dispassionate science” that saves him from despair and thoughts of suicide.”¹³⁰ “Pkhentz’s” narrator isn’t so lucky; no “voice” speaks to him other than the haunting echoes of a language he cannot fully remember, and the lack of any objective expression or ability to

¹²⁸ “You’re more of a hunchback than I am! You’re more disgusting. Monster! Hunchback! Wretched cripple!” Terts, Abram. “Pkhentz.” *Fantastic Stories*. Northwestern University Press, 1987, pg. 231.

¹²⁹ “There was a hole. I’ll search till I find it. The hole we made when we fell. Put wood all round it. Juniper blazes up like gunpowder. I’ll sit down in the hole, untie myself and wait. Not a single human thought will I think, not a single word of alien speech will I utter. When the first frosts begin and I see that the time is ripe—just one match will be enough. There will be nothing left of me.” Terts, Abram. “Pkhentz.” *Fantastic Stories*. Northwestern University Press, 1987, pg. 244.

¹³⁰ Krementsov, Nikolai. *A Martian Stranded on Earth: Alexander Bogdanov, Blood Transfusions, and Proletarian Science*. The University of Chicago Press, 2011, quot. Bogdanov, *Marsianin, zabroshennyi na zemliu*. Leningrad and Moscow: Kniga. 1924, pg. 168.

communicate drives him to the suicide that Bogdanov's own biographical text saved him from.

This isolation is all the more profound when read against the critical and science fictional musings of Konstantin Tsiolkovsky, an early rocket scientist who, inspired by the writings of Jules Verne, developed Russia's earliest astronautic designs and is widely heralded as the father of the Russian space program. According to Anindita Banerjee in *We Modern People*, Tsiolkovsky also "speculated that if the human organism could be modified into a self-sustaining plant, the primary biological grounds for competition would no longer exist. The synthetic anthropo-arboreal model presented in his science fiction occupied a tremendously important place in the broader concern about the future of humanity. Citing his early essays "Future Man" ("Chelovek budushchego," 1897) and "Future Plant" ("Rastenie budushchego," 1906), Tsiolkovsky called for the "devolution" of the human species as the first step toward counteracting disharmony and death" (138). Rather than a devolution, "Pkhentz's" narrator is more advanced than the humans around him, who have not yet made it to the stars and joined the socialist collective to be found there. He must hide his true nature—infinately more alien than disability—behind a façade that still places him outside normative society but still adjacent to it. Because his ability to achieve true connection is located in a language and a physical embodiment that, though it may be more advanced than those around him, nevertheless marks him as other, he can never reveal his true form. His craving for connection is stymied by his inability to lower himself in terms of either physical connection between bodies or linguistic communication.

Language in "Pkhentz" is in fact incapable of describing normative, shared experiences; it is social involvement in a participatory practice that creates a shared and

known community. The limits of human speech are frequently abutted in describing the narrator's embodied alienation, such that he finds refuge in a physical disguise that is still outside the boundary limits of ideal humanity but is still knowable through shared sensoriums. In "Pkhentz," to be a hunchbacked cripple places the narrator outside of the socialist physical ideal but maintains the illusion of his inclusion in a shared humanity; his best option for seeking community is still to exist outside of it. Unlike "The Eye that Never Weeps," in which human biology is incapable of experiencing the truth, here language is what fails when describing biological sensoriums and the social bonds that those physical experiences engender. It is because the narrator is physically outside of human experience and because he cannot physically perform, act, or react as expected, not only because he cannot speak the language or say what is expected of him, that he is cut off from connection with others.

In this way, language and physicality are linked insofar as there are no words adequate to the task of describing embodied experiences or of bridging the disparate gaps between them, challenging the narrating figure as an assemblage of biological determinism and performativity. As an alien, no matter how well-disguised, the narrator can never find just the right words that will allow him to keep the distance he craves while also ensuring comfortable anonymity; he is forever held in tension between attempting to appear normal enough to not be questioned while also rejecting the behavior that would ensure his normative performance. By rejecting the behavior associated with corporeality even as he recognizes the necessity of socially passing, he therefore rejects the socialist new human as not going far enough to ensure collectivity and community. And while this made the story itself unacceptable in the Soviet Union, it is undeniable that the narrator's sadness makes this an ambiguous rejection. It is clear that, while he is physically repulsed by the embodied

performance of social structures around him, his isolation does not make him happy, yet his ongoing struggle to express it can only take the form of a distorted linguistic mashup that evokes emotion without being self-contained, whole, or complete. His experience of being in the world is one of constant and utter defamiliarization, an estrangement that functions throughout “Pkhentz” not only as a textual mode, but also as an ontological mode of existing in the world.

In her translator’s foreword to Victor Shklovsky’s formalist manifesto “Art, as Device,” Alexandra Berlina notes: “Ostranenie is an unintentional neologism, an orthographic mistake on Shklovsky’s part: derived from *strannyi* (strange), it should feature a double n. Sixty-seven years later Shklovsky (1983a: 73) commented, ‘It went off with one “n,” and is roaming the world like a dog with an ear cut off.’ The missing ear draws attention: the word’s incorrectness refreshes language and stimulates associations connected to strangeness. Defamiliarization and estrangement do not. [...] These two concepts suggest decreased emotional connection to people, fictional or real, which is the opposite of the intended effect of ostranenie” (152). Roaming the world while cut off from language, as a dog without an ear, the narrator’s ability to conceptualize the world and describe it to readers is a constant process of defamiliarization, rendering the quotidian strange and remarkable, often horrifying and grotesque, specifically *because* he maintains an emotional connection to the world—a connection characterized by the simultaneous disgust and desire for belonging to a normative framework. Through his (many) eyes, the world of human embodiment and its attendant requirements are connected with his own association of society as a consumptive maw, gnashing up those who stick out or make their individual presence felt in some way.

For example, one of the earliest descriptions in “Pkhentz” in which the audience is made privy to just how fundamentally separate from normative biological modes the narrator is occurs in his description of supper as, “[...] steaming and stinking. The sadism of cooking has always amazed me. Would-be chickens are eaten in liquid form. The innards of pigs are stuffed with their own flesh. A gut that’s swallowed itself garnished with stillborn chickens—what else, when you think of it, is scrambled egg with sausage?” (219-20) This description of food is both defamiliarized and made disgusting, but the act of embodiment as a consequence of consumption is then extended, too, to martyrs: “Take an engineer or writer, stuff him with his own brains, place a violet in one braised nostril, and dish him up to his colleagues for dinner” (220).

Consumption, the body as dependent on it, and the language used for describing an ideal state free from biological bonds are all interconnected in the normative physiological framework from which the narrator attempts to distance himself, an inextricable intersection demonstrated most obviously in his relationship with Veronica. A beautiful young woman sharing his communal flat, Veronica pursues the narrator with a sexual fervor that he finds incomprehensible, interpreting it as an outgrowth of pity coupled with the belief that she can heal and rehabilitate him socially. Her human biological form, implied to be quite beautiful, is repulsive to him, and he shrinks from the warmth of her hands just as much as the warmth of her overtures. To give in to her demands would be to reveal himself to her levelling enrollment in socialist normative mores, his body, brain, and language being consumed and dissected in the process, his very self consumed in martyrdom to the idea of the perfect socialist subject.

Feigning self-debasement as a method of self-preservation, he declaims that “All I could do was to dwell on my hump, my age, my wretched salary, my humble job as a bookkeeper, and all the time it took up, to insist that only a woman with a hump to match would be right for me, whereas a normal, beautiful woman needed a symmetrical man” (221). In trying to forestall Veronica’s advances, the narrator insistently foregrounds himself as deformed and damaged and unworthy of human companionship (though of course this is just a ruse; he’s playing off normative social expectations, not his own beliefs).

Yet as The Thaw heated up and the most stringent restrictions on both speech and revolutionary zeal were lifted, citizenship began increasingly to require performing normative socializing, including the development of familial relations and reproductive roles. While earlier social performances of devotion to the developing state required physical privation such as of sex or food, new pressures and regulatory norms that emphasized familial happiness and fecundity became more common following Stalin’s death. In direct opposition to the disgust with the coupling of sex, reproduction, and death held by earlier *litterateurs*, philosophers, and revolutionaries, an official pronatalism became inextricable from state-level narratives of citizens’ social duties to national development.¹³¹

Drawing on Lee Edelman’s opposition to reproductive futurity, Veronica’s role in the narrative serves primarily to highlight the narrator’s sinthomosexual¹³² rejection of the socialist ideals of normative reproduction.¹³³ Not only does he reject the heteronormative

¹³¹ See Gal, Susan, and Gail Kligman. *The Politics of Gender after Socialism - A Comparative-Historical Essay*. Princeton University Press, 2012 and Randall, Amy E. “‘Abortion Will Deprive You of Happiness!’ Soviet Reproductive Politics in the Post-Stalin Era.” *Journal of Women’s History*, vol. 23, no. 3, Johns Hopkins University Press, Sept. 2011, pp. 13–38.

¹³² One who has no personal interest in the future of humanity because of his/her own (non-heterosexual, non-reproductive) sexual orientation.

¹³³ A topic already troubled in the drive to separate reproduction as labor from the biological imperative, as we have seen in chapter two.

imperative that she demands—that of a masculine desire to copulate, no strings attached, with a beautiful, fertile young woman who offers herself willingly—he also rejects the emotional impulse behind it, which is fundamentally misguided. Even without knowing his true form, the narrator recognizes that Veronica would be disgusted by even the body he uses as a disguise: ugly, old, and deformed. This is to say nothing, of course, of his actual multi-handed, multi-eyed vegetable state. Instead, he demurs on the basis of social acceptability, insisting that her desires are better focused elsewhere.

Yet to do so continually runs the risk, as mentioned previously, of revealing a rejection of socialist social norms that would jeopardize his safety and artificially created social standing. He cannot reject her outright; to do so would definitively identify him as someone who has conscientiously rejected the proximal relation to state acceptability developed through sexual intimacy. By insisting that his (assumed) status makes him undesirable, he is able to position himself as someone the system has failed, becoming a pitiable victim, rather than a subversive revolutionary. This disguise is a dangerous tightrope to walk, and one that ultimately fails him when confronted directly with Veronica's advances, which are openly and guilelessly offered in her body. He describes her thusly:

“It was—I repeat—horrible. I found that her whole body was of the same unnatural whiteness as her neck, face, and hands. A pair of white breasts dangled in front. At first I took them for secondary arms, amputated above the elbow. But each of them terminated in a round nipple like a push button.

Farther on, and right down to her legs, the whole available space was occupied by a spherical belly. That is where the food swallowed in the course of a day collects in a heap. Its lower half was overgrown with curly hair like a little head.

[...]

I caught a glimpse of something resembling human features. Only it didn't look female to me, but more like an old man's face,

unshaven and baring its teeth. A hungry, angry man dwelt there between her legs” (223-24).

Later described as “humanly speaking, her most valuable possession” (237), Veronica’s body here is as strange and grotesque as “a gut that’s swallowed itself,” enstranged from all indicators that society has identified as beautiful and desirable while still positioning itself as such. His only interest in it, before turning to a complete revulsion that drives him from the room, is detached, textbook curiosity.

The idealized female body is here completely defamiliarized, but also identified at the same time as the most valuable thing that Veronica possesses. Her value lies in her embodiment, in the slope of her belly, mounded with food, in the angry man between her legs, in the amputated arms of her breasts, the gut that swallows itself alive. To defamiliarize the human form in such a way invokes both Viktor Shklovsky’s recognition that enstrangement is most potent in erotic art (167-69), when what is “natural” is presented as if being seen for the first time, but also in Anastasia Kayatios’ reading of this scene as most deeply illustrative of the queer isolation the narrator experiences in his rejection of copulation (427). The potential for castration through what the narrator identifies explicitly as a *vagina dentata*—a hungry old man baring its teeth—warns that literally entering into the normative social bonds of heterosexuality spells disaster for the narrator, a traumatic closing-off of his own bodily agency and integrity through his refusal to engage with socialist expectations.

That Veronica’s body is so valuable to her both as an aesthetic possession and as a representative of the political status quo is mirrored in the narrator’s valuation of his own body: “the only example of the lost harmony and beauty which I call my homeland. What is

there for me to do on this earth except delight in my person?" (239) Similarly, on page 240, when he lies desiccating and dying, he "vowed that if I lived I would keep my secret to the end, and not let this last vestige of my homeland, this beautiful body, fall into the hands of my enemies for them to rend and mock" (240).

The body, policed and controlled in the state's quest for a normative framework, is itself fully invested with the dreams of national development and social mores. Its boundaries are permeable with those of state directives insofar as they are coterminous with each other; like Borges' perfect map¹³⁴, the perfect body not only represents the perfect state, but *is* the perfect state. For the narrator to refuse the perfection of Veronica's body is to refuse the perfection of the Soviet ideal that imbues her with value; to defamiliarize the sex she's offering in such a way is to turn away from the delights of socialist belonging and to choose chastity over the desire to be enrolled in the national project.¹³⁵

The philosopher Nikolai Berdyaev, a champion of androgyny and a fervent misogynist previously mentioned in chapter two, claimed that "There is something hideous in the sexual act itself" and that "the sexual organ is so hideous that the human race would die out if people did not fall into a state of possession when reproducing" (83-84). In this, Sinyavsky's narrator falls in line with a long history of Russian disgust with sex and the sexual organ. According to Eric Naiman, citing Mikhail Chlenov's 1905 survey of more than

¹³⁴ See Borges, Jorge Luis. "On Exactitude in Science" *A Universal History of Infamy*, translated by Norman Thomas di Giovanni. Penguin Books, 1975.

¹³⁵ In her analysis of the changing depiction of women in propaganda posters, Victoria Bonnell has mapped the ways that sexuality and fecundity initially disappeared into a genderless, emaciated, and sexless form until more overt sexual characteristics were mobilized after the 1930s. At this point, a discursive theme of prosperous abundance became associated with female fecundity, leading to the depiction of overtly sexual female forms to appear in Soviet iconography representative of the state. Bonnell, Victoria E. "The Peasant Woman in Stalinist Political Art of the 1930s." *The American Historical Review*, vol. 98, no. 1, American Historical Association, Feb. 1993, pp. 55–82.

2000 students at Moscow University, “of the 50.3 percent who did not engage in sexual intercourse, 17.9 percent (203) abstained out of ‘moral revulsion at the act of coitus,’ 4.6 percent (53) rejected sexual life ‘on principle,’ and 1.1 percent (13) expressed physical revulsion toward women” (35). Though the social landscape had changed significantly between the time of this study and the publication of “Pkhentz,” it is clear that the narrator’s revulsion towards Veronica and her body is less an implication of queer desire—as many have read it—and, rather, is more in line with the desire for physical transcendence that has long been a mainstay of Russian revolutionary literature. His disgust at her body, while a rejection of society, is simultaneously an embrace of revolutionary corporeal perfection.

The narrator’s body is the embodiment of his own homeland, for which words are no longer sufficient. As the meaning behind his language slips further and further away, it is his “beautiful body” that remains “the last vestige of [his] homeland,” something far more valuable than the words that increasingly serve merely as empty ciphers. The inability to speak either belonging or desire, to truly articulate a lived experience that can be understood only through individual somatic subjection, creates a void in which words are capable of serving only as disguises for a deeper existential meaning. For example, the narrator’s disguise is legally codified in his citizenship records, even moreso than in his disguise as a hunchback. In the annals of government bureaucracy, his status is a visualization of his place in society, a way of being seen that has nothing to do with who he really is and everything to do with how he must appear to be in order to pass: “Why have I spent thirty years pretending to be somebody else, like a criminal? *Andrei Kazimirovich Sushinski. Half-Polish, half-Russian. Aged 61. Disabled. Not a Party member. Bachelor. No relatives, no children. Never been abroad. Born at Irkutsk. Father: clerk. Mother: housewife. Both died of cholera in 1901. And that’s it!*” (232-33)

To appeal to the law in this way is risky, not only because his half-Polish ancestry here would have been directly legible to contemporary readers as indicative of the author's own identity—an identity Sinyavsky explicitly espoused at his censorship trial—but also because it recognizes the impossibility of accounting for a fundamentally alien self even as he has hidden behind this legal disguise for decades. To appeal to the law for the validation of identity within a political system capable of bestowing or denying personhood through citizenship¹³⁶ is not a new idea, but in this context it is presented as nothing more than a smokescreen, completely lacking depth or validity. The language of definitions as boundaries within which bodies must exist under the law is increasingly complicated by his appeals to a self-description that will provide him with socially sanctioned existence while simultaneously allowing him to exist at the boundary markers of permissibility.

It is at this point that the narrator's attempts at a social disguise begin to slip, casting him as a threat, rather than an outcast. Despite his attempts to situate himself as a victim of society, isolated and alone because of his age, unmarried status, alcoholism, or status as a madman—all of which are merely disguises for that which truly situates him outside of society—explicitly rejecting the normative family and sexual structure strips him of his plausible deniability and opens him up to new levels of social alienation. He cannot reveal his true reasons for rejecting the beautiful Veronica, and his inability to articulate an acceptable reason for choosing to exist outside the familial norm creates a disjunction between his disguise and the social expectations and political requirements¹³⁷ from someone in such a position.

¹³⁶ As we have also seen in chapter two, with the robot Lili's quest for recognition through a court of law.

¹³⁷ The 1936 and 1944 Family Edicts celebrated marriage and reproduction as patriotic duties, representing a sharp divergence from earlier policies that had attempted to provide stepping stones to a more revolutionary conception of the family. Pro-nuclear family and pro-natal codes were enacted as part

As the narrative begins to draw to a close, two separate but concurrent strands forcefully illustrate the complete severance of the possibility of language to express lived experience: the narrator's further loss of his own language, and the frankly incredible scene where Veronica's language completely breaks down. If the citizen at this time was one who was most voluble in their speech, who said the truth with their whole chest,¹³⁸ then those unable to speak to socialism directly are therefore unable to embody its ideals. The end of "Pkhentz," in which he stutters, coughs, soliloquizes a brief and frenzied rush of incomprehensible gibberish, and dies, represents his final desperate attempt to engage in the body politic even though he claims that "not a single human thought will I think, not a single word of alien speech will I utter" (244). The narrator, despite disclaiming his own participation in a system he finds appalling, descends into a mad frenzy of linguistic claims to normative inclusion, all of which fail but nonetheless underline his attempts to speak a truth that is unsayable. He truly becomes the *vox populi*, a figure of babel and confusion, speaking for a global attempt at socialist unity¹³⁹ that is mutually unintelligible in its very inclusivity. Meanwhile, Veronica, cast as the perfect socialist citizen, embodying all ideals of the New Man, is also represented as having her speech fail completely, demonstrating the

of these edicts, making it so anyone who rejected to enter into a nuclear partnership and reproduce was simultaneously rejecting their patriotic duties. See the "1944 Presidium of the Supreme Council of the USSR" (1944 ПРЕЗИДИУМ ВЕРХОВНОГО СОВЕТА СССР), available at www.libussr.ru/doc_ussr/ussr_4500.htm

¹³⁸ "The post-Stalin person, by contrast to his stooping predecessor, stood up straight, puffed up his diaphragm and bellowed out bold words "at the top of his voice" [vo ves' golos], to use the raucous modernist idiom of Vladimir Maiakovskii (1893-1930), a poet who did just as much in the mythic heydays of Leninism." Kayiatos, Anastasia Ioanna. *Silence and Alterity in Russia after Stalin, 1955-1975*. eScholarship, Jan. 2012, pp. 3, www.escholarship.org/uc/item/1989594t.

¹³⁹ The link between a theory of linguistic unity and socialism is well-researched, especially as it relates to a communal and shared method of communication. This is most evident in the ties between socialist projects and the development of Esperanto; see Gordin, Michael D. *Scientific Babel: How Science Was Done Before and After Global English*. The University of Chicago Press, 2015; Gobbo, Federico. "Beyond the Nation-State? The Ideology of the Esperanto Movement Between Neutralism and Multilingualism." *Social Inclusion*, vol. 5, no. 4, Cogitatio Press, Jan. 2017, pp. 38-47; and Lins, Ulrich. *Dangerous Language - Esperanto Under Hitler and Stalin*. Palgrave Macmillan UK, 2016.

impossibility of fully articulating the ideals being proclaimed even when nominatively embodying them. There is no way to translate that which can only be known in its physical embodiment, which is illegible when occurring outside standardized parameters.

First, Veronica's speech, given to the narrator as he lays desiccating and dying; in which language fails as it becomes more and more focused on a normative humanity: "You know, Andrei Kazimirovich, I really did love you. I realize that I loved you—how shall I put it—out of pity...Pity for a lonely, crippled human being, if you will forgive my frankness. But I loved you so much...didn't notice...physical blemishes...To me you were the handsomest man on earth, Andrei Kazimirovich...the most...man. And when you laughed at me so cruelly...make an end of myself...loved...won't conceal from you...worthy man...Fell in love...man...human...humanity...man to man... [...] Human... manhu... hanumanu.... Human... manhu... umanu... hanumanu... human..." (241-42).

The breakdown of language here by a mouthpiece that has, until this moment, represented the best that the socialist Soviet state has to offer, is beautiful, wild, and deeply disturbing. The first sentence is itself the most "whole" of the paragraph, but even so is intercut with the narrator's human name, a disguise that interrupts the fully-lived experience he might have had otherwise, had he not been bounded by the society that required of him a linguistic and physical performance that figuratively and literally maimed him. The sentence structure, speaking to him directly, has at its heart a division in the fullness of the social order, and that division is the narrator himself.

The second sentence begins to break down in the face of the inadequacy of language to express an embodied sense, an emotion that must delimit and recognize the impossibility of "how shall I put it" by setting that recognition off from the primary emotional clause: a

love born out of pity. The pity that engenders love is predicated on physical infirmity and a hierarchy of embodiment that recognizes the narrator's deformity as an object that can be normalized through the embodied power of love. It is this love that allowed Veronica to not "notice...physical blemishes..." and to idealize him as the "handsomest man on earth..." This is when the language truly begins to break down, with the enunciation of "...the most...man..." because as has become very obvious to the reader, if not Veronica herself, the narrator is anything but a man. As "worthy man" becomes only "man" and the broadness of "humanity" gives way to "man-to-man," the linguistic conceptualization of the human continues to degrade and break down, losing any internal coherence it may have once had. The passage is an effusive negation of the ability to express the worthiness of humanity as a whole or the boundary delineations of a man and his place in that broader social context.

Furthermore, as Kayiatos notes, "The contemporary reader would have been able to complete Veronika's half-sentence automatically here—"man is to man"—by conjuring up the picture of the perfect communist family from an official propaganda poster that became omnipresent following the 1961 Congress of the Communist Party. A father reaches out toward the viewer with open arms in the center of the image. A mother rests her hand confidently on her husband's left shoulder. And at his right, a respectful young man casts his hand skyward, mimicking the inevitable ascent of "good" citizens to communist paradise. Beside them appears the slogan of the Moral Code for the Builders of Communism [Moral'nyi kodeks stroitel'ia kommunizma], approved by the Congress that year. "Humane relations and mutual respect among people: man is to man a friend, comrade and brother!" [Gumannye otnosheniia i vzaimnoe uvazhenie mezhdu liud'mi: chelovek cheloveku—drug, tovarishch i brat!] (320-21).



143. Соловьев Е.
Гуманные отношения и взаимное уважение между людьми... 1962

Image 9: Solov'ev, B. “Gumannye otnosheniia i vzaimnoe uvazhenie mezhdu liud'mi: chelovek cheloveku—drug, tovarishch i brat!” Image provided courtesy of University of Southern California Libraries. Legacy record: pcra-uets-207306

Veronica’s degraded speech, as perceived by the dying narrator, evinces the glorious socialist future and social integration that remains out of reach for the narrator, who—like the “respectful young man” of the poster this utterance evoked—is reaching for a socialist paradise of brotherhood, in which man is to man a friend. Yet his rejection of this very brotherhood inevitably causes it (with Veronica, as always, functioning as its mouthpiece) to reject him in turn, just as Leopold has done earlier. Veronica ends by claiming that he is a “very bad man” (242), which is true—he is a very bad human, indeed.

And with this utterance, Veronica disappears from the narrative as an individual by becoming subsumed in the body politic, espousing the state view and embodying, in opposition to the narrator, what it means to be a very good [hu]man. This is the last we ever hear from her. Similarly, the narrator's own final speech can be read as similarly twisted and contorted. Unlike Veronica, however, whose ability to articulate disappears as she becomes a normative representative of Soviet socialist heterosexuality and nationalist community-building, the narrator's speech fails him as he mourns his inability to find community in either the alien world he left behind or the alien world in which he has been living all these years.

Claiming "It's getting harder and harder for me to recall the past. Only a few words of my native tongue have survived. I've even forgotten how to think as I used to, let alone read or write. I remember something beautiful, but what it exactly it was I don't know" (243), the narrator holds on to the belief that language can be some kind of identity even as this is shown repeatedly to be a lie. He believes that Leopold has forgotten his name and thus betrayed "his true self" (before realizing he's just a human) (230), it is his legal definition under the law that identifies him as a citizen, and words in his native language are what he clings to in order to retain some semblance of coherent self-identity. Ultimately, however, this belief in the ability of language to express that which can be felt only in the body's individual experience fades away, and he is left with an existence severed from both the expressability of language and the possibility of social inclusion. All that remains is an embodied cry of anguish, unsharable and incapable of expressing his private grief. "I'll sit down in the hole, untie myself and wait. Not a single human thought will I think, not a single word of alien speech will I utter" (244), he claims, ending the story with the untranslatable slurry of: "Oh native land! PKHENTZ! GOGRY TUZHEROSKIP! I am coming back to

you. GOGRY! GOGRY! GOGRY! TUZHEROSKIP! TUZHEROSKIP! BONJOUR!
 GUTENABEND! TUZHEROSKIP! BU-BU-BU!¹⁴⁰ MIAOW, MIAOW! PKHENTZ!”
 (245)

This textual farewell hits like a hammer; it is a wail of despair that will never reach another ear and, even if it could, would be incomprehensible to any interlocutor, human or alien. While it may be tempting to interpret these alien phrases (“Pkhentz,” “Gogry Tuzheroskip,” etc.) as the re-emergence of bodily language re-asserting itself in the final moments of the narrator’s life and thus imbuing it with a meaning simply foreclosed to the readers, the ability of language to express anything at all is called into question by the inclusion of an animalistic “miaow” coupled with French, German, and nonsense. If any of it means anything it is only as a cry without a corresponding interpellation for understanding. And when it is over, we are to understand that the death of the narrator brings silence that is, perhaps, an even better indicator of the text’s ambivalent attitude towards broader social belonging.

By rejecting the state, Sinyavsky’s narrator attempts to locate himself in the same narrative plane as it. Speaking on this plane of equivocal silence, Susan Sontag notes that “Silence is the furthest extension of that reluctance to communicate, that ambivalence about making contact with the audience... Silence is the artist’s ultimate other-worldly gesture: by silence, he frees himself from servile bondage to the world, which appears as patron, client, consumer, antagonist, arbiter, and distorter of his work” (6). He is contemptuous, swinging back and forth between the poles of disgust and mere annoyance. But to reject the state

¹⁴⁰ interesting to note, and probably more a coincidence than anything else, but “bu-bu-bu” could be read as an exclamation of “不不不,” an emphatic negation, though it seems very unlikely that Sinyavsky knew Chinese or that his narrator would speak it.

while also fervently desiring it opens a dialectical tension that places the narrator within the same symbolic order that he cannot fully enter. His human disguise allows him to exist at the edges of society without the requirements of fully entering into it; he can, himself, be both despised and simultaneously tolerated to exist. Given that Kierkegaard notes that contempt is still an expression of dependence on society,¹⁴¹ the narrator's gestures towards a normativity that never fully materializes interpellate him just as fully within its boundaries as Veronica's whole-hearted espousal of socialist heteronormative pressures.

Further noting that silence is not absolute but a never-complete process of attempting to speak into being something that cannot be understood by the listener, Sontag claims that "The ugly and discordant and senseless become "beautiful" (2). The inability to speak some kind of experiential truth to an audience incapable of understanding gestures to the way the listener receives the message and how their response shapes the situation just as much as the speaker's intent, if not more so. The narrator exemplifies this in his wail that "I'm not a freak, I tell you! Just because I'm different do you have to be rude? It's no good measuring my beauty against your own hideousness. I'm handsomer than you, and more normal. Every time I look at myself I have the evidence of my own eyes for it" (237).¹⁴² As opposed to Juana, whose experiential truth could not be understood through her own somatic experiences, the narrator finds his personal value in physical embodiment and the truth of his own senses. He knows he is beautiful because he can see it with his own eyes. Yet because language is insufficient to express this beauty, his unknowable and visually incomprehensible body is incapable of linguistic representation, and so his attempts to pass

¹⁴¹ "Showing that they don't care about me, or caring that I should know they don't care about me, still denotes dependence. [...] They show me respect precisely by showing me that they don't respect me." Kierkegaard, Søren. *The Diary of Søren Kierkegaard*. Citadel Press, 2000, pg. 105.

¹⁴² At his own trial, Sinyavsky would use this exact line to align himself with the narrator.

as a body that deviates for a normative form mirrors his attempts at liminal speech. The body, the language, and the law are co-constitutive in their inability to provide a fulfilling communal experience.

As speech acts and normative embodiment gesture towards aspirational belonging, silence and death conclude the social experiment. “The efficacious artwork leaves silence in its wake. Silence, administered by the artist, is part of a program of perceptual and cultural therapy, often on the model of shock therapy rather than of persuasion. Even if the artist’s medium is words, he can share in this task: language can be employed to check language, to express muteness [...] Art must mount a full-scale attack on language itself, by means of language and its surrogates, on behalf of the standard of silence” (Sontag 13). The void left by the narrator’s death at the end is one without language. Even in life, he despairs: “How could they understand me, when I myself am quite unable to express my inhuman nature in their language. I beat about the bush and try to make some headway with metaphors, but when it comes to the point I can find nothing to say. I can only see a short, solid GOGRY, hear a rapid VZGLYAGU, and an indescribably beautiful PKHENTZ beams down upon my trunk. Fewer and fewer such words remain in my memory. I can convey their structure only approximately in human speech. If I were surrounded by linguists asking “what do you call this” I could only shrug my shoulders and say: GOGRY TUZHEROSKIP” (236).

To account for himself in human language proves impossible; his existence is embodied in a way that is fundamentally incompatible with the ideal physical imaginary collectively created and standardized through ideology. As his ability to exist in the world fades away, so, too, does his grasp on language, leaving the reader with the incoherent explosion that places him outside the categories of human classification. This failure of

language as a failure of embodiment not only indicates his own inability to participate and be conscripted into socialist classificatory mores, but also calls into question how those mores and classifications are constructed themselves, given that they are insufficient for the co-option of non-normative bodies but also, as with Veronica, involve a breakdown of linguistic systems capable of demonstrating and classifying those bodies at all.

In the language of socialist belonging available during *The Thaw*, Veronica disappears. Similarly, in the final, tragic incoherence of the narrator, a garbled attempt at belonging is insufficient for co-optation and inclusion. The symbolic order of the human breaks down in the attempt to speak it into being; unlike Juana's final Blochian gesture towards a dynamic utopia, the narrator here forecloses himself from any real normative belonging through his alien declamation. His final gesture towards belonging is an untranslatable cry of desire as opaque to the reader as to himself.

THE CONTAMINATED CORPSES OF IDEOLOGY

The impossibility of language to represent a body that cannot speak for itself gestures towards a regime of the visual à la Rancière,¹⁴³ creating a dialectics of belonging that negatively defines bodies as what they lack or what they are not within the state system, not what they are. Yet the characters we have seen are defined in these stories by their excess, their too-muchness, rather than by a physical lack. Juana is too heavily invested in the light, too attracted to her proximity to a dangerous power, too visible to the state, such that her method of autonomy is to refuse to be used as a tool for seeing. The narrator of "Pkhentz"

¹⁴³ See Rancière, Jacques. *The Politics of Aesthetics: the Distribution of the Sensible*. Continuum, 2004.

is too queer, too voluble, too deformed; to become legible to the state requires him to change everything about his appearance and relational connections. That is, these characters attempt to fit into a system that strips away excess while simultaneously being defined by that very same excess. It is only when they strip everything away—sight, appearance, language, and, ultimately, their very lives—that they can be integrated into a system that cannot otherwise accommodate them. Visualizing their place in a society predicated on revolutionary asceticism requires their silence, invisibility, and consent to be tools through which ideology is mobilized.

Heavily invested in the attempt to visualize individual bodies as cohesive parts of a normative social body, science fiction being produced in the years immediately following the Chinese Cultural Revolution (1966-1976) was shaped not only by strict but constantly shifting literary regulations, but also the political desire to enfold numerous demographic populations into a single unified front. Far from a homogenizing erasure of identity, Maoist populism recognized ethnic, racial, and religious diversity while simultaneously subordinating it to a unified ideology that invested individual bodies with national attributes of state. In doing so, the body became a symbolic representation of the values of the nation, such that an individual's morals, physical attributes, and even willingness to work reflected on the party/state as a whole.

Because Maoist conceptions of “the people” invested individual bodies with national characteristics, authors writing at this time described the ideal embodied citizen as having been physically perfected by ideological conditioning. An inevitable product of existing social and developmental policies, potential future bodies developed as material products of the same communist revolution that had also created a new cultural and literary landscape in

China.¹⁴⁴ At the same time, “the body” as it was classified by the state was very much an imaginary—particularly in the case of science fiction literature, it was a projection of a constantly redefined ideal. “The body” became a stand-in for “the state” precisely because it *could* be regulated and controlled in a way that the nation as a cohesive whole could not. In this way, “bodies” were defined, planned, projected, and controlled that may have had no basis in present circumstances, but which nevertheless impacted the idea of what individuals *should* be.

The 1981 science fiction short story “Corrosion” (“腐蚀”) by Ye Yonglie (叶永烈) grapples specifically with the difficulty of normative national inclusion for non-normative bodies and the challenges this posed for a literature attempting to create a model world, one where even acknowledging bodily infirmity or the potential for illness was subject to censure. In doing so, it actually undercuts the idea of physical perfection as representative of moral perfection, with material embodiment and physical appearance posited as the inverse of moral integrity: as characters appear more prosperous, successful, and physically attractive, they actually become more degraded; as characters physically decay, their moral quality increases. In many ways a quite straightforward tale of internal politicking—though one that supports and ultimately reaffirms the nationalist commitment to socialist modernization—“Corrosion” forcefully grounds its final political conclusion in a revolutionary enrollment of physically degraded bodies within the sphere of national unity.

¹⁴⁴ See Volland, Nicolai. “Translating the Socialist State: Cultural Exchange, National Identity, and the Socialist World in the Early PRC.” *Twentieth-Century China*, vol. 33, no. 2, April 2008, pg. 51.

“Corrosion” deals with the academic repercussions of the arrival of a strain of ultra-corrosive space bacteria on Earth. The protagonist, Wang Chong,¹⁴⁵ spends the five years following the bacteria’s arrival safely ensconced in a university setting, comfortably working his way up the ranks, while both his mentor and colleague/rival exile themselves to work on the bacteria while quarantined alone in the desert. When they eventually make a breakthrough, Wang Chong seizes the opportunity to attach himself to their work and promote his own scientific standing. The crux of the problem is not in conquering the bacteria and the threat it represents, but rather, who gets the credit—when Fan Shuan (Wang Chong’s rival) writes the final report, he lists not only himself, Du Wei (their mentor), and Wang Chong as the authors, but also Li Li, the scientist who initially discovered the bacteria and died in the attempt to categorize it.¹⁴⁶ Both Wang Chong and Fan Shuan shared feelings for her when she was alive, but her inclusion now represents a problem for Wang Chong, who has aspirations of receiving the Nobel Prize for his involvement and believes (correctly) that only three laureates may share it. Ultimately, after seeing the sacrifices everyone except himself has made (in addition to Li Li, who died of bacterial exposure during the initial expedition, the elderly Du Wei eventually succumbs to the hardships of isolation in the desert and Fan Shuan works himself to death), Wang Chong realizes that his

¹⁴⁵ All names and excerpts, except where otherwise noted, are drawn from the 1981 English translation by Pei Minxin.

¹⁴⁶ 总指挥部，请立即转告杜微老师，我在“银星”号内查出来自太空的烈性腐蚀菌，鲜黄色，X形，从未见过。全队受感染，无法返回。请不要组织营救，以防烈性腐蚀菌扩散。[...] 李丽写毕，像虾似的蜷曲着身体，即使用双手紧抱脑袋，依然冷得全身直打寒颤。

(translation mine) “Headquarters, from the sample I collected from the ‘Silver Star,’ I’ve discovered a hitherto unknown ultra-corrosive bacteria from outer space. Its color is bright yellow, and it’s shaped like an X. Everyone on our team has been contaminated and cannot return. In order to prevent further contamination, please do not organize a rescue mission.” [...] Li Li finished writing and curled her body up like a shrimp, holding her head tightly in both her hands. She was so cold that she shivered.” (565)

own soul is corroded, and asks that the other three authors be honored, with his own name left off the final report.¹⁴⁷

Rather than depicting visibly non-normative bodies or an attempt by the state to incorporate such individuals into an acceptable narrative of national progress, the tools necessary for representing the human body as a combination of interior and exterior are troubled in “Corrosion.” By aligning the text itself with a performative visibility that self-consciously promotes physical beauty as an outgrowth of internal goodness only to invert that conclusion at the end, the story sets up the expectation of physical perfection as a prerequisite for moral goodness only to knock it down. The shift from class-based politics to a depoliticized technocratic society in the years immediately following the Cultural Revolution¹⁴⁸ is evident here in “Corrosion’s” resolute de-emphasis of heroic proletarian bodies in favor of a national body politic united in ideology. Too, the inclusion of degraded physical bodies at the expense—and even to the exclusion of—physically idealized forms coincided with a split in Sino-Soviet political aesthetics, wherein Maoism and its altered forms began to move away from the strictures of Soviet socialist realism and standards of beauty, rendering this story not only a revolutionary stand in terms of content, but also as a meta-textual point of divergence in national ideology.

At the level of the text, “Corrosion” features characters who seem to exemplify the trope of inner beauty being reflected outwardly. The protagonist, Wang Chong, is described

¹⁴⁷ Ironically, though Wang Chong is obsessed throughout the text with the rule stating that only three laureates may be recognized, Nobel regulations also prohibit posthumous awards, meaning that at the end of the story Wang Chong would have actually been the only member of the team eligible for recognition after all.

¹⁴⁸ For more on this shifting conceptualization of the human, see Huang, Linda. “Rethinking “Human:” Post-Mao Technocracy and the Disappearance of Laboring Body.” Paper presented at the Posthumanism in Modern Chinese Culture Conference, University of New Hampshire, Dover, New Hampshire, September 29, 2018.

by Ye Yonglie thusly: “[...] a youth of about thirty. His figure was like a bean sprout, tall and thin. His face was white, and his cheeks hollow. His eyeballs were like the black pieces [of Go] they were playing, big and sparkling. A mere glance at the young man and one would say, “he must be extremely intelligent.” Dressed in his pants and shirt, he slowly waved the foldable fan in his hand. He was Wang Chong, nicknamed “Small White Face.” He was one of Professor Du Wei’s best students” (138).

On the other hand, Wang Chong’s competition, Fan Shuan, against whom most of his efforts are expended, is described in this way: “The man was of medium stature, about thirty years old. He had a big square face, thick eyebrows and big eyes. His lips were rather full. He was wearing a shirt and shorts, his muscles looking strong and well-developed. He was Fan Shuan, another of Professor Du Wei’s assistants. As he would smile before speaking and would unwittingly show his white teeth, which looked like the white pieces the other two were playing, people had nicknamed him “Blacks’ toothpaste”¹⁴⁹ (138).

The two are described in-text using oppositional physical terms that, for much of the story, seem to be reflective of their actual roles. Wang Chong, the handsome, intelligent-appearing protagonist, is well-liked and held in high regard by everyone from his mentor to his mentor’s wife to Li Li, the heroic scientist who perished in the opening scene. Fan Shuan, on the other hand, is consistently described as second-best, a swarthy and rough pretender to Wang Chong’s inevitable and well-deserved place in the spotlight. Even in terms of love, the story mentions that both Wang Chong and Fan Shuan had feelings for Li Li, but it was with Wang Chong that she had begun to develop a more intimate relationship.

¹⁴⁹ Note here that the description of Fan Shuan’s teeth and their relevance to his nickname is actually not in the original text; it was added after the fact by the translator. “Blacks’ toothpaste” refers to Darlie toothpaste (黑人牙膏: lit. “black person toothpaste”), a brand inspired by Al Jolson’s blackface act that showed off his white teeth and immediately conjured an image of buffoonishness.

In fact, we only know how Fan Shuan felt about her—her feelings for him are never mentioned at all, an omission that speaks more to what little import he held in her life than a deliberate oversight.

That is, as opposed to being visibly deformed or immediately recognizable as deviant *per se*, the characters in “Corrosion” are initially introduced as if both their moral character and social standing are reflected in their external, physical appearances. For example, Pang Laikwan notes that the rule of the “Three Prominences” (san tuchu) as applied to socialist art and literature “stipulated that “Among all characters the positive characters must stand out; among all positive characters the heroic characters must stand out; and among all heroic characters the major heroic characters must stand out.” Complementary to the “Three Prominences” were the aesthetic techniques of “Tall, Big, and Complete” (gao, da, and quan) and “Red, Bright, and Shining” (hong, guang, and jiang), explicitly stating how the major heroic figures had to be presented” (30). The dichotomy set up here is between, on one hand, an intelligent, sensitive, well-bred and well-educated young man; one whose intelligence and grace is immediately apparent in his outward appearance, and on the other hand, the rough-hewn, coarse, ungainly Fan Shuan, who is so ill-bred that he cannot even control his facial expressions enough to refrain from unconscious displays of emotion. Fan Shuan’s physical description is carefully constructed so as to bring to mind the uncivilized peasantry upon whose broad shoulders the country could be built and rarefied by intelligentsia such as Wang Chong but who would, unfortunately, always be second-rate to him. Of course, as this story equally conscientiously undercuts such a trope, this ends up not being the case, but the initial introduction is designed so as to mobilize existing literary assumptions. Unlike Juana, for whom technological advancements reveal her saturation with radioactive corruption, or the narrator of “Pkhentz,” who disguises his even more alien and

alienated body in the guise of a hunchbacked cripple, Wang Chong presents himself proudly, as if he has nothing to hide. His body is whole, attractive, and well-regarded. The audience is invited to appreciate that quality and imbue it with moral attributes.

Here at the outset of the text, however, there is already a hint of subversion. Wang Chong's nickname, "Small White Face," reduces him to the synecdoche of a face alone. A face alone is a mask, a disguise, threatening a hidden truth that can be taken off and put on again. What's more, in Chinese traditional opera, different character types wear different colors of mask in order to broadly indicate what "type" they are: red for bravery and loyalty, yellow for ambition, green for impulsivity and violence, and white for treachery and subversion.¹⁵⁰ To wear a white mask is to immediately identify oneself as the villain. Here, then, though having a pale complexion and hollow cheeks initially suggests a life of ascetic commitment to knowledge and pursuit of rarefied intellectual care, Wang Chong being reducible to a white face also identifies him as a source of treachery and a focal point for suspicion, no matter how many characters like and look up to him.

Fan Shuan, on the other hand, is described using terms that clearly paint him as a peasant laborer. Unlike during the later years of the Cultural Revolution, when scientists as a class were reviled as the "stinking old ninth"¹⁵¹ within the black category of social dysphemisms, a peasant filling the role of an intellectual would not necessarily at this point have been coded as class betrayal. In fact, with the Deng era's repudiation of the worst

¹⁵⁰ See 杨楠, 王晓玲, 李海丽. "Associative Meanings of Colors in Chinese and English Cultures." 海外英语 (中旬刊), no. 3, 2011, pp. 164–66. "In China people call the people of low intelligence "白痴" [moron]. Therefore, "low intelligence" is the associative meaning of white. White also can symbolize a corrupted and evil person, because in Chinese traditional opera, people call the performer who performs the bad man "唱白脸," [lit. "sing the white face;" figuratively "play the villain"] so white also symbolizes illiteracy."

¹⁵¹ 臭老九

excesses of the Gang of Four and the preceding Cultural Revolution, the PRC was, in the late seventies/early eighties, once again opening up towards an internationalist version of science and, to some degree, abandoning the idea of science as an inherently ideological apparatus and shifting towards a paradigm of scientific participation as a nation-building process.

This nationalist mobilization of science and scientific literature is apparent in the broader aggregate of texts being translated into Chinese during the later years of the Cultural Revolution and leading up to the publication of “Corrosion.” Nicolai Volland notes, for example, that “An approximate break-down of translated titles [of Soviet literature into Chinese] between 1949 and 1954 finds about 40 percent total in the category “sciences and technology,” 25 percent in the humanities and social sciences, and about 30 percent in literature and arts” 61). Yet by the 1960s, “the CCP defined a set of theories in literature and art that challenged those imported from the Soviet Union and rejected Moscow’s claim to the central position. In the process, however, the inequality involved in the original Sino-Soviet relationship was not so much disbanded as redefined: when the PRC tried to reinvent itself as the new center of Third World cultural diplomacy, it built ties with the recently decolonized nations of Africa and Asia that closely resembled the framework in which the PRC had found itself only a decade earlier” (Volland 72). This shift towards reconceptualizing scientific progress as a barometer of international influence is echoed in Wang Chong’s singular goal of being recognized with the Nobel Prize and achieving international acclaim. It is also evident in Du Wei and Fan Shuan’s description of the bacteria’s potentially useful applications for their own nation alone. Where these two nationalist goals differ, however, is in their emphasis on substance vs. appearance: Wang Chong wants to appear intelligent and successful on the international stage, while Du Wei and Fan Shuan care nothing for personal

appearance and seek only to strengthen their national infrastructure for its own benefit, not for acclaim.

Writing about the same phenomenon during *The Thaw* in Russia, Istvan Csicsery-Ronay notes that the turn away from science as ideological category “meant that the Stalinist conception of science as an aspect of the superstructure, rather than as the productive base—that there was a difference between “socialist science” and “bourgeois science”—had to be jettisoned. Science and technology had to be reconceived as productive forces [...]. With this armature [...], it could also become a guiding force of Communism, making it a model of material development that other nations would follow, and that would produce the material conditions of a bona fide Communist utopia” (337). So it is for both Wang Chong and Fan Shuan, two junior scientists physically coded as being from very different backgrounds but committed to intellectual pursuit—both are committed to science as a productive social force—but the lingering association of “appropriate” social roles is foundational to an analysis of this text based on physical presentation. As we will see, this external emphasis, which continues throughout the story, is an intentionally subversive tactic employed to undermine credibility in representational aesthetics and physical beauty.

Unlike the Csicsery-Ronay quote above, “Corrosion” is not focused on explicitly creating a socialist utopia except insofar as it provides guidance for “right thinking” within a scientific framework. Fan Shuan, the swarthy farmhand who is dismissed and disparaged as second-rate throughout the text, ultimately demonstrates that his commitment to science and national development, even at the cost of his individual life, is a pure expression of his inner drive that is not reflected by his outer mien, whereas Wang Chong—the pale, studious, well-liked academic—proves to be rotten to the core.

As noted previously, however, Ye Yonglie is committed to setting up an initial dynamic in which external appearance is taken as indicative of inner moral character for the majority of the text before being revealed as a sham. At the level of the text, Wang Chong is handsome and “good;” Fan Shuan is rough and “second-rate” and, specifically as an implicit corollary of his unattractive appearance, always in Wang Chong’s shadow and never able to replicate his success or popularity. Defining beauty as the one trait that demands replication, Elaine Scarry asks, “What is the felt experience of cognition at the moment one stands in the presence of a beautiful boy or flower or bird? It seems to incite, even to require, the act of replication. [...] Beauty brings copies of itself into being. [...] Sometimes it gives rise to exact replication and other times to resemblances and still other times to things whose connection to the original site of inspiration is unrecognizable” (3). While operating outside the Platonic tradition from which Scarry is drawing, the desire for a beautiful physical standard—or, as Leon Trotsky initially imagined in *Art and Revolution*, “a higher social-biologic type, or if you please, a superman” (1924)—is a reproductive mode common to socialist realist art and depictions of beauty, with the beautiful as something to be emulated and replicated, an aspirational state of being that inspires reverence for physical perfection as a mode of self-modelling.

In fact, in this text there is a foregrounding not of appearance itself, but to attenuation to appearance. While the reader is aware of Wang Chong’s inner motivation, he maintains a commitment to an aesthetic self-presentation that allows him to perform a nationalist commitment to objectivity that he does not actually possess. This is shared between “The Eye that Never Weeps” (with Juana attempting to appear normal and visible deviation from the embodied norm betraying one’s proximity to concurrent deviation from state guidelines) and “Pkhentz” (with the narrator’s attempt at appearing human and, in the

absence of a perfect disguise for normativity, a material alignment with those society deigns to keep at the edges in order to reinforce the standard). In the pursuit of international scientific and political recognition, Wang Chong allows the actual work of scientific nationalism to continue invisibly, while he presents himself as the visible face of progress. He has the appearance of the new socialist human with none of the ideological underpinnings. His beauty emerges as a result of Fan Shuan's, Du Wei's, and Li Li's erasure from the public eye, such that the more his appearance is foregrounded, the more those around him are dismissed as unworthy of scientific attention at all. "The experience of "being in error" so inevitably accompanies the perception of beauty that it begins to seem one of its abiding structural features" (Scarry 28), yet while Scarry also "set[s] forth the view here that beauty really is allied with truth" (52), this concept as embodied in "Corrosion" is wholly repudiated. Wang Chong hopes to be perceived as morally and ethically upright as a natural consequence of his perception as being outwardly attractive and hale—a conflation that, while ultimately undermined, draws on pre-existing associations between aesthetics and ideology.

The aspirational reproductivity of physical beauty, taken as a marker of moral goodness, is a powerful literary trope in "Corrosion," masterfully marrying a politically-acceptable vision of textual description with social ideology while also maintaining the distance necessary to subvert it later in the text in a way that actually better upholds the late-socialist emphasis on total social participation in the political process. Going back to the Yan'an Talks to better explicate this emphasis on beauty and its implications for the state, Mao Zedong himself stated that what the Chinese Communist Party wanted was the unity of political thought and artistic vision. As this text asserts, art and culture served as tools for

shaping the country politically and socially, and were, in turn, shaped by politics and ideology.

“In literary and art criticism there are two criteria, the political and the artistic.... There is the political criterion and there is the artistic criterion; what is the relationship between the two? Politics cannot be equated with art, nor can a general world outlook be equated with a method of artistic creation and criticism. We deny not only that there is an abstract and absolutely unchangeable political criterion, but also that there is an abstract and absolutely unchangeable artistic criterion; each class in every class society has its own political and artistic criteria. But all classes in all class societies invariably put the political criterion first and the artistic criterion second.... What we demand is the unity of politics and art, the unity of content and form, the unity of revolutionary political content and the highest possible perfection of artistic form. Works of art, which lack artistic quality, have no force, however progressive they are politically. Therefore, we oppose both works of art with a wrong political viewpoint and the tendency towards the "poster and slogan style" which is correct in political viewpoint but lacking in artistic power. On questions of literature and art we must carry on a struggle on two fronts” (88).

Cultural processes of artistic assimilation meant that scientific theories and scenarios were transformed into influential cultural resources, which were then appropriated by authors working under the dominant literary regime to disseminate acceptable forms of and approaches to knowledge. The dissemination of specific scientific concepts could be broadened and popularized for the edification of a mass audience, demonstrating not only insights into the uses of science and technology, but also imparting a moral lesson about appropriate behaviors and approaches.

“Corrosion” grapples with the Maoist attempt to merge an appropriately “aesthetic” artistic rendering with the political materialities of good socialist praxis; it initially posits beauty as an important component of judgment but then evacuates it in order to impart a moral and ideological lesson. As opposed to the Marxist standard of aestheticism as a

bourgeois distraction from real social issues,¹⁵² Maoist thought recognizes beauty as something with which to grapple and explore, not dismiss out of hand. This is also in opposition to the Western Platonic ideal of beauty, which serves not only as an object of pleasure to behold, but inspires the reader/viewer to transcend the pleasure of contemplation and pursue a nobler, more objective ideal. “Corrosion” is ultimately as bereft of the Platonic link between beauty and objective goodness as it is the Marxist out-of-hand dismissal of beauty even for political efficacies’ sake. The Maoist rhetoric at work here values the beautiful but only insofar as it leads the reader to an understanding of its physical limits as a border case inciting tension with the more valuable ideological tenets that can draw from, but are not bound to, the aesthetic invitation.

The heroes of the story all find the apotheosis of their valor at the moment of bodily corrosion and decay, from the astronaut who first brought the bacteria to Earth (his suit and command chair “loose like tofu and cracked into many pieces”¹⁵³ and whose body breaks apart and crumbles at the touch of a hand) to Li Li (who dies curled up “like a shrimp”¹⁵⁴ and shaking) to Du Wei (aged, exhausted, and dehydrated to the point of having a stroke¹⁵⁵) to Fan Shuan (who dies of overwork, his semi-mummified body discovered slumped over

¹⁵² Gary Tedman explains that Marx’s own writings about art and aesthetics were neither known nor available during the period of time in which debates between the constructivists and proponents of socialist realism were most productive in establishing what has retroactively come to be known as “Marxist” aesthetics.

Tedman, Gary. “Marx’s 1844 Manuscripts as a Work of Art: A Hypertextual Reinterpretation.” *Rethinking Marxism* vol. 16 no. 4, 2004, pp. 427-441.

¹⁵³ 叶永烈。“腐蚀。”人民文学。北京中国，11月1981。“舱里零乱不堪。队长随手拿起宇航椅的座垫，谁知就像豆腐似的松散，裂成许多碎屑从手中掉了下去。队长走向宇航员，他的手一碰宇航服，竟然马上碰破一个大洞。要知道，宇航服是用十多层坚牢的合成纤维做成的，如今却变得像草纸做成似的！”

¹⁵⁴ Ibid. “李丽写毕，像虾似的蜷曲着身体，即使用双手紧抱脑袋，依然冷得全身直打寒颤。”

¹⁵⁵ Ibid. “我从记录本上获知，杜微教授一年多以前——去年夏天，因年老体衰，在天气奇热的一天里突然中暑而死。”

his desk, his hair long and unkempt and his eyes sunken into his face¹⁵⁶). Recognizing their contribution to scientific and national progress necessitates a disavowal of embodied beauty and a dispersal of such physical-moral attributes.

In his seminal “The Body Invisible in Chinese Art,” John Hays notes that “Seeing as a mode of knowledge and understanding has been predominantly formulated within the science of optics, and the clarity long associated with it implies particular notions of objectivity. Chinese art was produced and seen within a very different set of frames. [...] The “representation” of the body is a process of construction, not mimesis” (44). While Hays was speaking about figure painting in a historical Chinese context, the idea holds true here of a dispersal of non-physical traits embodying the ideal citizen in a way that is not dependent upon idealized physical mimesis, and in fact actively refutes it. In setting up the dichotomy of physical attractiveness only to knock it down, “Corrosion” disabuses the reader altogether of the importance of a physical ideal representing the ideal physical state. Simply, beauty becomes an object of suspicion only after the reader is first asked to abandon those suspicions.

Though he is the protagonist, Wang Chong ultimately takes on the role of the subversive element in an otherwise “pure” system of scientific nationalism, wherein Du Wei, Fan Shuan, and the unfortunate Li Li typify correct ethical behavior through their sacrifice. While Wang Chong refrains from volunteering to put himself on the front lines and remains safely ensconced within the university structure, Du Wei and Fan Shuan spend five years together in the desert working on the ultra-corrosive bacteria. Their research is fruitful and

¹⁵⁶ Ibid. “他是谁呢？我几乎不认识他了。他的头发又乱又长，已经夹杂着许多白发。他的脸像紫铜般颜色，满腮胡子。如果不是前额左上方有一块明显的疤，我几乎无法相信他就是方爽同志！在我的印象中，他如犍牛般壮实，一副运动员的派头，眼下竟皮包骨头，双眼深凹！”

leads them to wonder if they can utilize the bacteria in the interests of the nation, instead of treating it only as a danger. They are able to isolate the corrosive fluid—which harms only objects—from the bacteria—which harms biological life—with the intention of using it to dispose of urban garbage, simplify mining, and contribute to national development.

“In the evenings Du Wei and Fan Shuan sat in their “pillbox” watching the numberless stars decorate the sky. Then they would imagine what would happen if they succeeded. In the future people would only need to use a little corrosive fluid to demolish a concrete skyscraper. If people encountered mountains when building highways or railways, they would use the fluid to “raze” them to the ground. The disposal of millions of tons of urban garbage¹⁵⁷ would no longer be a tiresome burden; they would be turned into soil and used to level the swamps. When man wanted to dig up the valuable minerals buried deep under the ground, shafts and tunnels would not be necessary as they could readily resort to the fluid to remove the rock shell and exploit an open cut....” (571).

An excerpt that is not included in the English translation, however, is also important to a more situated reading of this story within the ongoing ideological development of a utopian socialism still proceeding from Maoist rhetoric, even if the moment of Mao himself was over. In the original text, but not, notably, in the 1981 English translation, are the lines “地球不断地打滚，日子一天天有一天，我站在了科学与幻想的分界线上，突然一阵颤动，分界线消失了，科与幻合为一体.....” (“The earth is constantly rolling, and day by day, I stand on the dividing line between science and fantasy. Suddenly there is a tremor, the dividing line disappears, and the division is united with the illusion...”)

¹⁵⁷ Echoing more contemporary Chinese Science Fiction, from Hao Jingfang’s “Folding Beijing” to Chen Qiufan’s *The Waste Tide* to Han Song’s “Regenerated Bricks,” all of which deal explicitly with other attempts to dispose of China’s urban garbage problem utilizing human labor (and even incorporate Chinese bodies as building materials).

Emphasizing that the universe is open and that history is unending, Mao, in his lecture on dialectical materialism,¹⁵⁸ conceptualized revolution as an ongoing process that shaped a future characterized by unending choices to recommit to communist practices.¹⁵⁹ The above quote from the text highlights the apocalyptic vision of a past that is superseded by a future that is continually being revised while already being assured. In “Corrosion,” the inevitability of a future in which China has already gone to space many times¹⁶⁰ is merged with the present, an active recognition within the text of the way scientific and ideological practices worked together to create a vision of the future predicated on work in the present. It is through Du Wei and Fan Shuan’s physical labor that utopia is assured, not in Wang Chong’s physical appearance.

“Corrosion” also undercuts the earlier socialist realist vision of the ideal human by evacuating that physical body of any underlying moral structure. In doing so, it dismisses the idea of a standard form seen in “The Eye that Never Weeps” and “Pkhentz” such that devotion to revolutionary and state-building ideals was—or could be—divorced from idealized embodiment. Pang Laikwan notes that in justifying socialist revolution aimed towards a communist utopia, “Mao stresses the revolutionary subject, evading incapable people and marginal events. Along with his emphasis on the “mass line,” he also tends to treat the masses as a single hero, not a plurality of differences” (2016, 120). We see this in the final recognition of heroism being given to the collective group of three and Wang Chong

¹⁵⁸ See Mao, Zedong. *Mao Zedong on Dialectical Materialism: Writings on Philosophy, 1937*. Edited by N. Knight. New York: M E Sharpe, 1990a, pg. 109.

¹⁵⁹ See also Mao, Zedong. “Gongzuo fangfa liushitiao (cao'an) [Sixty articles of work methods (draft)].” *Mao Zedong wenji [Mao Zedong collections]*, edited by the CCP Central Archival Research Centre. Beijing: Remin Chubanshe, 1999a, pg. 349.

¹⁶⁰ “是啊，自从一九五七年十月四日人类第一次征服太空以来，从未发生过这样的事情！是啊，中国的宇宙飞船曾多次访问各个星球，也从未发生过这样的事情。” (“Yes, since the first time humans conquered space on October 4, 1957, nothing like this had ever happened! Indeed, China’s spaceships had visited various planets many times, and this was completely unprecedented.”)

refusing the mantle of individual heroism, his only nationalist choice in the story and one that is cast as being, ultimately, the only correct option for his homeland.

“Corrosion” is therefore significantly less equivocal about its commitment to state social practices and normative structures than either “The Eye that Never Weeps” or “Pkhentz.” While Angela and Karlheinz Steinmüller have carefully remained ambiguous in their stance on socialist literary practices and Andrei Sinyavsky notably rebelled against such regulations, his work only being rehabilitated and published much later, the author of “Corrosion,” Ye Yonglie, has been a mainstay of state-sanctioned science fiction since his earliest work. In his later years, in fact, he has moved away from writing science fiction altogether and moved towards publishing biographies of great figures in China’s communist history, as well as popular scientific works.¹⁶¹ Given the author’s commitment to working within an acceptable political framework, this story supports discursive practices of rehabilitating the scientific process as a commitment to national development while continuing to decry individual fallacies within it.

As in the other two stories, there’s a curious level of deferment that occurs outside of the national borders—while “The Eye that Never Weeps” is located in an unnamed South American country, and the narrator of “Pkhentz”—in addition to his literal alienness to Earth in general and Russia in particular—codifies his identity as part Polish, the impetus for Wang Chong to begin seriously considering the Nobel Prize and its ramifications comes from, first, a tour of visiting American scientists, and, later, a direct comment from an American at a dinner party, both of which serve to drive home his sense of nationalism. This is a trope typical of socialist science fiction, which, even when it allowed for interstellar

¹⁶¹ See his author biography at www.sf-encyclopedia.com/entry/ye_yonglie

travel, tended to focus more closely to home and the negative influence of capitalist societies on good socialist citizens. Alexander Beliaev's famous novelette, *Professor Dowell's Head*, for example, is well-known for displacing the setting to America and making the greedy, immoral antagonist primarily motivated by capitalist and international scientific approval. This trend continues through the present, with contemporary Chinese authors in ostensibly "communist" literary milieus setting stories with potentially-objectionable characters or plots—such as the amoral narrator of Wang Jinkang's "The Reincarnated Giant,"¹⁶² who helps the world's richest industrialist circumvent inheritance laws through the transplantation of a brain into a grossly-deformed body—in countries that have historically been at odds with China. The implications of such types of nationalist orientations are varied: in the case of "The Eye that Never Weeps," for example, by locating the story in a country outside the literary confines of the socialist establishment, the text's critiques could plausibly be claimed to be directed towards that fictional country and not the authors' own, whereas in the case of "Pkhentz," the narrator is so directly a stand-in for the alienated author himself that the autobiography of details should be taken as self-evident. Here in "Corrosion," the result is that the West is still portrayed as explicitly aligned with an ideological form of imperialist science with which even brief contact could be as corrosive to national character as "Corrosion's" interstellar bacteria.

While the deferment of both social and physical degradation to a location outside the boundaries of the socialist state is a common trope of those socialist literatures¹⁶³ that

¹⁶² See Wang Jinkang. "The Reincarnated Giant," translated by Carlos Rojas *Renditions: A Chinese-English Translation Magazine*, no. 77/78, Spring & Autumn 2012. 石不语 (pseudonym of 王晋康). "转生的巨人." 科幻世界. 北京中国, 2005.

¹⁶³ Zhao Suisheng argues specifically that shoring up national borders is an ideological practice for establishing moral and national purity in socialist China, noting that "Socialist patriotism has three levels. At the first level, individuals should subordinate their personal interests to the interests of the state. At

attempt to shore up the boundaries of their own sociopolitical identity within a normativizing framework for embodiment, it uniquely takes a back seat here to texts that are attempting to grapple with the notion of belonging within their own physical borders. To ask what is outside as a foil to the national and physical standards of those inside allows for a deferment of criticism that can be very valuable for the author writing literature that is potentially interpretable as a problematic critique of state policies and values, but at least in “Corrosion,” only emphasizes the internal moral corrosion that has already gripped Wang Chong and threatens the cohesive nation project as a whole.

At the end, the rejection of physical appearance as a marker of internal goodness (and associated national zeal) comes together with an unqualified acceptance of the state as the highest ideal in Wang Chong’s final words. On the same day that he learns that he and “his” team have been awarded the Nobel Prize in Medicine and Physiology,¹⁶⁴ he also learns that both Du Wei and Fan Shuan have died in their pursuit of the actual scientific ideals this prize purports to honor. He is so moved by their dedication to improving the lives of their national comrades, as opposed to his own selfish self-promotion, that he isolates himself in their old desert laboratory, writing: “Though I’m physically strong and healthy, my soul has already been corroded by a kind of invisible ultra-bacteria, which cannot be seen even by an electron microscope! I’ve long been contaminated, but I didn’t feel it. Though Li Li, Du Wei, and Fan Shuan have all passed away, their souls remain uncontaminated and pure. Their

the second level, individuals should subordinate their personal destiny to the destiny of our socialist system. At the third level, individuals should subordinate their personal future to the future of our communist cause.” Zhao, Suisheng. *A Nation-State by Construction: Dynamics of Modern Chinese Nationalism*. Stanford University Press, 2004, pg. 28.

¹⁶⁴ A feat that China wouldn’t achieve outside of Science Fiction until Tu Youyou’s 2005 win for the discovery of artemisinin/青蒿素, work that grew out of her appointment by Mao to head of the secret drug discovery project, Project 523 (523 项目).

scientific ethics are the noblest. They are the people made of special material—the metal titanium. They are really the “Titans,” the true heroes” (585).

With Wang Chong’s ultimate abdication of his personal goals in the form of decrying any special international recognition for work he did not perform, both he as a character and the text as a meta-critical comment on personal ethics recognize the subjugation of the individual to the national good. He must commit the ultimate in self-effacement: not only has he eliminated his name from any form of recognition, he has also committed his body and his life to inevitable destruction. This is recognized as a titanic move of nobility, a sacrifice that is not only indifferent to physical perfection but actually demands its destruction. We find the text exulting in the corroded bodies and decayed forms of its most heroic characters, their wizened corpses and destroyed visages representing the ultimate in national devotion. Far from shying away from deformity and physical deviation, “Corrosion” lauds the most grotesque bodily choice as those that are most worthy of honor.

CONCLUSION

In very different ways and coming from very different national backgrounds, the three texts examined in this chapter attempt to incorporate non-normative bodies into a socialist vision of physical perfection by making the discursive move to render the body a site of complex political machinations. “The Eye that Never Weeps” does this through an atomic visuality that renders the body a porous site of technologicized surveillance, weaponizing it as a tool of the state (just as we saw in the previous chapter’s atomic bomb *lian huan hua*, in which the body is conceived as a tool for measuring external threats). “Pkhentz” conflates physical embodiment with language and insists on the impossibility of

both to convey real experiences or make meaningful connections, rendering the non-socialized body an isolated, lonely figure and rehabilitating the broader body politic as the focus of connection and meaning-making. “Corrosion” presents a physically aesthetic ideal only to undercut it in its insistence on dedication to scientific service to the nation as a separate measurement for developing an embodied ideal and rejecting physical perfection altogether.

In many ways, “Corrosion” is a more revolutionary approach to the intersection of physical normativity and moral right-thinking than either “The Eye that Never Weeps” or “Pkhentz,” despite its relatively mundane plot compared to the other two, and also its more stringent adherence to promoting the national standard. While “The Eye that Never Weeps” utilized technoscientific devices to make visible criminality and, in doing so, mobilized the body as its own device in which moral deviation could be made visible at the level of the skin, and “Pkhentz” decried the pain and sorrow of being physically and emotionally outside the border of the state even when such isolation is by choice, “Corrosion” not only dismissed the possibility of linking moral character and external beauty altogether, it actively rejected the whole, the firm, and the attractive to celebrate the pinnacle of degradation: moral triumph localized in an ugly corpse. That each of these stories recognizes the difficulty of normalization and integration is more than apparent in the fact that each ends with the death (or imminent death) of the protagonist. That these authors and literary regimes felt the need to address deviation in a way that continued to legitimize a utopian vision for the state did not obviate the difficulty of doing so, especially when disability, queerness, alienation, and moral degradation were all seen as anathema to the ideal citizen.

Articulating the place of non-normative bodies within a body politic that conceived of and presented itself as embodying the spirit of the people *en masse* was a difficult proposition, especially for those authors working explicitly within prescribed literary guidelines. Authors such as Sinyavsky had more leeway in their presentation of non-normative figures operating outside of social and physical boundaries because they, themselves, were publishing outside of that framework, but as we have seen, even these types of narratives contained internal elements amenable to a desire for belonging and were subject to incorporation into dominant ideological structures for which they were never intended.

The depiction of ill, deformed, or disabled figures was risky in that it allowed for the insinuation that deviation from the norm was possible at all, even if not desirable. Even across very different national contexts, one shared tactic taken by these stories to circumvent accusations of romanticizing an embodiment that allowed for the possibility of ideological deviation was to set the stories in other countries or have the corruption of foreign influences be a major factor in the character straying from acceptable boundaries. Another option was to demonstrate how, even when deviant characters chose their exclusion and isolation, this represented the greatest possible loss for them at the personal level. A final tactic was to deny full political inclusion in life and to only find redemption as a valuable member of society in death. All these are, of course, deeply problematic, ableist, and concerning approaches to texts that ostensibly reflected real social possibilities in their privileged roles as the literatures of national development.

Yet that the socialist state was willing to grapple with such possibilities at all highlights the importance of science fiction as a literary genre for explicitly defining the

boundaries and future developmental possibilities of social progress. None of the texts examined here are able or willing to imagine a national population with physical deviations that could exist without being a point of notability, but they were able to foreground some of the concerns surrounding the development of national physical standards that were effectively invisible, if not actively erased, under most forms of socialist realist art and literature. To be legible to the state and understood as a body capable of incorporation necessitated being visible within literary and political forms in the first place, and that science fiction was the mode of literary production through which such questions could be asked is remarkable, if incomplete in its conclusions about inclusion.

CONCLUSION

Across the twentieth century, authors working within the strictures of various socialist regimes explored which natural and social forces contributed to the development of humans. Believing that a new type of human would uniquely emerge under the guidance of socialism, and in whom socialism itself would be fully expressed, authors and policymakers alike developed the concept of the “new socialist human” in fact and fiction. While grounded in contemporary medical science and technological development, this human development project was also a utopian project in that it was a temporal projection of future change, with its evolution always aimed towards perfectibility.

Yet because existing social conditions were imperfect, humanity as it existed under such conditions could not help but be imperfect, too. Material steps would need to be taken to change the existing social conditions that produced humans, and in doing so, alter humans themselves. Socialism itself, therefore, functioned as a speculative genre or framing for understanding the world. It was not my goal in this project to define science fiction as a unique product under socialism, but rather to demonstrate how science fiction and socialism are responding to the same forward-looking attempt to predict the development of future national citizens and, to some extent, guide that development. Insofar as this encompasses questions of genre, it is only to recognize that literature under socialist regimes was constrained by literary policies that perceived art as morally responsible for depicting positive and realistic representations of the world.

Over the course of the twentieth century, socialist science fiction often served as a moralistic blueprint that guided subsequent population policies and provided various descriptions of human perfection to which individuals could aspire. The new socialist

humanity that was the end goal of such science fictional depictions was theoretically attainable under the right material and ideological conditions, interpellating readers in a process of world-building and population management. While the idea of the “new human” is one with cognates across the Western and capitalist world, as a delimited term it is most strongly associated with the Russian intelligentsia who emerged at the beginning of the twentieth century. From there, it was taken up by authors and philosophers and theorists with ideological ties to the development of Russian socialism, though often shaped by very different forces. For example, where the Russian idea of human perfectibility developed out of a philosophical and religious monism that saw human beings as the apotheosis of all living and spiritual things and as something that could only be achieved by the gradual perfection of all things in the future, the new human as it was conceptualized in the Chinese tradition developed more strongly from its transformation by labor and a belief that existing, imperfect humans could be perfected by such work in the present, even if their material conditions were not yet perfect.

The characteristics of a perfected human were both physical and ideological. Through physical change came ideological change, and ideological change necessitated physical change. This was effected by shaping the body through labor and eugenics-based projects and shaping the mind through education and literary consumption. Therefore the role of science fiction as a pedagogical tool capable of laying out a blueprint for human and social development was of vital, central importance.

This vision of a newly perfected humanity that would develop under socialist progress was not monolithic. Scholars of Chinese science fiction have identified the development of futurist visions at the turn of the twentieth century, for example, as

developing in reaction to Western imperialism and trauma. This impulse is primarily embodied in a literary and political refutation of the “sick man of Asia” trope that defined the Chinese individual and body politic as infirm, craven, weak, and ill. The development of a “new human” that stood in opposition to everything the “sick man of Asia” trope represented was a way of asserting a non-colonial vision of evolution under socialism.

Meanwhile in Russia, the literary limits of science fiction were being codified at the same time as an epistemological shift in the understanding of disease from a purely biological to a social ill was underway. A national discourse conflating biomedical practices of cleanliness, health, and technoscientific progress with the rise of national might became reflected in literature, with the corresponding result being that authors depicted the individual body as representative of the body politic in literature and practice. In the discursive marriage of state interventionist practices and physical health, socialist Russian citizens could usher in a higher utopian state by adhering to guidelines for both health and social production, but it would only be future generations that fully embodied the “new socialist human” archetype.

While the development of the new human in Russia had roots in Orthodox Christianity’s contempt of the body and the attempt to create a monistic universal apotheosis, and the new human in China developed out of a transformative ideology linking mental and physical development to the unifying progress of a soon-to-awaken postcolonial nation-state, the development of the ideal human in East Germany was dogged not only by opposition to Westernization, but also haunted by the immediate Nazi past. Due to the immediate legacy of Nazi eugenics, the East German new human ideal was less focused on

physical transformation and more focused on how a commitment to antifascist ideology would lead to the living conditions that would produce ideal citizens.

Ultimately, the development of the “new human” was effected by concurrent literary and political imaginations. As both individual figures and mass populations, this “new humanity” was both a product of socialist forces and a speculative goal that would engender further large-scale social perfection. Not limited to imagination alone, the “new human” was a project undertaken with material aims of transformation across the socialist ideosphere.

As I argue in chapter two, new ideas about reproduction—both social and biological—were central to the development of an idealized body. By attempting to sever the link between biological and social reproduction, authors and policymakers imagined a future in which reproduction was redistributed amongst non-historically reproductive bodies with the goal of transcending biological and labor-based roles. If existing labor roles were tied to biological roles, then the redistribution of labor along more egalitarian lines necessitated a reconceptualization of biology as well. To this end, the insular heteropatriarchal family unit—one father, one mother, their immediate biological offspring—came under attack for reproducing capitalist and sexist paradigms. Reconceptualizing a reproductive futurity not founded on biological determinism meant developing new modes of both familiarity and methods of reproduction.

More granularly even than the usurpation of the family unit, the role of women became a central issue for socialist authors and policymakers. While I touched very briefly in chapter one on the development of a new humanist rhetoric from a theological monism in the Soviet context, it is in the new eye cast towards women and reproductive connectivity that this legacy is most apparent. As the debate about the equal role of women in a socialist

society grew, marriage as an institution became synonymous with a microcosm of unfair state practices, such as the unequal application of the law to those (like children born out of wedlock or mistresses) not constrained within the legal bounds of marriage. Coupled with the enduring legacy of the cosmists—who held that the human body was inherently degraded and that childbirth, specifically, was a mark of sin that must be overcome through androgyny—the emancipation of women from both labor-based legal constraints and biological reproduction became the main focus of new humanists such as Alexander Bogdanov. As a physician, politician, and author, Bogdanov introduced bloodsharing and hematology to Russia in both fact and fiction, seeing universal bloodsharing as the inevitable social end that would unite all individuals into a mass organism of equal participation. This would abolish not only sex-based social roles (such as marriage and childbirth), but completely dissolve sex itself.

Unlike Bogdanov's dream of a superorganistic socialist polity, however, author Wei Yahua circumvented biology altogether, fully decoupling biological roles from gendered roles. By utilizing robotics as a means for addressing overpopulation and unequal marriage policies in late 1970s China, Wei ironically continued a cybernetic population planning system that had initially been introduced by Bogdanov at the beginning of the century. With his theory of tektology—or the “system of everything”—widely recognized at the precursor to cybernetics, and cybernetics used as the framework for establishing China's population planning policies (particularly its one-child policy), there is a direct line of influence outlining the development of the “new human” in Soviet Russia and Maoist China. Yet just as bloodsharing undercut and even erased the link between biology and labor roles, Wei's story appealed to the utopian Chinese dream of a future free from physical labor that simultaneously and concurrently required the mobilization of labor en masse to effect

revolutionary change and, in doing so, degraded the laboring body itself—here, a robot. Those doing the labor were necessarily degraded, and while shifting the responsibility for labor historically tied to women ostensibly lifted them to a more egalitarian level, it also necessitated the creation of a new class of degraded laboring subjects. The creation of a “new woman,” enrolled in and subsumed within the overall imagination of a “new human,” re-established hierarchies of perfectibility and freedom from modes of labor considered outdated while simultaneously creating new categories.

The laboring bodies that were freed from historical modes of social and biological reproduction in literary reimaginings of the future were uniquely subject to a temporal double-bind: while labor was posited as necessary for creating an idealized future and citizenry, the future being created was one free from labor and laborers. These dual roles were central to many *lian huan hua*, which not only depicted the future being developed, but also demonstrated the step-by-step methods necessary in the present to bring about such a future. Because they were primarily visual materials, their message was available to a wider readership than simply intelligentsia; children, peasants, and the illiterate had access to the messages contained within. The narratives contained therein are both idealized and aimed at an active ideological education characterized by Nathaniel Isaacson as a “quotidian utopian” vision for the development of a new humanity.

Importantly, even when not focusing on explicitly “science fictional” subjects, *lian huan hua* were instrumental in defining, demonstrating, and representing a development plan for futurity that was immediately actionable. By examining the bodies visually depicted in *lian huan hua*, we can better understand what types of labor were valued, how bodies changed as

a result of engaging in such labor, and what types of developmental roles these changed human bodies played in the material creation of a new socialist future.

Because labor and laboring bodies as they were depicted in *lian huan hua* both glorified labor and simultaneously categorized it as a hardship from which people would eventually be freed, literary materials produced and circulated in support of the nation-building project were constrained by a narrative of teleological progress that did two things: one, it collapsed temporality in such a way that a utopian future was in the process of being developed while also remaining a goal for which people had to strive. Two, it established this attainable, in-process futurity as a process of utopian praxis—that is, the very act of working towards an ideal future was the ideal. By enrolling laboring bodies in the process of creating a utopian future, bodies themselves were mobilized as tools in the process of creation. They become tools through which invisible and often immaterial objects—such as radiation or germs—become measurable. The transition from conceptualizing the labor of individuals as combatants in the case of potential atomic warfare to tools used for measuring it in order to assess the presence of a threat in the first place is a method of reimagining the body not as a participant in the construction of a future body politic or as a subject enjoying its post-scarcity fruits, but as a tool for defending national integrity.

If the goal of socialism was to perfect society and its citizens, and literature reflected this material impulse, then it stands to reason that the vast majority of figures depicted in this science fictional literature were idealized examples of bodily perfection. Yet as I have argued, what constituted perfection was not the same across time and place. While the “new human” represented a developmental path that eschewed illness, physical infirmity, mental infirmity, and often even ugliness, certain literary depictions of the new socialist humanity

attempted to grapple with the existence of individuals who did not conform to those same imaginary standards of perfectibility and, to differing degrees, enrolled them in the perfected body politic. Through their inclusion of and focus on non-normative bodies, these texts open up a discursive space to problematize the socialist new human and the ideal of physical perfection that would lead to and emerge as a result of the perfect state.

As I noted in the final chapter, disabled individuals were most often described as infrastructural deficiencies when they were described at all. Without the hope of convalescence and a return to productive participation in nation-building, the disabled, the chronically ill, the elderly, and the deformed were elided from national narratives altogether or, more rarely, given the opportunity to participate in society through science fictional technologies that “fixed” biological issues such as illness or aging and allowed a productive return to labor. Without having explicitly identified it earlier, this approach makes it clear that the “new human” project was, in many ways, a eugenicist project aimed not only at producing better citizens, but at removing those individuals and groups deemed insufficiently representative of a perfected socialist ethos. Yet in positing a perfected figure, such a symbol necessarily gestured towards its opposite: a figure so antithetical to socialist evolution that they had no place in either the future or the present, only the past.

Yet different authors and literary traditions did take steps to both represent non-normative bodies and, to varying degrees, categorize them as part of the project for creating a new humanity in the future. To a large degree, these approaches were shaped by national histories and traditions. As I mentioned previously, the socialist Russian tradition—which saw a perfected humanity as a far-future goal that would shed humanity’s current physical body altogether—held embodied perfection in the present to be an impossibility in any way,

shape, or form; individuals could strive to better themselves, but only future generations could ever be perfected. Therefore, the ill, the aged, the infirm, and the deformed were only imperfect by degrees, not by categorical exclusion. The Chinese tradition, however, held that physical and ideological labor was capable of perfecting existing, living citizens, so to a much greater extent than its international socialist compatriots, Chinese authors and policymakers allowed for the integration of significant bodily variation provided they were adequately shaped and reformed by labor and education. In fact, the text I analyzed here—“Corrosion” by Ye Yonglie—actually rejects aesthetic beauty altogether and holds infirmity and physical decay as the highest patriotic ideals. For its part, arising as it did from the mass genocide perpetuated by the Nazis, East German authors were under significant political constraints in terms of describing policies aimed at human perfection, and most often relied on a policy of “over there” that located non-normative bodies in foreign locations. Similarly to the *lian huan hua* that utilized the body as a tool for measuring invisible threats, the body in East German science fiction also became seen as a potential threat for invisible ideological divergences, rather than physical imperfections.

No matter what approach they took, the depiction of ill, deformed, or disabled figures was risky in that it allowed for the insinuation that deviation from the norm was possible at all, even if not desirable. Though formally different, all three traditions are troubled by the imperfect bodies of their socialist citizens—bodies whose infirmities call out for correction through the application of the state’s hygienic practices. For these texts to acknowledge the continued existence of disability, however, is to risk betraying the socialist vision of a perfected humanity. Across national and linguistic traditions, socialist science fiction encountered its limit in representations of deviant bodies that resist idealization—bodies that these narratives nonetheless cannot do without.

Through an investigation of futurist developmental policies, reproduction and socially reproductive labor, physical labor in the present and future, and the role of disability and sickness on human perfection policies, I demonstrate how the “new human” developed in both fact and fiction. The bodily and ideological perfection of a new breed of humanity under socialism was, in many ways, a response to crisis that posited contemporary societies as existing under a deficit model that destroyed individuals, families, and societies; only with strong, guided population planning policies could the body politic overcome external oppression and internal degradation. The legacies of such policies persist today, although in our post-socialist world, the initial driving ideological impetus has dissipated. Yet for decades, a future-oriented political orientation guided the development of individuals at both the micro and macro levels, imagining new ways of life, new political orders, and new citizens to populate a reformed world.

BIBLIOGRAPHY

CHAPTER ONE

- Andersson, Jenny. "The Great Future Debate and the Struggle for the World." *American Historical Review* vol. 117, no. 5, 2012, pp. 1411–30.
- Aristotle. *Nicomachean Ethics* (I.13) and *De anima* (III.11). Hackett Publishing, 2019.
- Arnds, Peter O. *Representation, Subversion, and Eugenics in Günter Grass's The Tin Drum*. Camden House, 2004.
- Atanasoski, Neda, and Kalindi Vora. *Surrogate Humanity: Race, Robots, and the Politics of Technological Futures*. Duke University Press, 2019.
- Bergson, Henri. *Creative Evolution*. Greenwood Press, 1976.
- Banerjee, Anindita. *We Modern People: Science Fiction and the Making of Russian Modernity*. Wesleyan University Press, 2012.
- Bloch, Ernest. "Something's Missing: A Discussion between Ernest Bloch and Theodor Adorno on the Contradictions in Utopian Longing." *The Utopian Function of Art and Literature: Selected Essays*. MIT Press, 1989.
- Bogdanov, Alexander. *Red Star the First Bolshevik Utopia*. Indiana Univ. Press, 1984.
- Brooks, Jeffrey. *Thank You, Comrade Stalin!* Princeton University Press, 1999.
- Chen, Theodore Hsi-en. "The New Socialist Man." *Comparative Education Review*, vol. 13, no. 1, Feb. 1969.
- Cheng, Yinghong. *Creating the "New Man" From Enlightenment Ideals to Socialist Realities*. University of Hawai'i Press, 2009.
- II Corinthians 5:17. *The Bible*. Authorized King James Version, Oxford UP, 1998.
- de Baecque, Antoine. *The Body Politic: Corporeal Metaphor in Revolutionary France, 1770-1800*. Translated by Charlotte Mandell. Stanford University Press, 1997.
- del'Antonio, Eberhardt. "Für oder wider utopische Literatur?" BArch NY 4445/168 Pages [Bl.], 1958.
- . *Titanus*. Verlag Das Neue Berlin, 1959.
- . *Heimkehr Der Vorfahren: Zukunftsroman*. Verlag Das Neue Berlin, 1966.
- Efremov, Ivan A. *Andromeda: A Space-Age Tale*. Fredonia Books, 2004.

- Engerman, David C. "Introduction: Histories of the Future and the Futures of History." *American Historical Review*, vol. 117, no. 5, 2012.
- Fabian, Johannes. *Time and the Other: How Anthropology Makes Its Object*. Columbia University Press, 2014.
- Farley, James. *Constructing a New Citizen: The use of Model Workers in 'New China' 1949-1965*. University of Kent at Canterbury Press, 2016.
- Fitzgerald, John. "The Unfinished History of China's Future." *Thesis Eleven*, vol. 57, no. 1, SAGE Publications, May 1999.
- Förster, Werner. "Time Travelling into the Present: Science Fiction Literature in the GDR." *Journal of Popular Culture*, vol. 18, no. 3, Blackwell Publishing Ltd., Dec. 1984.
- "Frauen." DDR Handbuch, 3rd edition, vol. 1, 1985.
- Fritzsche, Sonja. *Science Fiction Literature in East Germany*. Peter Lang International Academic Publishing Group, 2018.
- Gewirtz, Julian. "The Futurists of Beijing: Alvin Toffler, Zhao Ziyang, and China's "New Technological Revolution," 1979–1991." *The Journal of Asian Studies*, vol. 78, no. 1, Feb. 2019.
- Hahn, Daphne. *Modernisierung und Biopolitik: Sterilisation und Schwangerschaftsabbruch in Deutschland nach 1945*. Frankfurt am Main: Campus Verlag, 2000.
- Heidtmann, Horst. "A Survey of Science Fiction in the German Democratic Republic (Panorama de La SF En République Démocratique Allemande)." *Science Fiction Studies*, vol. 6, no. 1, SFS Publications, Mar. 1979, pp. 92–99.
- Heller, Mikhail. *Cogs in the Soviet Wheel: The Formation of Soviet Man*. Collins Harvill, 1988.
- Hobbes, Thomas. *Leviathan*. Edited and introduced by C.B. Macpherson. Penguin, 1968.
- Hohendorf, G., et al. "Die Opfer der nationalsozialistischen "Euthanasie-Aktion T4" Erste Ergebnisse eines Projektes zur Erschliessung von Krankenakten getöteter Patienten im Bundesarchiv Berlin." *Der Nervenarzt*, vol. 73, no. 11, Nov. 2002, pp. 1065–74.
- Hui, Yuk. *The Question Concerning Technology in China: An Essay in Cosmotechnics*. Urbanomic Media Ltd, 2016.
- Huneke, Eric. "Morality, Law, and the Socialist Sexual Self in the German Democratic Republic, 1945-1972." Dissertation, 2013.
- Isaacson, Nathaniel. "Science Fiction for the Nation: Tales of the Moon Colony and the Birth of Modern Chinese Fiction." *Science- Fiction Studies*, vol. 40, Mar. 2013.
- . "Orientalism, Scientific Practice, and Popular Culture in Late Qing China." *The Oxford Handbook of Modern Chinese Literature*, edited by Carlos Rojas, Andrea Bachner, and Nathaniel Isaacson. Oxford University Press, 2016.

- Jameson, Fredric. "Science Fiction and the German Democratic Republic." *Science Fiction Studies*, vol. 11, no. 2, 1984, pp. 194-199.
- Kang Youwei. *Ta Tung Shu: The One-World Philosophy of K'ang Yu-wei*. Translated and edited by Laurence G. Thompson. Allen & Unwin, 1958.
- Kerr, Eric, et al. "Networked Human, Network's Human: Humans in Networks Inter-Asia." *East Asian Science, Technology and Society: An International Journal*, vol. 12, no. 4, 2018.
- Krupkat, Günther. *Als die Götter starben*. Verlag Das Neue Berlin, 1963.
- Liang Qichao (1902a [1936]) "Xin zhongguo weilai ji" (An Account of the Future of New China). *Yinbingshi zhuanjì [Monographs from the Ice-Drinker's Studio]*. Shanghai: Zhonghua shuju.
- Lenin, Vladimir. *Collected Works*, 4th English Edition, vol. 30. Progress Publishers, Moscow, 1961.
- . "Achievements and Difficulties of the Soviet Government." *Lenin's Collected Works*, 4th English Edition, vol. 29. Progress Publishers, Moscow, 1972.
- Lindenberger, Thomas. "Everyday History: New Approaches to the History of the Post-War Germanies." *The Divided Past: Rewriting Post-War German History*, edited by Christoph Kleßmann. Berg, 2001.
- Ma Shaoling. "'A Tale of New Mr. Braggadocio': Narrative Subjectivity and Brain Electricity in Late Qing Science Fiction." *Science Fiction Studies*, vol. 40, no. 1, 2013.
- Major, Patrick. "Future Perfect? Communist Science Fiction in the Cold War." *Cold War History*, vol. 4, no. 1, Taylor & Francis, Oct. 2003.
- . "Unusual Censor Readings: East German Science Fiction and the GDR Ministry of Culture" *Divided, but Not Disconnected: German Experiences of the Cold War*, edited by Tobias Hochscherf; Christoph Laucht; Andrew Plowman. Berghahn Books, 2013.
- Marx, Karl. *A Contribution to the Critique of Political Economy*. Charles H. Kerr and Co., 1904.
- Mill, John Stuart. "On the Definition of Political Economy, and on the Method of Investigation Proper to It." *Essays on Some Unsettled Questions of Political Economy*, 2nd ed. Longmans, Green, Reader & Dyer, 1874, essay 5, paragraphs 38 and 48.
- Pang, Laikwan. *The Art of Cloning: Creative Production During China's Cultural Revolution*. Verso, 2017.
- Paul, Heike, and Katja Kanzler. *Amerikanische Populärkultur in Deutschland*. Leipzig: Leipziger Universitätsverlag, 2002.
- Polianski, Igor J. "Psychiatrische Fachbücher aus dem Nationalsozialismus und die zensorische Praxis in der SBZ und frühen DDR." *Der Nervenarzt*, vol. 91, no. 3, Mar. 2020, pp. 261–67.

- Qian Ying. "When Taylorism Met Revolutionary Romanticism: Documentary Cinema in China's Great Leap Forward." *Critical Inquiry*, vol. 46, no. 3, University of Chicago Press, Mar. 2020, quoting Ding Jiao. "Xinde tansuo: geming xianshi zhuyi yu geming langman zhuyi xiang jiehe de chuanguzuo fangfa ruhe zai xinwen dianying zhong tixian" (新的探索：革命現實主義與革命浪漫主義相結合的創作方法如何在新聞電影中體現, "New Explorations: How to Manifest the Creative Method of Combining Revolutionary Realism and Revolutionary Romanticism in News Films"), *Dianying Yishu* (電影藝術, *Film Art*), Jan. 1959.
- Ridley, Charles Price, Paul H. B. Godwin, and Dennis J. Doolin. *The Making of a Model Citizen in Communist China*. Hoover Institution Press, 1971.
- Rousseau, Jean-Jacques. *A Discourse on Inequality*. Penguin Books, 1984.
- Ryurikov, Yuri. "Notes on Literature about the Future." *Soviet Literature*, vol. 4, 1960
- Schönfeld, Rudi. "Gesamteinschätzung des vorliegenden Manuskriptes "Kurs Ganymed".' BArch, DR-1/3360, 12 November 1961.
- Schwartz, Matthias. "How Nauchnaia Fantastika Was Made: the Debates About the Genre of Science Fiction from Nep to High Stalinism." *Slavic Review*, vol. 72, no. 2, 2013, pp. 224-246.
- Song, Mingwei. "After 1989: The New Wave of Chinese Science Fiction." *China Perspectives*, no. 1, Jan. 2015, pp. 7-13.
- Stites, Richard. "Fantasy and Revolution: Alexander Bogdanov and the Origins of Bolshevik Science Fiction" Preface to Bogdanov, Alexander. *Red Star the First Bolshevik Utopia*. Indiana Univ. Press, 1984.
- Thom, Akin and Horst Spaar, eds. *Medizin im Faschismus*. Akademie für ärztliche Fortbildung, 1983.
- Wang, David Der-wei. *Fin-de-Siècle Splendor: Repressed Modernities of Late Qing Fiction, 1849-1911*. Stanford University Press, 1997.
- . *The Monster That Is History, Violence, and Fictional Writing in Twentieth-Century China*. University of California Press, 2004.
- . "Chinese literature from 1841 to 1937." *The Cambridge History of Chinese Literature, Volume II: From 1375*, edited by Sun Chang, Kang-i and Stephen Owen. Cambridge University Press, 2010.
- Weiss, Sheila Faith. *Race Hygiene and National Efficiency: the Eugenics of Wilhelm Schallmayer*. University of California Press, 1987.
- Wolfe, Cary. *What is Posthumanism?* University of Minnesota Press, 2009.

Xu Nianci. "New Tales of Mr. Braggadocio." *Chinese Science Fiction: Late Qing and the Contemporary*. Translated by Nathaniel Isaacson and edited by Song Mingwei. *Renditions* no. 77 & 78, 2012.

Zhang Yinde. "The Utopia of the Human: about Ge Fei's *Jiangnan Trilogy*." *Asiatische Studien : Zeitschrift der Schweizerischen Asiengesellschaft = Études asiatiques : revue de la Société Suisse - Asie*, vol. 70, no. 3, Walter de Gruyter, 2016.

Zheng Wenguang. "Tantan Kehuan Xiaoshuo" ["Discussing the SF Novel"]. *Dushu Ribao*, 1958.

CHAPTER TWO

- A Woman Resident in Russia. "The Russian Effort to Abolish Marriage." *The Atlantic*, July 1926.
- Adams, Parveen, and Elizabeth Cowie. *The Woman in Question: M/f*. MIT Press, 1990.
- Ahmed, Sara. "Orientations: Toward a Queer Phenomenology." *GLQ: A Journal of Lesbian and Gay Studies*, vol. 12, no. 4, 2006, pp. 543-574.
- Alt, Herschel, and Alt, Edith. *The New Soviet Man: His Upbringing and Character Development*. Bookman Associates, 1964.
- An, Mark Yuying, Wei Li, and Dennis Tao Yang. "The Great Leap Forward: Anatomy of a Central Planning Disaster." *Journal of Political Economy*, vol. 113, no. 4, The University of Chicago Press, Aug. 2005, pp. 840-77.
- Atanasoski, Neda, and Kalindi Vora. *Surrogate Humanity: Race, Robots, and the Politics of Technological Futures*. Duke University Press, 2019.
- Benjamin, Ruha. *People's Science: Bodies and Rights on the Stem Cell Frontier*. Stanford University Press, 2013.
- . "Racial Fictions, Biological Facts: Expanding the Sociological Imagination Through Speculative Methods." *Catalyst: Feminism, Theory, Technoscience*, vol. 2, no. 2, 2016, pp. 1-28.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Duke University Press, 2010.
- Berdyaev, Nikolai. *Smysl tvorchestva, Izdadel'stvo AST: Астрель, Moskva : Izdadel'stvo AST : Astrel'. 1937.*
- Bogdanov, Alexander. *Red Star the First Bolshevik Utopia*. Indiana Univ. Press, 1984.
- Braidotti, Rosi. "The Politics of Life as Zoe/Bios." *Bits of Life: Feminism at the Intersections of Media, Bioscience, and Technology*, edited by Nina Lykke and Anneke Smelik. University of Washington Press 2008.
- Cheng, Yinghong. *Creating the "New Man" From Enlightenment Ideals to Socialist Realities*. University of Hawai'i Press, 2009.
- Chernyshevsky, Nikolai. *Что делать? (What Is to Be Done? Tales of New People: a Novel)*. Moscow: Raduga Publishers, 1983.
- Cixous, Hélène. *La Jeune Née*. I.B. Tauris, 1996.
- Davies, William. *Economic Science Fictions*. Goldsmiths Press, 2019.
- Deleuze, Gilles. "A Philosophical Concept..." *Who Comes After the Subject?* Edited by Eduardo Cadava, Peter Connor, and Jean-Luc Nancy. Routledge, 1993.

- Dikötter, Frank. *Mao's Great Famine: The History of China's Most Devastating Catastrophe, 1958–62*. Bloomsbury, 2017.
- Dionne, Emilie. "The Deconstruction of Dolls: how Carnal Assemblages can disrupt the law from within in Ghost in the Shell: Innocence." *Rhizomes*, vol. 21, Winter 2010.
- Edelman, Lee. *No Future: Queer Theory and the Death Drive*. Duke University Press, 2007.
- Federici, Silvia. *Wages against Housework*. Falling Wall Press, 1975.
- Fedorov, Nikolai, translated by Elisabeth Koutaissoff, and Marilyn Minto. *What Was Man Created For?: The Philosophy of the Common Task*. Haymarket Publishing, 1990.
- . "One Evening in 2217." *Red Star Tales: A Century of Russian and Soviet Science Fiction*, edited by Howell, Yvonne, and Anne O. Fisher. Russian Life Books, 2015.
- Feigenbaum, Evan. *China's Techno-Warriors: National Security and Strategic Competition from the Nuclear to the Information Age*. Stanford University Press, 2003.
- Feng Jin. "The New Woman in Early Twentieth-Century Chinese Fiction." *CLCWeb: Comparative Literature and Culture*, vol. 6, no. 4, Purdue University Press, 2004.
- Firestone, Shulamith. *The Dialectic of Sex: The Case for Feminist Revolution*. Verso, 2015.
- Gajjala, Radhika and Annapurna Mamiidipudi. "Gendering Processes within Technological Environments: A Cyberfeminist Issue." *Rhizomes*, vol. 4, Spring 2002.
- García-Ordaz, Mercedes, Rocío Carrasco-Carrasco, and Francisco J. Martínez-López. "Personality and Emotions in Robotics from the Gender Perspective." *Handbook of Research on Synthetic Emotions and Sociable Robotics: New Applications in Affective Computing and Artificial Intelligence*, edited by Jordi Vallverdú and David Casacuberta. Information Science Reference, 2009.
- Gastev, Aleksei. [How to Work?] *Kak Nado Rabotat': Prakticheskoe Vvedenie V Nauku Organizatsii Truda*. Moskva: URSS, 2011.
- Grachev, Mikhail, and Boris Rakitsky. "Historic Horizons of Frederick Taylor's Scientific Management." *Journal of Management History New Series*, vol. 19, no. 4, 2013.
- Greenfield, Douglas. "Revenants and Revolutionaries: Body and Society in Bogdanov's Martian Novels." *The Slavic and East European Journal*, vol. 50, no. 4, Winter 2006.
- Greenhalgh, Susan. "Missile Science, Population Science: The Origins of China's One-Child Policy." *The China Quarterly*, no. 182, June 2005.
- Greenhalgh, Susan, and Edwin A. Winckler. *Governing China's Population: From Leninist to Neoliberal Biopolitics*. Stanford University Press, 2005.
- Haraway, Donna. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Prickly Paradigm Press, 2015.
- . *Making Kin Not Population*. Prickly Paradigm Press, 2018.

- Hellebust, Rolf. *Flesh to Metal: Soviet Literature and the Alchemy of Revolution*. Cornell University Press, 2018.
- Iovene, Paola. *Tales of Futures Past: Anticipation and the Ends of Literature in Contemporary China*. Stanford Univ. Press, 2014.
- Kang, Minsoo. *Sublime Dreams of Living Machines: the Automaton in the European Imagination*. Harvard University Press, 2011.
- Kollontai, Alexandra. "Communism and the Family." *Komunistka*, no. 2, 1920, and in English in *The Worker*, 1920.
- Krementsov, Nikolai. *A Martian Stranded on Earth: Alexander Bogdanov, Blood Transfusions, and Proletarian Science*. University of Chicago Press, 2011.
- Laboria Cuboniks (collective). *The Xenofeminism Manifesto: A Politics for Alienation*. Verso, 2018.
- Lenin, Vladimir. "Nauchnaya Sistema Vizhmaniya Pota" ("Scientific system of sweating"), in Lenin, V. (Ed.), *Polnoye Sobraniye Sochinenii* (Complete Works), 5th ed., Vol. 23, Izdatel'stvo Politicheskoi Literaturi, Moscow, 1970.
- Lewis, John Wilson and Xue Litai. *China Builds the Bomb*. Stanford University Press, 1988.
- . *China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age*. Stanford University Press, 1994.
- Lie Yukou (Liezi), *Zhan Zhang*. World Book Company, 1988. 列禦寇 [列子]; 張湛注. 張湛, . 世界書局, 1988.
- Major, Patrick, "Future Perfect? Communist Science Fiction in the Cold War" *Across the Blocs: Exploring Comparative Cold War Cultural and Social History*, edited by Patrick Major and Rana Mitter. Frank Cass, 2004.
- Mao Zedong. Dialectic 25, "The Question of Red and White Joyful Events." *Long Live Mao Tsetung Thought*, translated by W C. Deb. Progressive Publications, 1993.
- . "On the Bankruptcy of the Idealist Concept of History." *Selected Works of Mao Tse-Tung* [1st ed.]. Foreign Languages Press, 1962.
- Marx, Karl. *Capital, Volume 1: A Critique of Political Economy*. Chapter 23. International Publishers Co., Inc, 1900.
- Marx, Karl and Friedrich Engels. *Die Deutsche Ideologie*. Berlin: Contumax-Hofenberg, 2016.
- . *The Communist Manifesto*. Vintage Books: Penguin Random House LLC. 2018.
- Massumi, Brian. *A User's Guide to Capitalism and Schizophrenia: Deviations from Deleuze and Guattari*. MIT Press, 1999.
- Mittler, Barbara. *A Continuous Revolution: Making Sense of Cultural Revolution Culture*. Harvard University Asia Center, 2013.

- Muravyov, V.N. *Kul'tura budushego (Culture of the future)*; *Muravyov, Sochineniya (Works)*, vol. 2, book 2.
- Naiman, Eric. *Sex in Public: the Incarnation of Early Soviet Ideology*. Princeton University Press, 1997.
- Proletkult. "From the Editors," *Proletarskaia Kul'tura*, 1918, no. 3, March 1918.
- Salame, Richard. "The New Taylorism." *Jacobin Magazine*, February 20, 2018.
- Scharping, Thomas. *Birth Control in China, 1949-2000*. Routledge, 2003.
- Seifrid, Thomas. *A Companion to Andrei Platonov's The Foundation Pit*. Academic Studies Press, 2009.
- Song, Jian. "Systems Science and China's Economic Reforms." *Control Science and Technology for Development (CSTD '85)*, edited by Yang Jiachi. Pergamon, 1986.
- Tamney, Joseph. B. and Chiang, Linda Hsueh-Ling. *Modernization, Globalization, and Confucianism in Chinese Societies*. Praeger, 2002.
- The Human Microbiome Project Consortium et al. "A Framework for Human Microbiome Research."
- Tien, H. Yuan. *China's Strategic Demographic Initiative*. Praeger, 1991.
- Trotsky, Leon, translated by William Keach. *Literature and Revolution*. Haymarket Books, 2005.
- Wei Yahua. "Conjugal Happiness in the Arms of Morpheus." *Science Fiction from China*, edited by Wu Dingbo and Patrick D Murphy. Praeger, 1989.
- Wolfe, Ross. "The Ultra-Taylorist Soviet Utopianism of Aleksei Gastev." *The Charnel House*, Dec. 7, 2011.
- Yang, Jisheng "The Fatal Politics of the PRC's Great Leap Famine: the preface to Tombstone," *Journal of Contemporary China*, vol. 19, no. 66, 2010, pp. 755-776.

CHAPTER THREE

- Barad, Karen. "No Small Matter: Mushroom Clouds, Ecologies of Nothingness, and Strange Topologies of Spacetime-mattering." *Arts of Living on a Damaged Planet. Ghosts of the Anthropocene; Monsters of the Anthropocene*, edited by Tsing, Anna Lowenhaupt, et al. University of Minnesota Press, 2017.
- Barthes, Roland. *Camera Lucida: Reflections on Photography*. 1st American ed., Hill and Wang, 1981.
- Brock, Darryl E. "The People's Landscape: Mr. Science and the Mass Line." *Mr. Science and Chairman Mao's Cultural Revolution Science and Technology in Modern China*, edited by Chunjuan Nancy Wei and Darryl E. Brock. Lexington Books, 2013.
- Brown, Kate. "Marie Curie's Fingerprint: Nuclear Spelunking in the Chernobyl Zone." *Arts of Living on a Damaged Planet. Ghosts of the Anthropocene; Monsters of the Anthropocene*, edited by Tsing, Anna Lowenhaupt, et al. University of Minnesota Press, 2017.
- Cai Xiang, trans. Rebecca Karl. *Revolution and Its Narratives: China's Socialist Literary and Cultural Imaginaries (1949-1966)*. Duke University Press, 2016.
- Chen, Minjie. "Chinese Lian Huan Hua and Literacy: Popular Culture Meets Youth Literature." *Perspectives on Teaching and Learning Chinese Literacy in China*, edited by Cynthia B Leung and Jiening Ruan. Springer Netherlands, 2012.
- Cheng, Yinghong. *Creating the "New Man" From Enlightenment Ideals to Socialist Realities*. University of Hawai'i Press, 2009.
- Daw, Sarah. *Writing Nature in Cold War American Literature*. Edinburgh University Press, 2018.
- Engels, Friedrich, and Edward B. Aveling. *Socialism, Utopian and Scientific: with the Essay on "The Mark"*. International Publishers, 1970.
- "防原子, 防化学, 防细菌常识. 沈阳部队"三防"宣传组编绘." ["Fang yuan zi, fang hua xue, fang xi jun chang shi. Shenyang bu dui "san fang" xuan chuan zu bian hui."] China: [publisher not identified], 1971.
- Gewirtz, Julian. "The Futurists of Beijing: Alvin Toffler, Zhao Ziyang, and China's "New Technological Revolution," 1979–1991." *The Journal of Asian Studies*, vol. 78, no. 1, Feb. 2019.
- Greenhalgh, Susan, and Edwin A. Winckler. *Governing China's Population: From Leninist to Neoliberal Biopolitics*. Stanford University Press, 2005.
- Han, Song. "Chinese Science Fiction: A Response to Modernization." *Science Fiction Studies*, vol. 40, no. 1, 2013, pp. 15–21.
- Huang, Betsy, Greta Niu, and David Roh. *Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media*. Rutgers University Press, 2015.

- 黄长怡 [Huang Changyi]. "小灵通漫游未来." ["Xiao Lingtong manyou weilai"]. 中国改革开放三十年文化生态备忘录 [Memorandum on the Cultural Ecology of China's 30 Years of Reform and Opening]. 广东教育出版社 [Guangdong jiaoyu chaban she], 2008, pp. 148-152.
- 黄子平 [Huang Zeping] and 张楠 [Zhang Nan]. "当代文学中的“劳动”与“尊严”——在中国人民大学的演讲." 当代文坛 no. 5, 2012.
- Iovene, Paola. *Tales of Futures Past: Anticipation and the Ends of Literature in Contemporary China*. Stanford Univ. Press, 2014.
- Isaacson, Nathaniel. "Science Crosstalk in China's Shifting Cultural Field." Talk given as part of the *Science Fiction and Asian Histories* panel at the 2016 ACLA Conference. Harvard University, 2016.
- . *Celestial Empire: The Emergence of Chinese Science Fiction*. Wesleyan University Press, 2017.
- Jameson, Fredric. *Archaeologies of the Future: the Desire Called Utopia and Other Science Fictions*. Verso, 2005.
- 金涛 [Jin Tao]. 叶永烈和他的作品小议 ["Ye Yonglie and his Works"]. 第二次全国少年儿童文艺创作评奖委员会办公室. 儿童文学作家作品论[C]. 中国少年儿童出版社, 1981年04月第1版, 第191-193.
- Jowett, A. John. "Patterns of Literacy in the People's Republic of China." *GeoJournal*, vol. 18, no. 4, 1989.
- Kinkley, Jeffrey C. *Visions of Dystopia in China's New Historical Novels*. Columbia University Press, 2014.
- Lee, Jennifer Dorothy. "An Essay for Red Art – Propaganda Posters from the Cultural Revolution (1966-1976)." *The Research House for Asian Art*. August 2016.
- Lippit, Akira Mizuta. *Atomic Light (Shadow Optics)*. University of Minnesota Press, 2005.
- Major, Patrick. "Future Perfect? Communist Science Fiction in the Cold War." *Cold War History*, vol. 4, no. 1, Taylor & Francis, Oct. 2003, pp. 71–96.
- Mao Zedong. "Talks at the Yan'an Forum on Literature and Art." *Selected Works*, vol. III, May 1942.
- . "On the Importance of Physical Education." *Selected Works of Mao Tse-Tung*. [1st ed.], Foreign Languages Press, 1962.
- . *Peking Review*. 23 May, 1970.
- . "Introducing a Co-operative." *Selected readings from the works of Mao Tse-Tung*. Foreign Languages Press, 1971.

- . "Chairman Mao's Teachings on the Mass Line: Combining Communist Leadership with Masses." Translated by Paul Saba. *The Call*, vol. 5, no. 34, December 27, 1976.
- Masco, Joseph. *The Nuclear Borderlands: the Manhattan Project in Post-Cold War New Mexico*. Princeton University Press, 2006.
- . *The Theater of Operations: National Security Affect from the Cold War to the War on Terror*. Duke University Press, 2014.
- Martin, R. Orion. "Lianhuanhua: China's Pulp Comics." *The Comics Journal*, 17 Oct. 2014. www.tcj.com/lianhuanhua-chinas-pulp-comics/
- Moro, Jeffrey. "Weird Ways of Seeing: Patrick Nagatani's Nuclear Vision." *Los Angeles Review of Books*, 2 June 2018.
- Moylan, Tom. *Demand the Impossible: Science Fiction and the Utopian Imagination*. Methuen, 1986.
- Nye, David E. *American Technological Sublime*. MIT Press, 2007.
- Pan, Lingling. "Post-Liberation History of China's Lianhuanhua (Pictorial Books)." *International Journal of Comic Art* 10, no. 2, 15 Oct. 2008, pp. 694–717.
- Pang, Laikwan. "Mao's Dialectical Materialism: Possibilities for the Future." *Rethinking Marxism*, vol. 28, no. 1, Routledge, 2016, pp. 108–23.
- . *The Art of Cloning: Creative Production During China's Cultural Revolution*. Verso, 2017.
- Pauleit, Winfried. "Video Surveillance and Postmodern Subjects: The Effects of the Photographesomenon, an Image Form in the Futur Antérieur." *Ctrl [space]: Rhetorics of Surveillance from Bentham to Big Brother: [karlsruhe, Zkm - Center for Art and Media, 12 October 2001 - 24 February 2002]* edited by Thomas Y. Levin. Karlsruhe: ZKM Center for Art and Media, 2002.
- Piette, Adam. *The Literary Cold War, 1945 to Vietnam*. Edinburgh University Press, 2009.
- "Qin Chao Mei jun jinxing xijun zhan ji wo caiqu cuoshi qingkuang de baogao" ["Report on American Invaders Using Bacteria Weapons and Our Responsive Action"], February 28, 1952, Nie Rongzhen junshi wenxuan [Selected Military Papers of Nie Rongzhen]. Beijing: People's Liberation Army Press, 1992, pp. 365–366.
- Seeberg, Vilma. *Literacy in China : the Effect of the National Development Context and Policy on Literacy Levels, 1949-79*. Brockmeyer, 1990.
- Song, Mingwei. *Chinese Science Fiction: Late Qing and the Contemporary*. Hong Kong: Renditions no. 77 & 78, 2012.
- . "After 1989: The New Wave of Chinese Science Fiction." *China Perspectives*, vol. 1, 2015, pp. 7–13.
- Steiner, Arthur H., "Current 'Mass Line' Tactics in Communist China." *The American Political Science Review*, vol. 45, no. 2, June 1951.

- Stember, Nick. "Chinese Lianhuanhua: a Century of Pirated Movies." Nickstember.com, 23 May 2014. www.nickstember.com/chinese-lianhuanhua-century-of-pirated-movies/
- Tanizaki, Jun'ichirō. *In Praise of Shadows*. Translated by Thomas J. Harper and Edward G. Seidensticker. Leete's Island Books, 1977.
- Tidhar, Lavie. "Science Fiction, Globalisation, and the People's Republic of China." *Foundation: The International Review of Science Fiction*, vol. 32, no. 89, 2003, pp. 93-99.
- Virilio, Paul. *War and Cinema: the Logistics of Perception*. Verso, 1989.
- Volland, Nicolai. *Socialist Cosmopolitanism: The Chinese Literary Universe, 1945-1965*. Columbia University Press, 2020.
- Wagner, Rudolf G. "Lobby Literature: The Archaeology and Present Functions of Science Fiction in the People's Republic of China." *After Mao: Chinese Literature and Society 1978-1981*, edited by Jeffrey Kinkley. Harvard University Press, 1985, pp. 17-62.
- Wang, David Der-wei. "Confused Horizons: Science Fiction." *Fin-de-siècle Splendor: Repressed Modernities of Late Qing Fiction, 1849-1911*. Stanford University Press, 1997.
- Wu Yan. "'Great Wall Planet': Introducing Chinese Science Fiction." *Science Fiction Studies*, vol. 40, no. 1, 2013, pp. 1-14.
- Wu Zifu. Department of the Study of Marxism and Leninism, Jinan University, *Dang de ba jie liu Zhong quan hui xue xi cai liao* [Study materials for the Party's Sixth Plenary Session of the Eight Central Committee], Guangzhou, 1959.
- “小无知游”幻想农场 [“Xiao Wuzhi you huanxiang nongchang”]. 編文, 迟叔昌图, 沈培天津少車纪童系术出版社像 [Ban wen, chi Shuchangtu, Shen Pei, Tianjin Shaocheji Tongxishu chuban she xiang]. 1960.
- Xia Jia. "What Makes Chinese Science Fiction Chinese?" *Invisible Planets: Contemporary Chinese Science Fiction in Translation*, edited by Ken Liu. Tor, 2016.
- 叶永烈 [Ye Yonglie]. “小灵通漫游未来” [“Xiao Lingtong manyou weilai”]. 少年儿童出版社 [Shaonian ertong chuban she], 1978.
- “总路綫圖画唱本 [“Zong lu xian tu hua chang ben.”].” 本社美術編輯室編繪 [Ben she mei shu bian ji shi bian hui], 上海 : 上海人民美術出版社 [Shanghai : Shanghai ren min mei shu chu ban she], 1958.

CHAPTER FOUR

- Ahmed, Sara. "Affective Economies." *Social Text*, vol. 22, no. 2, Duke University Press, 2004.
- Banerjee, Anindita. *We Modern People: Science Fiction and the Making of Russian Modernity*. Wesleyan University Press, 2012.
- Bardziński, Filip. "The Concept of the 'New Soviet Man' As a Eugenic Project: Eugenics in Soviet Russia after World War II." *Ethics in Progress*, vol. 4, no. 1, 2013, pp. 57-81.
- Berdyayev, Nikolai. *Samopoznanie*. Paris: YMCA Press, 1983 [1949].
- Berlina, Alexandra, introduction to Shklovsky, Viktor. "Art, as Device." *Poetics Today*, vol. 36, no. 3, Duke University Press, Sept. 2015.
- Bogdanov, Alexander. *Marsianin, zabrosennyi na zemliu*. Leningrad and Moscow: Kniga. 1924.
- Bonnell, Victoria E. "The Peasant Woman in Stalinist Political Art of the 1930s." *The American Historical Review*, vol. 98, no. 1, American Historical Association, Feb. 1993, pp. 55–82.
- Borges, Jorge Luis. "On Exactitude in Science" *A Universal History of Infamy*, translated by Norman Thomas di Giovanni. Penguin Books, 1975.
- Bulletin of the Atomic Scientists*, Feb 1955.
- Csicsery-Ronay Jr, Istvan. "Science Fiction and the Thaw." *Science-Fiction Studies*, vol. 31, Nov. 2004, pp. 337–44.
- Cheng, Yinghong. *Creating the "New Man" From Enlightenment Ideals to Socialist Realities*. University of Hawai'i Press, 2009.
- Creager, Angela N. H. *Life Atomic - a History of Radioisotopes in Science and Medicine*. The University of Chicago Press, 2015.
- Droit, Emmanuel. *Vorwärts zum neuen Menschen? Die sozialistische Erziehung in der DDR (1949-1989)*. Cologne: Böhlau, 2014.
- Eisenhower, Dwight D. "Address Before the General Assembly of the United Nations on Peaceful Uses of Atomic Energy, New York City. 'Atoms for Peace.' 8 Dec. 1953.
- Finnane, Antonia. *Changing Clothes in China: Fashion, History, Nation*. Columbia University Press, 2008.
- Fisher, Jaimey., and Barbara Caroline Mennel. *Spatial Turns: Space, Place, and Mobility in German Literary and Visual Culture*. Rodopi, 2010.
- Fritzsche, Sonja. *Science Fiction Literature in East Germany*. Lang, 2006.

- . "East Germany's 'Werkstatt Zukunft': Futurology and the Science Fiction Films of 'defa-futurum.'" *German Studies Review*, vol. 29, no. 2, German Studies Association, May 2006, pp. 367–86.
- . "A Natural and Artificial Homeland: East German Science-Fiction Film Responds to Kubrick and Tarkovsky." *Film & History*, vol. 40, no. 2, Center for the Study of Film and History, Sept. 2010, pp. 80–101.
- Gal, Susan, and Gail Kligman. *The Politics of Gender after Socialism - A Comparative-Historical Essay*. Princeton University Press, 2012.
- Gobbo, Federico. "Beyond the Nation-State? The Ideology of the Esperanto Movement Between Neutralism and Multilingualism." *Social Inclusion*, vol. 5, no. 4, Cogitatio Press, Jan. 2017, pp. 38–47.
- Gordin, Michael D. *Scientific Babel: How Science Was Done Before and After Global English*. The University of Chicago Press, 2015.
- Gottlieb, Erika. *Dystopian Fiction East and West: Universe of Terror and Trial*. Queen's University Press, 2001.
- Grewal, Inderpal., and Caren Kaplan. *Scattered Hegemonies: Postmodernity and Transnational Feminist Practices*. University of Minnesota Press, 1994.
- Grotewohl, Hans. "Grundlagen für die Entwicklung neuer Wohnformen." BA DH 2/23501, 1970.
- Hays, John. "The Body Invisible in Chinese Art." *Body, Subject & Power in China*, edited by Angela Zito and Tani E. Barlow. University of Chicago Press, 1994.
- Huang, Erin Y. *Urban Horror : Neoliberal Post-Socialism and the Limits of Visibility*, Duke University Press, 2020.
- Huang, Linda. "Rethinking 'Human.' Post-Mao Technocracy and the Disappearance of Laboring Body." Paper presented at the Posthumanism in Modern Chinese Culture Conference, University of New Hampshire, Dover, New Hampshire, September 29, 2018.
- Jameson, Fredric. "Progress Versus Utopia; Or, Can We Imagine the Future? (Progrès Contre Utopie, Ou: Pouvons-Nous Imaginer L'avenir)." *Science Fiction Studies*, vol. 9, no. 2, July 1982.
- Kayiatos, Anastasia Ioanna. *Silence and Alterity in Russia after Stalin, 1955-1975*. eScholarship, Jan. 2012. www.escholarship.org/uc/item/1989594t.
- Kierkegaard, Soren. *The Diary of Soren Kierkegaard*. Citadel Press, 2000.
- Krementsôv, Nikolai. *A Martian Stranded on Earth: Alexander Bogdanov, Blood Transfusions, and Proletarian Science*. The University of Chicago Press, 2011.

- Krige, John. "Atoms for Peace, Scientific Internationalism, and Scientific Intelligence." *Osiris*, vol. 21, no. 1, 2006, pp. 161–181.
- Lessard, John. "Iron Curtain Auteurs: Lost Voices from East Germany's DEFA Studios." *Cineaste*, vol. 34, no. 3, Cineaste Publishers, July 2009, pp. 5–10.
- Lins, Ulrich. *Dangerous Language -- Esperanto Under Hitler and Stalin*. Palgrave Macmillan UK, 2016.
- Lippit, Akira Mizuta. *Atomic Light (Shadow Optics)*. University of Minnesota Press, 2005.
- Major, Patrick. "Future Perfect? Communist Science Fiction in the Cold War." *Cold War History*, vol. 4, no. 1, Taylor & Francis, Oct. 2003, pp. 71–96.
- . "Unusual Censor Readings: East German Science Fiction and the GDR Ministry of Culture." *Divided, but Not Disconnected: German Experiences of the Cold War*, edited by Tobias Hochscherf, Christoph Laucht, and Andrew Plowman. Berghahn Books, 2013.
- Mao, Zedong, "Talks at the Yen'an Forum on Literature and Art." *Selected Works*, Vol. III, May 1942.
- . *Mao Zedong on Dialectical Materialism: Writings on Philosophy, 1937*. Edited by N. Knight. New York: M E Sharpe, 1990.
- . "Gongzuo fangfa liushitiao (cao'an) [Sixty articles of work methods (draft)]." *Mao Zedong wenji [Mao Zedong collections]*, edited by the CCP Central Archival Research Centre. Beijing: Remin Chubanshe, 1999.
- Marx, Karl, et al. *The German Ideology*. Lawrence & Wishart, 1965.
- Masco, Joseph. *The Theater of Operations: National Security Affect from the Cold War to the War on Terror*. Duke University Press, 2014.
- Naiman, Eric. *Sex in Public: the Incarnation of Early Soviet Ideology*. Princeton University Press, 1997.
- Nelson, Craig Doyle. *Nuclear Bonds: Atoms for Peace in the Cold War and in the Nonwestern World*. Thesis at OSU, 2009.
- New York Times (1923-Current File), *New York Times Company*, 17 Apr. 1966, <http://search.proquest.com/docview/117141207/>
- Pang, Laikwan. "Mao's Dialectical Materialism: Possibilities for the Future." *Rethinking Marxism*, vol. 28, no. 1, Routledge, 2016, pp. 108–23.
- . *The Art of Cloning: Creative Production During China's Cultural Revolution*. Verso, 2017.
- Rancière, Jacques. *The Politics of Aesthetics: the Distribution of the Sensible*. Continuum, 2004.

- Randall, Amy E. "‘Abortion Will Deprive You of Happiness!’ Soviet Reproductive Politics in the Post-Stalin Era." *Journal of Women’s History*, vol. 23, no. 3, Johns Hopkins University Press, Sept. 2011, pp. 13–38.
- Sammartino, Annemarie. "The New Socialist Man in the Plattenbau: The East German Housing Program and the Development of the Socialist Way of Life." *Journal of Urban History*, vol. 44, no. 1, SAGE Publications, Jan. 2018.
- Scarry, Elaine. *On Beauty and Being Just*. Princeton University Press, 1999.
- Shklovsky, Viktor. "Art, as Device." *Poetics Today*, vol. 36, no. 3, Duke University Press, Sept. 2015.
- Siegworth, Gregory J. and Melissa Gregg. "An Inventory of Shimmers." *The Affect Theory Reader*. Duke University Press, 2010.
- Soldovieri, Stefan. "Socialists in Outer Space: East German Film’s Venusian Adventure." *Film History*, vol. 10, no. 3, Indiana University Press, Jan. 1998, pp. 382–98.
- Solov'ev, B. "Gumannye otnosheniia i vzaimnoe uvazhenie mezhdu liud'mi: chelovek cheloveku—drug, tovarishch i brat!" Soviet Union, 1962. Digital Publisher: University of Southern California Libraries. Legacy record: pcra-uets-207306
- Sontag, Susan. *Styles of Radical Will*. Farrar, Straus and Giroux, 1969.
- Spillers, Hortense J. "Mama’s Baby, Papa’s Maybe." *Black, White, and in Color: Essays on American Literature and Culture*. University of Chicago Press, 2003.
- Steinmüller, Angela and Karlheinz. "Das Auge, das niemals weint" *Windschiefe Geraden: Science-fiction-erzählungen*. Verlag Das Neue Berlin, 1984.
- Tedman, Gary. "Marx's 1844 Manuscripts as a Work of Art: A Hypertextual Reinterpretation." *Rethinking Marxism* vol. 16 no. 4, 2004, pp. 427-441.
- Tertŭ, Abram. *Fantastic Stories*. Northwestern University Press, 1987.
- Torner, Evan. "Casting for a Socialist Earth: Multicultural Whiteness in the East German/Polish Science Fiction Film *Silent Star*." *The Liverpool Companion to World Science Fiction Film*, Liverpool University Press, 2014.
- Trotsky, Leon. "Revolutionary and Socialist Art." *Literature and Revolution*, 1924. www.Marxists.org.
- Trotsky, Leon. *Art and Revolution: Writings on Literature, Politics and Culture*. 4th printing. Pathfinder, 1970.
- Turek, Ludwig. *Die Goldene Kugel: Phantastischer Kurzroman um Atomkraft und Weltraumschiffe*. Dietz, 1949.

- Volland, Nicolai. "Translating the Socialist State: Cultural Exchange, National Identity, and the Socialist World in the Early PRC." *Twentieth-Century China*, vol. 33, no. 2, April 2008.
- Wang Jinkang. "The Reincarnated Giant," translated by Carlos Rojas *Renditions: A Chinese-English Translation Magazine*, no. 77/78, Spring & Autumn 2012. 石不语 (pseudonym of 王晋康). "转生的巨人." 科幻世界. 北京中国, 2005.
- Weheliye, Alexander G. *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Duke University Press, 2015.
- Weise, Lothar, and Eberhard Binder. *Das Geheimnis Des Transpluto*. Neues Leben, 1969.
- 杨楠 [Yang Nan], 王晓玲 [Wang Xiaoling], 李海丽 [Li Haili]. "Associative Meanings of Colors in Chinese and English Cultures." 海外英语(中旬刊), no. 3, 2011.
- Yang Wenqi, and Fei Yan. "The Annihilation of Femininity in Mao's China: Gender Inequality of Sent-Down Youth During the Cultural Revolution." *China Information* vol. 31, no. 1, 2017, pp. 63-83.
- Ye Yonglie. "Corrosion." Translated by Pei Minxin. *Science Fiction from China*, edited by Wu Dingbo and Patrick D. Murphy. Praeger, 1989.
- 叶永烈 [Ye Yonglie]. "腐蚀。" 人民文学. 北京中国, 11 月 1981.
- Yoshihara, Toshi, and James R. Holmes. *Strategy in the Second Nuclear Age: Power, Ambition, and the Ultimate Weapon*. Georgetown University Press, 2012.
- Zhao Suisheng. *A Nation-State by Construction: Dynamics of Modern Chinese Nationalism*. Stanford University Press, 2004.