

Tropes of Alterity in Soviet and Polish Science Fiction (1957-1992)

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Abstract

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This dissertation examines Soviet and Polish science fiction from the 1960s to 1980s as a political genre that investigates power and society. The problem of alterity is central for this genre: it is ungovernable because it is incomprehensible. Science fiction of this kind explores the possibilities and impossibilities of living with the Other that can impact social organization dramatically and lethally while that Other cannot be impacted in return. Living peacefully with such alterity is the fundamental premise of pluralism as a principle of social organization, according to the conclusions of the study.

The dissertation explores alterity in science fiction by Ivan Efremov (1908–1972), Arkady and Boris Strugatsky (1925–1991 and 1933–2012), Stanisław Lem (1921–2006), and Volodymyr Savchenko (1933–2005). My goal is to reveal in their works a transformative epistemological shift that had manifested itself through the tropes of alterity. Among these tropes the dissertation highlights aliens and alien civilizations, artificial intelligence, anisotropic universe, distant planets endowed with unique natural attributes, the more abstract unknown, and non-human elements running out-of-control within human species. I also examine specifically science-fictional notions such as the bull and progressor, which represent the intelligentsia's relations with power and the masses. The analyzed literary worlds also represent their authors' views of alternative societal organization, ruled by the powerful alterity such as a mega-computer or alien super-intelligence. Another important trope of alterity is based upon a

simultaneous performance of contradictory competing logics that create an effect known as parallax: the reader may interpret the same characters and/or stories in multiple, mutually incompatible, ways.

Beyond avoiding censorship, these tropes set the stage for the authors' utopias, in which the Other appears as an impenetrable alterity that affects those who encounter it. For these writers, alterity serves as the tool for problematizing progress, as it was imagined after World War II by the majority of political elites under socialism and in the West. I suggest that their science fiction contributed, among many other factors, to the lexicon and the imaginary of a cohort of political dissidents and Communist Party functionaries alike who translated science-fictional themes into political science terms to shape Perestroika's discourse. The dissertation, thus, establishes a historical connection between Soviet and Polish science fiction of the post-Stalin period and the ways in which democracy was discursively constructed in Russia, Ukraine, Poland, and other former socialist nations.

To Olesia and my parents

Note on Transliteration

Unless the proper names are known in English by a distinct orthography, this dissertation utilizes transliteration of proper names from the Russian, Polish, and Ukrainian languages in accordance with the Library of Congress style. This approach guarantees that the original names will be represented in Latin script in a manner that is both consistent and accurate. Proper names that are well-known in English but have different spellings have been kept in their conventional English forms. This transliteration approach simplifies cross-referencing and ensures text clarity for multilingual users.

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Introduction

My study aims to investigate many perspectives on society and diverse approaches to building an ideal society, a utopia, as interpreted in individual works of science fiction (hereafter SF). I place my research within the larger context of intellectual history, which is defined as the study of ideas with the potential to dramatically transform society, similar to breakthroughs in technology or science. SF, as a genre, has played a vital part in reinventing the Soviet imagination and offering new political notions for an alternative social structure. It also served as a means of camouflaging serious political thought throughout the 1957-1991, when the state incorporated SF into its discourse of space exploration.

My thesis investigates the process of bringing the concept of political pluralism into Soviet political discussions throughout the 1960s-1980s. I am focusing on the historical evolution of ideas that combined provide an actualized alternative to Soviet political science and ideology. The subject of pluralism in this context occurred in politics and SF in late 1960s, and I investigate the course of social development of political pluralism by linking SF from the 1960s and 1970s with the ideology of Perestroika. For this purpose, I highlight a specific set of literary figures, i.e. tropes, that emerged from Western scientific disciplines throughout the 1950s and 1960s and entered the debate over Soviet Perestroika via the mediation of SF. I propose that recognizing differences in social organization and political systems, as well as accepting limited comprehension of others and appreciating diversity as a valuable trait, were historical solutions to the crisis in the Soviet system and other "totalitarian" regimes,¹ as depicted in works of SF.

¹ The word "totalitarian" is fundamental to the discourse of pluralism; it defines the opposite. This concept can be found in each of the studied authors.

The project draws inspiration from media studies, discourse analysis, postmodernist theory, and political SF pioneers. The first group of scholars consists of the intellectual historians that focused on new media and technology and their impact on society: Marshall McLuhan and Norbert Wiener are among those who maintained that the medium had the ability to impact the content, emphasizing that any materialistic assessment of culture must begin with a consideration of its media. Another group of scholars in some part of their works studied the relationship between discourse and power. Among those are Karl Popper, Jean-François Lyotard, Frederick Jameson, and Michel Foucault. These philosophers taught me about the notions of freedom and justice, which are necessary for the preservation of diversity rather than its suppression.

In this dissertation, I interpret Soviet and Polish SF of the 1960s-1980s as a political genre. In this respect, I continue the work of scholars who investigated political issues in SF and positioned this genre as a medium of political communication: Istvan Csicsery-Ronay and Darko Suvin. Among the Russophone critics, Rafail Nudelman, Maiia Kaganskaia, and Elana Gomel were the first to approach SF as a laboratory for different scenarios of for the Soviet society's development.

I reveal SF political potentialities through the analysis of the works by Ivan Efremov (1908-1972), Arkady and Boris Strugatsky (1925-1991 and 1933-2012, respectively), Stanislaw Lem (1921-2006), and Volodymyr Savchenko (1933-2005). I focus on these writers' representation of SF tropes and concepts of alterity, such as aliens and alien civilization, artificial intelligence, anisotropic universe, the unknown, and the non-human. Along these lines, I will also discuss such idiosyncratic concepts as the bull and progressor and their evolution reflecting SF rethinking of intelligentsia's role in the given society and critique of its "colonizing"

discourses. I will also show how SF evolves from such openly political concepts as alternative communism to more philosophic, but also more powerful, ideas of multiverse, coexistence of incompatible logics, and utopian visions within dystopias. For me, the works of these SF writers are political because they translate a major epistemological shift in sciences of the period into a political vocabulary. In the late 1980s, as I will show in the Conclusion, the conceptual vocabulary of SF writers, in its turn, was transformed into political discourses of Perestroika (1986-1991) with its emphasis on pluralism and non-binary worldview.

As said, I focus on tropes of Otherness, or alterity, a concept, which stands for every natural and human difference and perception of such differences within and outside of SF texts. In Efremov, I look into the concept of the “bull” as an aberration among the superhumans of the future. In the Strugatskys, I study how the tropes of the alien civilization interact with the figure of the progressor. I also look into the meaning of the concept of “anisotropic matter” that unites Efremov and the Strugatskys. In Lem and Savchenko, I study the role of smart machines and the concepts of the unknown and non-human, which become detrimental to the feeling of stability promoted by Soviet ideology and science. I focus on the concept of the multiverse, i.e., the hypothesis that there can be not only other civilizations, but other architectures of natural and intellectual world that remain to be incomprehensible to humans even after the contact.

While working with the unknown, scientific thinking requires alternative logics, and such logics are modeled through the system of tropes by each of the SF authors discussed here. Certainly, tropes only are not enough for the analysis that also focuses on contradictions between their characters, or between characters’ practical knowledge of respective fictional worlds and the representation of these worlds by authors, or simply between characters and authors. One of

the frequent alternative logics in SF texts under examination is the ever-changing, an unstable perspective on the world – I call such effect a parallax, which is a term from astronomy, and which means the observed displacement of an object caused by the change of the observer's point of view. It is used metaphorically in logic. There, parallax is a pragmatic rhetorical tool that structures the experience of reading in such a way that any interpretation must be accompanied by a disclaimer limiting its veracity by a point of view of the character or author at the given moment. The parallax view introduced by Soviet and Polish SF of this period directly contributed to the epistemological shift that eventually affected the discourse of Perestroika.

Science Fiction as a political genre

In this research, alterity is the Otherness that is powerful and incomprehensible. I have chosen the most striking tropes for the "Other" that are impervious to coercion (confrontation), cannot be seen as merely inferior versions (assimilated), and cannot be mutually altered when human go in contact with them intentionally or not. These metaphors illustrate the concept of alterity that challenges human understanding and pushes it into unfamiliar territory within the context of less definite environments like Cosmos. The chosen novels and short stories depict the process of self-transformation via the realization of an insurmountable gap that exists between persons. The state, artificial intelligence, computerization and robotics, are examples of the alterity that will be discussed in this dissertation. These phenomena contribute to the creation of new political systems and social formations in reaction to technological advancements.

Although mysterious, this Other has tremendous impact on humans, therefore the only means to research the Other is through introspection. I use the concept of alterity to highlight this

particular form of Otherness, which has been transformed into an artistic tool to reveal the inherent human inability to confront certain matters, particularly within the realm of social existence or in nature.

My understanding of alterity is influenced by Elana Gomel's perspective on otherness in 20th-century SF. In her book *Science Fiction, Alien Encounters, and the Ethics of Posthumanism: Beyond the Golden Rule* (2014), Gomel draws on the discourse of "cognitive estrangement," introduced by Seo-Young Chu and Darko Suvin, suggesting that SF is inherently focused on presenting alternative perspectives and exploring the concept of Otherness. Gomel criticizes SF writers, including renowned physicist Carl Sagan in his novel *Contact* (1985), for their failure to fully embrace a "non-anthropomorphic" concept of otherness. She comes up with a classification of encounters with the Other. Gomel names three scenarios for the interaction with the Other that SF proposes: coercion, assimilation, and mutual alteration. The last one is the most cutting-edge and is defined as "post-humanist." (Gomel 2014, 6)

Like Gomel, I rely on analyses of the same writers but of their different works, and the difference in the tropes is not a matter of historical period of the chosen SF works, but of the literary scholar's preference. I am adding a fourth option to the list, which is also post-humanist, as it fundamentally changes the nature of humans in the encounter. This focus is not just a simple variation of Gomel's alteration, but rather a fundamentally distinct way of understanding knowledge, in which there humans have no ability to influence or affect the Other. However, the humans who encounter this alternative undergo a profound shift that leads them to a state of hybridity that has never been seen before, and so can be also described as post-human. The

trajectories of political and social change that follow the discovery of the powerful and incomprehensible Other are in the focus of this research.

In the 1960s-1980s, there emerged a new perspective on science fiction as a genre that can have political dimensions. This new understanding of SF genre was associated with such (postmodern) literary/cultural concepts as “othering,” “alienation,” and “cognitive estrangement.” French philosopher Roger Callois (1913-1978) in his book *Writing Stones* (1970)² outlined an important definition of the fantastic, which became shared by other scholars. For Callois, the fantastic is a genre for expressing logical ideas within a given set of possibilities that can model any social or cognitive system with amazing realism:

As opposed to fairy tales or to the Marvelous, which involves a world of enchantment, of constant metamorphoses and miracles where everything is always possible, the Fantastic presumes a well-ordered universe ruled by the immutable laws of physics, astronomy, and chemistry. (Callois 1985, 349)

In Callois’ view, SF as a work of literature stages intellectual experiments by defying the laws of nature and expanding scientific knowledge by the means of imagination. This is why “the fantastic can never be ‘natural,’ for it is presented, on the contrary, as the inadmissible breach wrought in nature by some mysterious power that is specifically viewed as supernatural. It has to be imaginary, that is, a deliberate invention of the mind, which recognizes it as such.” (Callois 1985, 349) The paradox arises immediately, since the “deliberate invention,” “attested universe,” and “supernatural” in SF serve as the foundation for highly logical and (quasi)realistic world-

² Originally published as “Le Fantastique naturel,” in *Cases d'un échiquier* (Paris: Gallimard, 1970), 61-73.

construction. The fantastic violates the rules of nature, and through this expands existing rationality, creates new logic and new intellectual optics. These innovations, obviously, are not limited by scientific discourses, ultimately, they suggest revisions of fundamental concepts defining contemporary society and, thus, are inevitably political.

These ideas are shared by Darko Suvin, Tzvetan Todorov, Frederic Jameson, Istvan Csicsery-Ronay, and many other scholars of SF in the 1960s-80s. In his essay, "On the Poetics of the Science Fiction Genre" (1972), Darko Suvin defines science fiction as "a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author's empirical environment" (Suvin 1972). Tzvetan Todorov originated the concept of the fantastic, characterizing it as the hesitation of characters and readers when presented with questions about reality. Todorov summed up his theory in *The Fantastic* (1975).

Callois, Todorov, and Suvin associate SF's political meaning with utopia at its core as something offering a radically new worldview, as SF "novum" to use Darko Suvin's term. The most consistent theorist connecting political utopia and SF is Frederic Jameson, who argued that utopia is ambivalent and not always is illustrating the idea of historical progress; it can have a subversive meaning as well. The problematization and deconstruction of progress, according to Jameson, suggests a very specific transformation of utopia as a genre and as a chronotope. As if borrowing from Callois, Jameson speaks of the zone, an exceptional place, in which there are artifacts with the "powers [that] transcend the explanatory capacities of human science":

On the contrary, the “zone” – a geographical space in which, as the result of some inexplicable alien contact, artifacts can be found whose powers transcend the explanatory capacities of human science – is at one and the same time the object of the most vicious bootlegging and military-industrial Greed, and of the purest religious – I would like to say Utopian – Hope. The “quest for narrative,” to use Todorov’s expression, is here very specifically the quest for the Grail; and the Strugatskys’ deviant hero – marginal, and as “antisocial” as one likes; the Soviet equivalent of the ghetto or countercultural anti-heroes of our own tradition – is perhaps a more sympathetic and human figure for us than Le Guin’s passive-contemplative and mystical innocent. (Jameson 1982, 2)

In 2004, Jameson returned to the problem of political utopia in SF. He wrote that utopia has fallen out of fashion, and is employed only by ideologists of various types of alternative socialist or communist societies: “Thus ‘utopian’ has come to be a code word on the left for socialism or communism; while on the right it has become synonymous with ‘totalitarianism’ or, in effect, with Stalinism” (Jameson 2004, 35). The reason for the disinterest in utopia outside of the totalitarian episteme, as registered by Jameson, reveals the centrality of the concept of alterity, lost for a while by the Western world at the end of the Cold War. However, this category is central for political thinking and only utopia can sustain it: “... it is difficult enough to imagine any radical political program today without the conception of systemic otherness, of an alternate society, which only the idea of utopia seems to keep alive, however feebly.” (Jameson 2004, 35) For Jameson utopia is still important for social development. But utopia is akin to SF: it is unimaginable before it appears, so it must be supernatural at some point in history: “a given

Utopia asserts its radical difference from what currently is, to that very degree it becomes, not merely recognizable but, what is worse, unimaginable” (Jameson 2005, xv). According to Jameson, it is SF as a genre that by and large fulfills this function of utopia, even when the narrative seems to be dystopian or unrelated to political issues.

American SF literary scholar Istvan Csicsery-Ronay sees SF in the Soviet bloc as a political genre that subverted official ideology by *performing* it to pass censorship, while at the same time, embodying a set of values different from the official. Csicsery-Ronay explained it contextually: those who lived between empires were most critical of the weaponization of technology for political control and expansion. In his essay, “Lem, Central Europe, and the Genre of Technological Empire,” Csicsery-Ronay named Czech writer Karel Čapek (1890 – 1938) and Stanisław Lem as the only two SF writers known to him who criticized genuine fascination with technology treating it as a repressive factor in the life of society. By analyzing their works, the literary scholar detects two types of alterity. The first one, allegorically can be called “grey people,” the ones that easily become executioners of most anti-social orders, and these are exemplified by the grey lizards in Čapek’s *War with the Newts* (1936). These are the fascists, the Nazis, the Cheka and NKVD. The other type of aliens is exemplified by Lem’s *Solaris*, a planet or maybe an ocean that humanity cannot understand with available science and that challenges the idea of human superiority in the world (Csicsery-Ronay 2006). According to the scholar, these types of alterity open up two trajectories for analysis: the alterity as a dangerous other but presented with ambivalent overtones, alterity as empowering discovery of the true nature of the world.

There was a similar trend in Soviet literature, and one of its accounts can be found in Rafail Nudelman's work. A Soviet émigré scholar, translator and SF writer himself, Nudelman came up with a historical study of SF as a genre of "modeling in ideology." (Nudelman 1989, 39) For him, utopia was not completely associated with totalitarian regimes that claimed they were achieving a utopia via their particular way of progress. Utopian thinking as a hypothetical view about what society can be, continued as a form of critique of totalitarian forms of societies. In my dissertation, I base my argument on Nudelman's historical overview of the 20th-century SF. Pre-Soviet and early Soviet SF literature focused on the conflict between civilization and barbarism understood in colonial terms. As Nudelman points out, the characters in this literature act either against or on behalf some "impersonal social forces":

This same destiny is predetermined by impersonal social forces acting with the certainty of Greek fate. [...] Often antagonistic forces shed their individualized shells and appear by themselves, impersonally and *en masse* as, for example, the Asian hordes invading Europe in Erenburg's *Trust 'Europe'* or gigantic snakes in Bulgakov's *Fatal Eggs*. These forces are almost always "from below," "of the soil," "earth," "barbarism," or "Asia's forces" opposed to "civilization" or "Europe," which is in retreat and foredoomed. (Nudelman 1989, 39)

From the 1930s to 1950s, Soviet science fiction was in isolation and reduced to a particular aesthetics of military adventures:

Like a true myth, official ideology claims to offering a universal – and otherwise total – explanation of the creation of the world and the end of history. But since spatially its

power was limited, official ideology introduced a clear separation of the world into "one's own" and "the alien." The confrontation of "good" and "evil" followed the same lines of separation. The world was now divided into the orderly ("one's own") versus chaotic ("alien") because everything that came out of the alien world brought chaotic interruptions into the "planned" movement of "one's own" world. (Nudelman 1989, 46)

Stalinism separated the world into our own and the zone of alterity; later on, the alien would move inside the subject. Nudelman finishes his essays with a few conclusions, one of which is that the internalization of "alien" features was the final stage of Stalinist SF:

The fear then experienced throughout the society had its source not so much in the arrests and executions as in the idea, proclaimed from above, of the omniscience and irrationality of everything "alien." Accordingly, the line of division between "one's own" and what was "alien" gradually moved, from external to internal (or psychological) landscape. (Nudelman 1989, 47)

Then, there was a change in Soviet science fiction, as well as in Western one, with the focus on probability rather than planning, othering, and creating new humans – in short, with alterity becoming a central issue and a new value:

... the view of SF as a scientific-technological forecaster ("literature of the winged dream," as one writer of the previous period called it) is supplanted by the notion of SF as a means of artistic cognition and analysis of reality by way of probable extensions. [...] This future was constructed out of the remains of the official myth superficially adjusted to fit the spirit of the time. (Nudelman 1989, 50, 52)

In this article, Nudelman argued that the period of the Thaw impacted SF for several decades to follow. “The spirit of the time” that he mentions was a freedom of expression lasting for only a brief period of time. These changes in SF occurred during the 1960s (Nudelman 1989, 54). The 1960s were constitutive, but the 1970s was the time when the changes found their full realization – they became performative.

Epistemology and alterity

The categories for asserting difference are central for the forms of alterity, which I describe as the Other that is too strong and incomprehensible to be subdued. Human irrationality structures understanding and behavior towards the Other. There are transhistorical and transcultural binaries that are difficult to overcome, such as sex and gender, racial difference, or simplified forms of "indigenous people" and unfavorable images of an immigrant versus, on the other side, the proper human with the “right” origin, the “right” start for development. These dualisms appear as “ontological” and “natural” in sciences of different nations, and hence, in fiction too. The essentialization of these dichotomies leads to the “naturalization” of colonial power and Orientalism (see Said 2003, Spivak 1988). Michel Foucault was the one who gave an even broader explanation of how literature and science are coopted into the production of sexual, racial, and any other kind of difference that is essentialized as definitive to an individuum.

The Soviet Union is an example of a society governed by the binary opposition naturalizing social categories, namely: capitalism versus socialism. The disparity between the West and the Soviet Union was mutually viewed as ontological, economic, and spiritual. Clearly, these dichotomies were even less grounded in realities than dichotomies of sex, gender, and

belonging; nonetheless, they were necessary for distinguishing the “correct” Soviet self from various forms of symbolic alterity. In this language of the norm, which is connected to episteme in Foucault’s sense, normativity is synonymous with episteme; human follows the rules that are presented as scientifically warranted “knowledge” rather than a set of hypotheses to discuss.

From this standpoint, a colonial place is not “normal”; it is the subject of exceptional innovative measures. It is a “zone” that is created for alterity. Through social categories and binaries that appear to organize those social categories, language shapes the "zone" of alterity, which is either the colonial or anti-imperial area within imperial space. South African post-colonial philosopher Achille Mbembe’s Foucauldian study “Necropolitics” focuses on the detrimental impacts of fiction. He argues that SF has strong linkages to imperialist thinking, and to visualizing alterity in existing and prospective colonies. According to his concept, a frequent SF trope of an area occupied by aliens often functions as a colonial space, i.e., a land destined to be conquered and colonized. "The state of exception" is the description of a foreign location as a violent zone, as shown by Mbembe:

In the same context, colonies are similar to the frontiers. They are inhabited by “savages.” The colonies are not organized in a state form and have not created a human world. Their armies do not form a distinct entity, and their wars are not wars between regular armies. They do not imply the mobilization of sovereign subjects (citizens) who respect each other as enemies. They do not establish a distinction between combatants and noncombatants, or again between an “enemy” and a “criminal.” It is thus impossible to conclude peace with them. (Mbembe 2003, 24)

This epistemology is of an alien being treated exceptionally, despite the declared, high ethics of violence against intruders, parasites, and “broken” ruthless humans, who are so absorbed by their instincts that they are still savages and animals. Colonies are where such violators of proper humans live and dominate, so not every excursion is safe for the traveler:

In sum, colonies are zones in which war and disorder, internal and external figures of the political, stand side by side or alternate with each other. As such, the colonies are the location par excellence where the controls and guarantees of judicial order can be suspended—the zone where the violence of the state of exception is deemed to operate in the service of “civilization.” (Mbembe 2003, 24)

By this means, a society establishes a location where anything is possible and human life has no value, despite the fact that there can be no consensus on the statement that human life has no value. So even most violent ideas must sound as peaceful.

Colonialism and imperialism are one of dimensions for alterity, but there are certainly others – associated with gender, class, race, etc. SF writers that I am discussing in this dissertation – Ivan Efremov, the Strugatsky brothers, Vladimir Savchenko, and Stanisław Lem – placed such zones of alterity at the center of their works. They are exploring and frequently creating concepts, images, and characters that embody alterity in its different forms, including the ultimate form of alterity – the non-human. Thus, even when remaining within Soviet binary-structured ontology, these writers are subverting and undermining it. It is in this function, rather than in direct political jabs or indirect allusions and hints, I see main political significance of their work: by this means SF writers of the 1960s-80s are creating utopias of alterity even when depicting their failure or misunderstanding surrounding them.

In my dissertation, I want to trace the development of the concept of alterity in its various SF manifestations: from aliens to AI and, eventually, to the multiverse. The Tormans, Efremov's planet of degeneration in *The Hour of the Bull*, exemplifies alterity that is presented as generational or time difference between the barbaric and civilized, the conflict also painted as a struggle between persisting evil in humans and overcoming it by collective effort and a superior social organization (see chapter 1 in Gomel 2022). Those who are coming from the world of the future are more powerful, and those who are powerful are on the side of progress. Akin to Tormans, Strugatsky's Arkanar in *Hard to Be a God*, a planet experiencing Middle Ages, continues the theme of enigma for future generations by embodying an alterity that transforms humans without undergoing a transformation itself. The planet is stuck in the past, and it cannot be moved without a proper plan, yet those available fail. The Strugatskys' alterity motifs became considerably more varied as time passed. It is important to note, however, that they never abandoned the theme of a degenerative society or social group as an essential component of global progress. Despite this, the Strugatskys introduced images of alterity that transcends time and has always and will continue to challenge humanity. The Forest with magical processes and the quasi-Amazonian women who are guarded by robots and reproduce without men, are two images of alterity that I focus on in their *The Snail on the Slope*.

Lem introduces a new trope, the unknown, the mathematical X of metagalactic pluralist reason of Otherness, which can be anthropomorphic or not. Human motivations are that Unknown too. Lem explored the humanization of robotics and the dehumanization of humans who are only partially intelligent to accomplish the tasks that their machines are capable of, if they are utilized correctly. On the pole opposite to the cybernetic utopia, Lem introduces the

image of Solaris, the celestial body that induces lunacy in its human visitors by influencing their subconscious.

In Savchenko, the human is declared extinct and the post-human emerges from a machine-human hybrid that can be interpreted broadly as a metaphor for the contemporary human being whose daily existence is dictated by media and other technologies, thereby establishing a framework for subjectivity. In the field of the Ukrainian SF, two decades after Lem, Savchenko employs the trope a planet, like Solaris, that affects the lives of those in its vicinity, including those who attempt to make contact with the enigmatic globe. However, their endeavors are in vain. Savchenko employs the psychological device known as the "black box" to illustrate the futility of ambitious endeavors to exploit alterities, such as Solaris or Forest. This is exemplified through the depiction of an institution's leader, who, distraught over the failures and the demise of a crew member, willingly destroys the entire institution in secret from others, not revealing his motivations.

In the dissertation's Conclusion, I draw parallels between these SF alterity tropes and the discourse of pluralism produced in the writings of three politicians – Andrei Sakharov, Valentin Turchin, and Georgii Shakhnazarov – linked to the power struggle in the 1970s and 1980s; they all use tropes of alterity similar to the studied SF authors to advocate for non-traditional political systems.

When exploring utopias of alterity created by Efremov, the Strugatskys, Lem, and Savchenko, I will pursue the following questions: What are the dangers associated with alterity, and what are its advantages? What challenges does it create for SF characters and their authors? Was late Soviet culture ready to accept these challenges? While analyzing each individual case

of SF alterity, I will focus on broader cultural and political implications of the given type of alterity, as well as its relations with predecessors.

Dissertation structure

Chapter One “Ivan Efremov: Superior Humans and the ‘Anisotropic Matter’” focuses on the author whose aesthetics was seen as the embodiment of liberties given by the policies of de-Stalinization, known as the Thaw (1956-1964). Efremov was and remains a controversial writer in many historical contexts, his name is associated by some critics with Russian nationalism, and I examine how this idea appeared in literary studies. As demonstrated by Elana Gomel and others, Efremov’s communist future man is intimidating and confronts those humans whom he considers to be inferior, or the bulls, as the writer calls them. However, I propose a different view on Efremov’s bulls and his politics: I argue that bulls stand not for inferior species but for authoritarian versions of the same “superhumans,” and that the concept of the “anisotropic matter” suggests a coexistence of systems with incompatible ontologies and epistemologies and, thus, offers an alternative to progressivism based on coercion and violence.

In Chapter Two “Arkady and Boris Strugatskys: Superior Humans (Progressors) and the Forest,” I investigate how the Strugatskys’ Kammerer trilogy serves as their *magnum opus* on Soviet state’s approaches to alterity. Three books, *Inhabited Island* (Russian, 1968), *The Beetle in the Anthill* (Russian, 1977), and *The Time Wanderers* (Russian, 1986), are a story of one character, Maxim Kammerer who turns from a young and sympathetic freedom fighter into a skillful servant of the secret police. In the first book, there is no information that the progressor is a secret police officer, but later on it becomes more obvious and creates certain confusion in

readings of the Strugatskys. This confusion exists in a political discourse as well, so even the most famous freedom fighters in Russophone world would eagerly identify themselves with progressors. The world in trilogy is rather limited in alterity, while the novel *The Snail on Slope* (*Ulitka na sklone*, 1966, 1972), which has a lengthy and tumultuous history, is unique for Soviet literature because of its breadth in the representation of alterity, e.g. aliens, zombies, the Forest, as well as new gender community that is able to create new types of sociality based on technological development. As already argued by George Slusser, the Forest “grows” from the Strugatskys’ development of Efremov’s idea of “anisotropic matter” (Slusser 1989).

Chapter Three “Stanisław Lem and Volodymyr Savchenko: The Non-Human, Artificial Intelligence, and the Multiverse,” compares similar tropes of alterity in Lem and Savchenko, while also contextualizing these tropes in Lem’s theoretical works on science fiction. One of the key tropes for the 1960s was connected to the changes in science, specifically to the popularity of cybernetics and the works of its founder, Norbert Wiener. Artificial intelligence in the works of Savchenko, I argue, is the central trope of alterity, and as such, alterity of AI that is both equal to humans and also completely misunderstood by humans. Some technology is superior in intelligence to humans, and power relations between humans and smart machines raise new philosophical questions. These questions at first appear speculative, but I show how Lem promoted an adoption of a new philosophical category, the non-human in fiction and science, and how Savchenko develops this category in his novels. This new philosophical vision complicates any normalcy, i.e., understanding of determinisms and connections between agents and events. In the Soviet context, Lem was perceived as a philosopher and, during Perestroika, as a political writer. I establish the fact that Lem was of interest to those who were “the architects of

Perestroika,” a small circle of advisors to Gorbachev. The trope of the Multiverse that Lem introduces in 1972 in his theoretical work, and Savchenko practically explicates in his 1992 novel *A Rank in the Universe* (title in the original, year), becomes formative for Perestroika’s “new thinking.”

The Conclusion brings the political context through the discussion of political pluralism as imagined by the dissidents Andrei Sakharov and Valentin Turchin in the 1960s-70s, as well as by Mikhail Gorbachev’s advisor Georgy Shakhnazarov in 1982-1986. I also comment on their use of SF as a reference for political ideas. Andrei Sakharov anticipates the so-called CETI, or extraterrestrial civilizations, to have an impact on world politics. The robots in Shakhnazarov’s SF writings struggle for recognition and equal rights. In Turchin’s *Inertia of Fear* (*Inertsiiia strakha*, 1976), the world is expected to be robotized through cybernetics, with humans assimilating to the non-human technological environment. Despite writing in a variety of genres and holding differing views on equality and social change these two historical figures symbolize an epistemological shift from totalitarian models to the idea of non-coercive power that necessitates non-violent visions of unity, understood through language that is not hostile to alterity. In many ways, this shift was prepared and facilitated by the discourses of alterity developed by Efremov, the Strugatsky brothers, Lem, and Savchenko.

Chapter 1: Ivan Efremov: Superior Humans and the “Anisotropic Matter”

In the first two chapters, I discuss the representation of alterity by the most important and famed SF writers of the post-Stalin period: Ivan Efremov and Arkady and Boris Strugatsky. I discuss them separately – Efremov in this chapter, and the Strugatskys in the next – but with the understanding that they both represent a radical change in SF aesthetics, as assessed univocally by all participants of the literary processes from 1957-1991. Soviet editors and publishers of SF (Brandis 1968, 1972; Britikov 1989) and émigré literary scholars (Kaganskaia and Agurskii 1974; Kaganskaia 1986, 1989; Nudelman 1989; Geller 1989) were among the first critics who connected the names of Efremov and the Strugatskys with political struggle in the post-Stalinist USSR. The same opinion is shared by the scholars of Soviet culture and history (Paterson 1997, Gomel 2004, 2020, 2022; Sergeev 2017) and world-known literary scholars of science fiction (Csicsery-Ronay 1989; Jameson 1989; Suvin 1974). Efremov’s and the Strugatskys’ prose is often defined as “social” or “socio-political SF” (Brandis 1968, 2) and “socio-prognostic” (Brandis 1981).

Efremov is considered the author whose fictional world is inhabited by superior and inferior humans, where the superior human represents a SF alterity vis-à-vis an imperfect human of the present. I argue that scholars have missed an important motif of the “anisotropic matter,” which sets the limits for the superior humans over non-human phenomena. In this chapter, I will focus on the following texts: *Andromeda Nebula: A Space-Age Tale* (*Tumannost’ Andromedy*, 1957) and *The Bull’s Hour* (*Chas Byka*, 1968), as well as on Efremov’s interviews, in which he

commented on the sources for his style and his method of writing, his views on humanity, and his own literary goals. I will argue that *Andromeda* contains thematic and conceptual embryos of social alterity, which resonate with Efremov's later developments in science fiction discourse – especially with his idea of possible alternative worlds in *The Bull's Hour*. This is one of the first but well-known instances of the topic of alternative paths in history, which – as I argue in the context of politics and science fiction – came to the concept of the Multiverse in various SF authors, specifically Stanisław Lem and Volodymyr Savchenko (Chapter 3).

My main research question is: how much does the concept and representation(s) of alterity shift from Efremov's first big success, *Andromeda Nebula* to his most controversial work, *The Bull's Hour*? In his programmatic literary article, "The Inclined Horizon" (*Naklonnyi gorizont*, 1962), Efremov explains his SF method as a "dialectical analysis." The "dialectical analysis" is the way of writing and reading when the past ("a relic," *perezhitok*) is simultaneously interconnected with and opposed to the future ("horizon," *gorizont*). A similar formula applies to the representation of utopia and dystopia, as well as to the characters of the other (and Other – the alterity) and the self (and Us, the collective self). Does it apply to inferior humans, whom Efremov calls "the bulls," and who are the opposite of the imaginary humans of the communist future, the New Men?

Andromeda Nebula is a significant socio-philosophical novel by Efremov, set in the distant future of Earth, the home for a highly developed and intellectual communist society. The novel features several storylines, including the flight of the spaceship "Tantra," the crew's encounter with a mysterious enemy, and Dar Veter, the head of the External Stations, suffering

from depression. On Earth, Dar Veter accepts the invitation of historian Veda Kong to participate in archaeological excavations, which leads to a romantic relationship between him and Veda.

Meanwhile, a physicist Ren Boz makes an outstanding discovery, but due to the high risk, he is officially refused to carry out the experiment. Mwen Mas, who replaced Dar Veter as head of the External Stations, helps Ren Boz, leading to a disastrous experiment that results in the death of Ren Boz and the destruction of the orbital installation. Despite causing a casualty, Mwen Mas is acquitted as a motivated leader, but he nonetheless, repents of his actions and goes into exile on the Island of Oblivion, a refuge for those who want to hide from society or live as in the past. Veda Kong and her friend, psychiatrist Evda Nal, visit Evda's daughter at school, discussing the successes of future pedagogy. The artist Kart San paints portraits of the best representatives of different racial types, with special interest to the link between human evolution and the geological development of the planet. The novel emphasizes the importance of understanding and embracing diversity in a perfect communist society.

In *The Bull's Hour*, Earthlings travel to the distant planet Tormans. In the year 4030, a communist system dominates on the entire Earth, while totalitarianism reigns on Tormans. The crew of the starship has an opportunity to communicate with people of different classes, from the lowest strata of the population to the highest leadership on the planet. Tormans is a planet with depleted natural reserves, a single language, and a rigid division of inhabitants into two groups. DNA tests identify individuals as "zhy" (long-living people) and "kzhy" (short-lived people), with "zhy" becoming scientists, writers, and useful for society, and kzhy used for physical labor. After the starship leaves the planet Tormans, small changes occur in the consciousness of the people. 130 years later, a ship flying past brings a message for Earth, revealing that Tormansians

are changing and their social structure is also undergoing changes. The political structure of Tormans, is directly projected by Efremov onto Maoist China; “Chinese government” is mentioned in the introduction to the novel in Efremov's authorial voice.

Efremov's life

A Soviet-Russian paleontologist, geologist, and science fiction writer, Ivan Antonovich Efremov was born on April 22, 1908, in the village of Vyritsa, Russia, and died on October 5, 1972, in Leningrad, Russia. Efremov graduated from the Leningrad Mining Institute in 1935, where he got academic degrees in paleontology and geology. In 1941, he defended his doctoral dissertation in biology. In this dissertation, Efremov proposed a study of fossil rests and preserved paleontological imprints for interdisciplinary studies of *human* history, since a human is also part of Earth's geological history and biological diversification. During his lifetime and again since Perestroika, Efremov had (and has) been considered an inventor of a scientific interdisciplinary field that studies human evolution through the combination of geological and biological data (see: Brandis 1972, 2; Sergeev 2017, 15). For his book *Taphonomy* (Tafonomiia, 1950), he received the Stalin Prize in 1952. While working on his dissertation, he started publishing science fiction: his SF was inseparable from his scientific work. For instance, his short story of 1943 “Olgoi-Jortoi” (in Russian transliteration, “Olgoi-Khorkhoi”) is about a creature that, as the story insists, the Mongolians believe in, and Efremov investigates what that creature might be with the help of paleontology and other sciences.

When Stalin died in 1953 and the USSR went through de-Stalinization during 1957-1964, Efremov came up with unexpected science fiction aesthetics that were embraced by Soviet

popular culture, and this aesthetics branded the Thaw as a time of a new artistic imagination. Referring to the culture of the 1920s, he also experimented with his style, fostering debates about his characters that continue to this day. Later, Efremov united *Andromeda Nebula*, his other novel *Cor Serpentis* (1958), and *The Bull's Hour* into a trilogy *The Great Ring* (*Velikoe Kol'tso*), which is grounded on the generational continuity of characters in various worlds: Veda Kong (a character in *Andromeda Nebula* mentioned in *The Bull's Hour*) is an inspiration and role model for Fai Rodis (a character in *The Bull's Hour*) who arrives as a hologram to read lectures to female crew members, Chedi and Fai in *The Bull's Hour*.

While Efremov's aesthetics was a unique combination of styles and genres, his public attempts to reconsider the rules of the fantastic in science fiction came as a collective effort of writer Lev Zhygarev and biologist Aleksandr Studitsky, who all together collaborated on the theory of post-Stalinist fiction; and their voice was critical of their contemporaries. Their article "On the Literature of the Dreams with the wings" (*O literature krylatoi mechty*), with the subtitle "A Response to Vladimir Nemtsov's³ article 'Tradition and Innovation'" (*Literaturnaia Gazeta*, Dec. 11, 1954), addressed to the Second Congress of Soviet Writers (1954) and rejected the logic of "a fantasy novel without fantasy." Instead, the authors proposed as examples of fantastic literature such literary authorities as Jonathan Swift, François Rabelais, and Honoré de Balzac, seeing in their work the fantastic that actually allows a science fiction writer to elucidate in his work "the process of mastering knowledge [*poznanie*] and the poetry of creativity." The article's

³ Vladimir Nemtsov (1907—1994), a Russian Soviet science fiction writer.

polemical target were “limiters” [*predel'shchiki, ogranichiteli*], who tried to designate ideologically correct limits of Soviet science fiction:

Some of these limiters, like Vladimir Nemtsov, persuaded us that we should fantasize closer to today, better within the five-year plan, even better not to fantasize at all. [...] And now, before the congress, I want to say loudly: let's clear the way for the science fiction genre, let's remove all barriers. Let scientists come to us, let venerable writers not be afraid of us. Let there be books about far and near, about geology and agronomy, let the author choose the means, but let him give us works that are deep in thought, captivating in plot, with vivid, artistic images. (Efremov et al, 1954)⁴

The manifesto was a call for new artistic imagination that would rely on scientific knowledge. In his interview nine years after political attacks on *Andromeda Nebula*, Efremov formulated his vision of science fiction, while stressing its psychological impact:

Art has always been magic. This is the creation of the world according to one's aspiration and desire, this is the transformation of the world with the magic touch of the artist. Writers – I'm talking about great writers – are great magicians, and this is their great strength, both political and emotional.... The poetry of the knowledge and alteration of nature opens up unlimited possibilities for art. In this I see the honorable task of science fiction. (Efremov via Brandis 1968)

The “poetry of the knowledge and alteration of nature” is the formula that makes science fiction important as a tool for the “transformation of the world by artist's miracle touch.” The artistic is

⁴ Here and thereafter, if not indicated otherwise, the translation is mine.

equated with magic because it uses esoteric symbols to communicate knowledge, but the nature of knowledge is not limited by any rules or regulations. This was the year when Efremov published his most controversial work (for Soviet censorship), *The Bull's Hour*. Efremov continued his literary career until death in 1972, and his last novel *Thais of Athens* (*Tais Afinskaia*) of same year proves that he was expanding his aesthetic horizons: this book was not a SF but an erotic novel about a sex worker from Ancient Greece, and it is written as prose on sensuality.

Scholars' perception of Efremov went through an evolution after the Thaw: beginning with the interpretation of Efremov as a victim of the regime, banned during Stagnation (1964-1986) until Perestroika, to treating him as one of the leaders of the right-wing intellectual movement in the USSR. His novel *The Bull's Hour*, which, as many close to him have argued, was the main reason for the official ban of his books from 1972-1989 and during Perestroika, it became public that justification was labeling Efremov a "foreign (British) agent" by the KGB. In his autobiographical article, Vasilii Zakharchenko, an editor-in-chief of the magazine *Tekhnika – molodezhi* from 1949 to 1984, shared details on how Efremov's reputation was ruined:

I remember the frantic resistance of the "institutions" to the holding of any events, one way or another connected with Efremov ... I am remembering and thinking now: how could this happen? Hundreds of people have been connected to the "Efremov case" for decades. They spied on the writer, fed on him, wrote false reports, faked obviously ridiculous accusations. (Zakharchenko 1991, 10)

Zakharchenko, who was a vocal supporter of the Russian nationalist movement in the USSR, serialized Efremov's *Andromeda* in that magazine from 1957 forward. This magazine also published Efremov's non-fiction articles in 1978 and 1982, despite the ban. Zakharchenko's memoir, which praises Efremov, also points to "Efremov's school" as one of the main arguments for connecting Efremov to the right-wing ideology. Yet, the cooption of Efremov into the discourses of the 1980s happened not only via the official channels where he again was allowed as a subject; but also, through non-official channels of resistance, which, as I show, would find insight in Efremov's *Bull's Hour*.

The ambivalence of Efremov's reception

Leonid Geller in his monograph *The Universe beyond Dogma (Vselennaia za predelami dogmy, 1985)*, identified Efremov as the main figure of the science fiction of the Thaw that pre-programmed further transformations of the genre, up until Perestroika; thus, he influenced the process of liberalization in the 1980s. The "new wave" was one of the concepts associated with the Thaw literature and, overall, with the spirit that it carried:

I discussed science fiction of the 1960s as a whole; at the same time I tried to follow changes that were happening in this genre [...] first, the impulse given by the situation of the Thaw and Efremov, the period of acceleration, when "the literature of the winged dream" dominated and the discovery of other worlds was in full steam; then, with the appearance in the year of the second Thaw of the first important works of the "new

wave”, a period of maturity, a return to literature in the attire of satire, dystopia, attempts to rethink the world. (Geller 1989, 373-374)

According to Geller, Efremov and his followers, representatives of science fiction of “the winged dream,” stood outside of the totalitarian paradigm and opposed to those authors who were writing in the specifically Stalinist genre of SF, which by its authors was called “close-range SF,” which meant only technical advancement within the limitations of a planned economy (Kazantsev and Nemtsov 1957). Geller links Perestroika’s ideas with the science fiction of “the winged dream,” which was the lens of the “bird-eye view,” combined with “the discovery of new worlds,” similar to “the parallel worlds” mentioned by the literary critic as a synonym (Geller 1989, 372).

Post-Soviet scholars continue writing about *Andromeda* as a visionary novel that shaped a new view of the “uncertain” communist future: “Ivan Efremov, a paleontologist by training, thinking on the scale of hundreds of millions of years, answered these questions by moving the action of his novel in the uncertain but distant future” (Pereslegin 2008, 239). Now, the question remains: how does this uncertain future emancipate itself from the present, formed by the totalitarian regime of the 1930s-50s?

In *Subversive Imaginations*, Nadya Peterson points out that Efremov’s first novel proposes the perspective on humanity’s present from the imaginary future, thus creating a defamiliarizing distancing from present-day society and reducing its condition to a small episode in the long journey toward the perfect harmony in society:

Efremov's *Andromeda Nebula* portrays a perfect society on Earth. However, the dynamism of his utopia does not come from lengthy descriptions of Efremov's vision of social perfection; rather, it is generated out of a conflict with the perfect society's own past. [...] The parallel plots in the novel serve to illustrate this conflict: a story of a traveling spaceship and a tale of an experiment to establish contact with a planet located many light years away. [...] The bulk of the novel is devoted to a description of the gradual road to perfection traveled by earthly civilization. (Peterson 1997, 34)

Ancestral times are indeed a repeating theme in Efremov's novels, and in *The Bull's Hour*, this motif appears to be a compensatory narrative, so the protagonists would not believe that they had failed. This means that the "perfect people" of the novel are the descendants of the people who lived under totalitarian regimes, and whose ancestors were damaged by the state. Peterson analyses further Efremov's view that humanity depends on the environment, including the historical past as the environmental (or genetic) factor. The "alternate societal models" that Efremov's characters witness during their space journeys suggest, however, as Peterson continues, "the potential pluralism of the future" (Peterson 1997, 35), which in turn suggests that the magisterial trajectory of Marxist philosophy of history is not the sole path toward happier future. There are other scenarios at play – a thought that was heretical for 1957. Peterson concluded that Efremov described a pluralistic society through the form of the novel based upon "the parallel plots."

By the 1970s, *Andromeda Nebula* had been re-defined as "Stalin's apology" by Mikhail Agursky (1974), and in the 2000s, Elana Gomel called it "crypto-fascist" (2004). Since the

1980s, right-wingers have used Efremov as a symbol of their identity, and the school of Efremov's fiction was concerned with Slavic self-identification, embedded in esotericism, to advocate for imperialist ideals with metaphysical rather than scientific appeal (Kaganskaia 1989). There were some reasons for these attacks. Nikolai Mitrokhin hypothesized that Efremov inspired Russian ethnic chauvinism. He argued that his publisher Zakharchenko was interested in Efremov's concepts pertaining to "deep history" (*glubinnaia istoria*) (Mitrokhin 2013, 416-417). According to these critics, Efremov organized the hierarchy of humans *implicitly*, through "races," and *explicitly*, through essentialized concepts of "culture" and "civilization." In Efremov's fiction, the environment and the lifestyle form the basis for the biopower that differentiates cultures and civilizations into planetary "races."

Rafail Nudelman initially defended Efremov, but later turned into a supporter of these crypto-fascist readings of his works. According to Nudelman's 1978 article, Efremov's understanding of SF as "a tool [*sredstvo*] for the expression of a certain metahistorical, or historiosophical, scheme had positioned him as a successor to the Russian literary tradition of the 1920s" (Nudelman 1989, 52). However, Efremov's approach to history (metahistory) also betrayed its Manichean origins: "Efremov bases his understanding of history on the Manichaean view of history as an eternal struggle between Good and Evil. Evil for Efremov (what he terms the "Inferno") is most fully represented by the Judeo-Christian culture's notion of the Original Sin and the suppression of eros." (Nudelman 1989, 56) Even though Efremov created images of totalitarianism that the censors of the 1970s considered to be threatening to the Soviet regime, this does not automatically mean that Efremov was not weaving in some disturbing ideas that

came from outside of the Marxist-Leninist spectrum. According to Nudelman, imagined models of social organization in SF integrated contradictory ideologies into newly (re)formed discourses based on “old” categories: nationalism, religious mysticism, (post)humanism, scientism, technicism, and socialism, all unreconnected on the foundational discourse of Enlightenment that equated knowledge with power:

Following Stalin’s death, the ideological turnabout in Soviet society necessitated the “airing” of official ideology and the birth of new ideological models, the existence and alternative values of which were now almost openly acknowledged. These models appeared as hybrids of former ideologies. At one and the same time we find nationalism existing in combination with religious humanism, liberalism absorbing the elements of the technocratic utopia, the remnants of Socialist ideology in the shape of “Marxism with a human face,” “Orthodox Marxism,” “the third power,” etc. (Nudelman, 1989, 48)

While using old ideologies, Efremov was able to synthesize the language that was not referring to any particular tradition, but offered a new, “alternative and equally universal myth”.⁵ The universal myth here is Marxism-Leninism, and Efremov’s solution, according to Nudelman,

⁵ “Efremov’s science fiction, in other words, does not merely provide a critique of the official myth; it openly claims to offer in its stead Efremov’s own alternative and equally universal myth. These heightened ideological claims, as well as the optimism of Efremov’s historical and existential models, depend, among other things, on the indirect links of such models with a certain cluster of ideas widely circulating in Soviet society at the time: the national-messianic ideology, resurrected during the Second World War and allied with official ideology, then in deep crisis.” (Nudelman 1989, 57)

is “national messianism,” a hybrid of National-Bolshevism (a term of Mikhail Agursky), Russian religious philosophy from the turn of the century, and, I can add, New Age influences.⁶

Kaganskaia focuses on Efremov’s hierarchy of religious discourses, with which Nudelman – despite being known for his religious interpretations of Stanisław Lem (see: Chapter 3) – did not engage. Kaganskaia grounds her criticism on the noticeable feature in Efremov’s writing, his frequent critique of the Jewish tradition that, in Efremov’s view, had transformed into the defects of Christianity too. The antagonized past, for him, is Christian religion, with Judaism presented as its source:

His entire system of views, his worldview, are dangerous, and all the more dangerous because the spectrum of his ideas are influential (*perspektivny*) in Russia. For example, I compare Efremov’s historiosophic concept mentioned here with one of the leaflets of the notorious Ivan Samolvin, who literally says that only by turning to its primordial, native gods, humanity did escape the Judeo-Christian twilight. But Efremov will be a very influential writer, and his circle of ideas, it seems to me, will capture more and more of Russian masses. (Kaganskaia in Agursky et al, 1978)

⁶ “In contrast to official myth, Efremov’s model articulated ideas which were growing in popularity. Equivalent to official ideology both in scale and quality, these ideas could be fully substituted for it. Having developed in relative freedom since the war, national messianism arrived at the period of the “thaw” as the most mature and competitive ideology alternative to the official one. Its claims to hegemony are supported by its links to early National-Bolshevism. This is apparent in national messianism’s perception of the world as irreconcilably split into the Russian (or, in its religious variant, Orthodox) and Western (or Catholic) world-views, and in its premonition of an historical clash between the two.” (Nudelman 1989, 57)

Kaganskaia also detects a Manichean binary at the foundation of Efremov's views.⁷ In 1989, Kaganskaia connected Efremov's Manichean racism with the mainstream of late Soviet science fiction.⁸ The opposite position was expressed by Leonid Geller who saw Efremov appropriated by state ideologists:

Efremov was inattentively read and poorly understood. The success of *Andromeda Nebula* prevented us from seeing anything in it other than encyclopedic fiction, dynamic optimism, extreme anthropocentrism and geocentrism. There emerged a cliché, accepted by official critics, representatives of the "new wave," and Western researchers: Efremov – fantastic Socialist Realist, the opposite of the Polish writer S. Lem and the Strugatsky brothers. This comparison is not meaningless, but as a comparison, not as a contrast. [...]

Efremov found himself somewhere halfway between the "near-future" writers and "innovators". And not without the consent of the latter, he was completely taken over by the guardians of ideology. (Geller 1989, 356)

Geller pointed to the problems of such interpretations, without clarifying what side to take. The problem is that Eferemov is *simultaneouysly* a right-winger, radical innovator, and critic of the official ideology. The source of this paradox, I argue, lies in the structure of his work. The existence of a totalitarian order, which is hard to change due to state control over the population or lack of knowledge for the reformers, is depicted in opposition to the world of the

⁷ "Efremov's anthropology and historiosophy have a pronounced Manichean racist characters, Good and Evil, which, according to his concept, determine the course of world history, are clearly divided between cultural and ethnic regions: the Greco-Indian oikumene embodies Good ("Great Arc," in the writer's terminology), and the Near East and Far East (Semitic and Chinese) -- Evil. Hence Efremov's anti-Judaism and anti-Christianity, which typologically coincide with proto-Nazi Theosophical Gnosticism." (Kaganskaia 1987)

⁸ Many more examples and parallels of this kind could be cited. There is only one conclusion from this, a conclusion important for the assessment of science fiction of the 1980s: we are facing an almost complete set of racist esotericism, that is, the para-Nazi myth of the "Aryan race," rewritten in "Russian letters," with Germans as "true Aryans" being replaced by Russians in the same capacity." (Kaganskaia 1989)

Great Ring, where humanity is united and does not have governments. This binary opposition was actualized as a meaningful category for analysis in the readings of critics who defended Efremov as a promoter of liberal ideas, including Nudelman and Geller. Efremov's anthropocentrism is undermined in his novel *The Bull's Hour*, in the episode where the teacher explains to his students that the world cannot be controlled and planned, so there is probably "matter" that cannot be understood by today's science. This also means that the Universe can be "anisotropic," so there should exist a different variant of society that lives in an "asymmetric" Universe. The word "anisotropic" becomes a key connecting Efremov to those science-fictional concepts that would become the core of Perestroika sensibilities.

Alternative communism

Andromeda Nebula begins with the discovery of a signal, which appears to be of an intelligent origin. A team of scientists and explorers is assembled to travel to the Andromeda Galaxy to investigate the source of the signal. This task is assigned to the team of the spaceship Tantra, which left Earth for 25 years. The team includes a variety of specialists, such as a biologist, a physicist, a linguist, and an astro-navigator. As the team travels deeper into space, they encounter a variety of alien civilizations, each with its own set of unique cultures, technologies, and ways of life. The team must navigate these encounters carefully, as some of the civilizations are hostile and dangerous.

Communism is portrayed by Efremov's novels as a myth-like social order that emerges after humanity has overcome the hierarchy based on class as a social category; yet this concept

also suggests that social hierarchies will exist for 1000 to 3000 years after the advent of the new order:

Even as I was writing, I was changing the time of action to bring it closer to our era. At first it seemed to me that the gigantic transformations of the planet and life described in the novel could not be realized earlier than in three thousand years. My calculations were based on the general history of mankind, but I did not consider the rate of acceleration of technological progress. (Efremov 1968, 5)

Important markers of Soviet ideology, from Marx to Lenin and Stalin, were omitted in *Andromeda*, and Gomel in her reading of Efremov's novel emphasizes that he created a dull utopia of perfection that separates disciplined future from the chaotic present. In her view, Efremov's vision of communism is based on well-controlled nature and a disciplinary society, which had achieved its successes by education of individuals through the elimination of the bull's qualities and inclinations. The drama happens around a human confrontation with nature in its "evil" instances, as Gomel picks up from Efremov's vocabulary:

The landscape of the future is a Communist pastoral, regaining a sort of prelapsarian innocence through being teamed and regulated by man. The planets of the "iron star" and the savage creatures, on the other hand, on the dark side of nature as constructed by Soviet ideology – not merely dangerous but purposefully evil. (Gomel 2022, 168)

In a series of publications, Gomel argued for the logical link between Efremov's recitation of the epistemological premise that knowledge can change society for the better, which was a common denominator between Soviet ideology and the Enlightenment. Gomel points to the ways Efremov

imagined nature as either “being tamed” or “dark.” This is a perspective that interprets nature as either inferior to humans or as humanity’s main “foe” (Gomel 2022, 168, 174). This resonated with criticism of *Andromeda Nebula* by Tatiana Chernysheva, who saw in Efremov’s understanding of nature the source of the novel’s lack of dynamics: “For all its merits, the picture of the society of the future is strikingly static. It is a world of geometrically regular lines, a world of frozen forms, a world that simply has nowhere to develop. Not without reason the image of the Great Ring appears as a symbol of completeness” (Chernysheva 1968, 68).⁹

In *Andromeda Nebula*, the name of the spaceship Tantra is symbolic, as it refers to the ancient Indian esoteric tradition leading toward transpersonal states and confluence with the world spirit, the fullest realization of all life experiences. As is explained in *The Bull’s Hour*,

Tantric "red orgies" in Buddhist monasteries, mysteries in honor of the gods of love and fertility in the temples of Hellas, Phoenicia and Rome, belly dances in Egypt and Northern Europe, "enchanted" dances of India, Indonesia and Polynesia in former times had more hypnotic influences than just erotic. Only much later did psychologists figure out that there is the link between the associations and the feelings of a person in their sense of beauty. This feeling of beauty firmly stands on eroticism, which is hundreds of thousands of years of natural selection of the most perfect. (*Chas Byka*, 60)

The spaceship, surrounded by such associations, metaphorically passes through the body of the Universe seeking the full realization of life experiences, including sexual ones. Noteworthy, in

⁹ “При всех достоинствах этой книги картина жизни общества будущего поражает своей статичностью. Это мир геометрически правильных линий, мир застывших форм, мир, которому просто-напросто некуда развиваться. Недаром появляется образ Великого Кольца как символ завершенности.” (Chernysheva 1968)

the resonance with early Soviet feminist thinker, writer, and politician Alexandra Kollontai (1872-1952), Efremov's communism has no room for an individual family: children are nurtured by the whole society somewhere far from the novel's action.

For Efremov, communism "is an exotic combination of the Greek cult of eroticism and heroism with the mystical and the irrational as conceived by the East. The motif of a return to the 'first civilization,' close to nature and 'soil, always appears in the utopian segments of Efremov's SF." (Nudelman 1989, 56) Nudelman's description exposes that Efremov's work found balance between East and West: in bringing up Eastern concepts, Efremov uses them to strengthen "the Greek cult" and the Judeo-Christian culture, regardless of whether Efremov opposes Christianity (this remains an open question).

The utopian dimension of *Andromeda* is counterbalanced by the features of a space opera. I believe that *Andromeda Nebula* fits the definition of this genre, popular in many countries in the 1940s, but which was absent altogether in Soviet literature and film until the 1960s. It was innovative in the Soviet Union, after 20 years of Stalinism, but conventional and old-fashioned for science fiction on the world stage. The novel's plot is dramatized by love triangles. Efremov pays very little attention to the technological advances of his futuristic world. His fiction creates the feeling of an alternative environment, a surreal one, but serves as a setting for a conventional melodramatic narrative about love, orchestrated with some lectures on fictional paleontology. There is no sex on the Tantra ship or in the desert, where Dar Veter gets Fai Rodis's attention, and also where she decided not to tell her husband Erg Noor, who is now on a distant space expedition, that she wants to be with another man. Erg Noor loses himself in guilt to his co-

worker who almost died, and Fai Rodis feels free to flirt with Dar Veter. In the flirtation scene, it seems that there is open sexuality in Efremov's representation of male and female bodies, especially in their dancing. Dar Veter does not engage further with Fair Rodis because they are interrupted by a wild boar in the area where they are traveling. So, the only scene with sexual tension is interrupted by a fight with a wild animal.

However, unlike the space operas that would later follow Efremov's example,¹⁰ sexuality in *Andromeda* is regulated to the extent that a love triangle between Fai Rodis, Dar Veter, and Erg Noor is handled in the most appropriate – and rather boring – manner. There is no jealousy or infidelity present, because they live in the proper ideological world, where women are free to choose a partner, and nobody claims that another human being is his or her property. However, they are family people, loyal to their partners by choice.

Nevertheless, despite all these deviations from a “proper” representation of communism, Efremov's literary project was quickly accommodated into the officially supported discourse on the future. Efremov himself became the establishment, one of the functionaries of the newly reformed state, who worked for the editorial boards of many widely circulating periodicals (*Fantastika* and *Mir Prikliucheni*). *Andromeda Nebula* remained the foundational text for science fiction oriented toward Soviet communism, and for writers of the late 1950s and 1960s, it was an example to follow. It was a complex work, open to interpretation, that enchanted readers and produced contradictory concepts among critics. Due to favorable political circumstances, *Andromeda Nebula* opened a new artistic dimension for Soviet society. Instead of

¹⁰ For instance, Sergei Snegov's take on Wells, in the novel *Human as Gods* (1966-1968), which was much more perverse and diverse in terms of sexuality, and included bestiality.

relating to the failures of Stalinism, Efremov proposed a distancing from it into the imaginative future – a space utopia that could be achieved in 3000 years.

***Andromeda* and Übermensch**

During the Thaw, *Andromeda Nebula* was classified as a "socio-philosophical novel," heavily influenced by H.G. Wells's *Men Like Gods* (1922), according to Efremov's own admission:

The thought of education is connected with the whole image of the man of the future, which I am trying to show in *Andromeda Nebula*. And in this -- human -- dimension, my novel debates some of Wells' works, especially his *Time Machine*, which paints a pessimistic picture of the "fading" and degeneration of humanity. Of course, I not only polemized with Wells, but also learned from him the art of fantasy. In particular, his novel *Men Like Gods* (which I appreciate more than others) was a kind of "starting point" for *Andromeda Nebula*. (Brandis 1974)

Wells's novel was, according to Efremov, "the starting point" for his *Andromeda Nebula*, and I suspect that this genealogy may be extended to *The Bull's Hour*. There is arguably a similarity in style between Wells and Efremov in their melodramatic focus. Comparing *Andromeda Nebula* and *Men Like Gods*, Gomel described the characters as emotional and attractive, but also coercive in their interactions with the world of the Other (Gomel 2004, 12). A human evolution story is at the foundation of both writers' epistemologies, and those stories are also about depressed and affectitious people, who try to find their true selves. In Wells, the protagonist is a

journalist working for *The Liberal*, Mr. Barnstaple, who travels to an alternative world, the Utopia, only for a vacation away from his wife and family.

As Efremov commented on his literary references, he mentioned that he was in a “debate” with Wells’ “understanding of the human.” This polemic was not just against Wells, but also with the concept of the *Übermensch* adopted by Wells. A Nietzsche scholar, Francesca Cauchi sums up the meaning of the *Übermensch*: “In *Zarathustra*, this ‘ardent creator-will’ is the defining quality of the knowers who want to create ‘over and beyond’ themselves – hence the *Übermensch* [über meaning beyond, Mensch meaning man] – in accordance with the laws of becoming and overcoming” (Cauchi 2022, 79). In other words, being the *Übermensch* is being outside of oneself and, in this way, being more than oneself. Thomas Andrae in the article “From Menace to Messiah: The Prehistory of the Superman in Science Fiction Literature,” maintains:

Following the lead of *Frankenstein*, the early superman was characterized as an often sympathetic but always monstrous, threatening, and socially deviant individual despite his heroic image in Burroughs’ *Mars Stories*. The basis of this image was the myth of the coming of the superman, the belief that Homo Sapiens might someday be supplanted by an alien and implacable Homo superior. Homo superior was of the same genus but of a different species than Homo Sapiens, a species as superior to man as man was advanced over the apes. The theme was anticipated in H.G. Wells’ early science fiction novels like *The Invisible Man* (1897), the story of a power-mad egoist whose invisibility renders him practically omnipotent, and explicitly developed in his *War of the Worlds* (1898), the story of the subjugation of Earth by aliens from Mars with superhuman intelligence. The

Martians represented an evolved humanity according to Wells, "descended from beings not unlike ourselves by a gradual development of brain and hands ... at the expense of the rest of the body." This abnormal development of the brain led to what Wells believed was a more selfish form of the intellect, which became detached from the moral and emotional restraints that curbed the primitive instincts. Wells' notion of superman was later developed by one of his chief admirers, J. D. Beresford, in his 1911 novel of a mutant child with superhuman powers of understanding and intelligence, *The Hampshire Wonder*. (Andrae 1980, 86-87)

This is where one should look for the impulse of the New Man as the superior and universal human for Efremov, and this is the perspective that I use as a counterpoint against accusations of racism or Russian nationalism in Efremov.

The connection between Efremov and Wells was first analyzed by critic Vsevolod Revich. For Efremov, personal freedom is less important than human belonging to the man-made environment (more recently defined as Anthropocene) which, in turn, secures his or her superiority to nature (Revich 1997). For Wells, according to Revich's analysis, Mr. Barnstaple is a liberal subject, whose free mind makes him superior to the rest of the society. Efremov's characters remind of Wells' protagonist, as interpreted by Gomel and Kaganskaia: he also displays crypto-fascistic features and looks like a statue-like figure free from any restrictions of the old age. The difference is in the "blood" that Efremov infuses these statues; by "blood" the critic means dissonances and contradictions that the writer creates in superior human behavior and feelings:

In the article "On the Road to the *Andromeda Nebula*," Efremov cited H.G. Wells' novel [*Men Like Gods*] among the works which influenced him. Wells painted happy and free creatures in it, beautiful as antique statues, but there is no more blood in them than in polished marble. [...] Apart from the most general information, we learn very little about the social mechanisms of the country of Utopia, much less about the mental operations of its subjects. I am unable to comprehend what Efremov was drawing from there. For Wells, his Apollo-like Utopians are as conventional as the Martians and the Selenites. The point of Wells' novel is to contrast the greatness of godlike creatures with the pettiness of his contemporary English philistines, politicians, and hypocrites. (Revich 1997, 174)

Efremov uses beauty as a social category that impacts life. By a series of equations, he built a logic demonstrating that beauty must be a universal feature, because the "environment," and nothing else, shapes a human being:

Man, even in the early stages of his formation, developed as a universal organism, adapted to a variety of conditions. The transition to social life has defined an even greater versatility. The beauty of man is, in addition to perfection, the universality of purpose, enhanced and refined by mental activity and spiritual nurture. A thinking being from another world, if it has reached the cosmos, is also highly perfect, universal, that is, beautiful! There should be no horned and tailed thinking monsters, mushroom men, octopus-men. (Efremov 1978, 51)

Thus, there is a group of related and equated concepts: "universality," "beauty," and "anthropomorphic." They all, in different ways, manifest perfection, an ideal – and, well,

superiority. They are all inscribed into the system of binary oppositions. For Efremov, the opposite of humanity is literally Nihilo, the big nothingness, which is the “natural state of affairs.” The facts of belonging to a man-made environment are secured by a shared rationality. Efremov’s characters can be impulsive, but this is an individual and not a collective trait. Proper human “psychology” in *Andromeda* is grounded in the character’s ability to set up power goals and achieve them. In Efremov’s works, this ability is represented as the feature that belongs to the whole of humanity in opposition to the chaos of nature. The human does not belong to degrading nature by virtue of belonging to human civilization. Bringing the idea of human superiority to the extreme, Efremov creates his version of the Übermensch, able to rise above his or her human limits. Furthermore, the typical story of Efremov’s character is the narrative about Übermensch in love, or at least flirting – hence, the space opera.

There are noticeable features of this New Man: he or she battles with nature, and winning over nature inside and outside oneself is the establishment of man in human (Gomel 2022, 168). A Martian is not an alien for Wells, but a metaphor of non-existence, similar to Efremov’s view of nature. However, reading of *Men Like Gods* and *Andromeda* from the perspective of Donna Haraway’s and Michel Foucault’s posthumanism, as Elana Gomel does, clearly demonstrates that neither Wells nor Efremov did see any alternative to the Enlightenment-based utopia of the perfect human, i.e., an enlightened rationality and power, both based on science. Although visionaries for their cultures, Wells in the 1920s and Efremov in the 1960s did not see beyond the “human as the measure of things,” which practically meant that any human is above nature and

above any non-human alterity. This philosophy is, in fact, hardly compatible with racism, either Manichean or “simple.”

The Bull's Hour

Efremov's *Bull's Hour* takes place in the future, when humanity has just established its colonies on other planets. A team of humans, the crew of the spaceship Dark Flame, goes to the area of the Universe where one of the planets had lost connection with humanity, which is firmly united by the Great Ring association of planets. This planet is Tormans, and humans come first to investigate the planet, but due to the planet's physics, they damage their ship and are unable to leave orbit. They discover that the local government invented a myth of alternative humanity, destroyed proofs of the opposite, and use segregation to maintain power.

The novel has two main plotlines. The first plotline follows the scientific expedition that turns into a passive-aggressive interaction between the hosts and the visitors, as they explore and study the planet's unjust social regime. The spaceship crew discovers dissidents and youth ready to rebel – a cybernetician Tael represents this stratum of Tormansians. On the other hand, the human cosmonaut Vir Norin marries a local woman and remains on the planet. The framing narrative is situated further in the future, depicting a classroom where children and teacher discuss and hypothesize about the expedition and its results, since these results were never seen, and soon the Earthlings will be able to inspect the planet visited by the Dark Flame. As the teacher explains, Tormans is a symbol: “People returned to the myth of Tormans more than once, and it is always meaningful in times of crisis, open war, famine, and a vague future. For us, the

planet Tormans was just one of many fairy tales that have sunk into oblivion...” (*Chas Byka*, 1968, 21).

Vir Norin refers to physics to explain why degenerate societies, dystopias, can exist. It is due to the “asymmetry of the helicoidal shift.” The helicoid is a concept in engineering, it is the shape of detail that connects to others at irregular angles:

Vir Norin obeyed his listeners’ wishes. He spoke of the spiral-helicoidal structure of the universe, of the worlds of Shakti and Tamas, about complex surfaces of force fields in the cosmos obeying the law of five-axis ellipsoidal structures, about triple nature of development waves - big and small, about spiral-asymmetric probability theory instead of linear-symmetric one accepted in the science of Yang-Yah and not allowing to do without the supreme being. Vir Norin spoke about the victory over space and time after solving the mysteries of the limiting masses of stars, known for a long time to scientists of Jan-Yah as well as to earthmen: the Chandrasekar and Schwarzschild values, and most importantly, after correcting the Kruskal diagram error, when the ideas about anti-world as perfectly symmetric to our world were over. In fact, between Tamas and Shakti there is a helicoidal shift asymmetry, and the explosion of quasars does not necessarily reflect the collapse of stars in Tamas. (*Chas Byka*, 297)

Thus, the anti-world is not, scientifically speaking, exactly the opposite but more idiosyncratic: there are possibly unpredictable cases. Vir Norin is not an engineer of the world; he is a researcher with the perspective of a computer engineer. As a lecturer, he takes on the role of a political personae, plus, he is an internal alien, the future father of a Tormasian.

The myth of Tormans has two sides: one of a failed Communist utopia and one depicting a wrong understanding of humanity. These two erroneous paths merge into one symbol. We learn about the world of communism through the comparison done by communist subjects in a foreign and hostile world of Tormans, the anti-world. This novel develops Efremov's visions of alternative communism in the direction of a totalitarian dictatorship reminiscent both of Maoist China and Stalinism. Efremov's characters are communists from the Earth of the future, and from their perspective, the political regime on the planet Tormans is the result of a psychological deformation: hopelessly distorted psychology [*beznadezhno isporchennaia psikhologiia*] (*Chas Byka*, 417, Eviza to Fai Rodis); and the psychology of handicapped masses [*iskalecheny psikhologicheski massy*] (Fai Rodis to her crew, 428). The science-fictional theory of experimental history traces the deformed psychology of Tormans to their cultural forms – namely, non-figurative art, as claimed by Fai Rodis: “The psychologists from the Earth predicted the appearance of absurd and inadequate forms of arts” (*Chas Byka*, 428-429).

The mechanism of making good and bad art is the ontological ground that holds Efremov's vision of history. He proclaims the society of the future will be free from any struggle but the symbolic one (art, science, love): “Conflict [in the future society] will move into the higher realm of inquiry, scientific and artistic creativity, and love” (Efremov 1963). At the same time (as mentioned above), for Efremov, beauty is the universal criteria of perfection, the flipside of anthropocentrism:

Beauty, for example, is not a conditional and not at all personal concept, but rather an absolute one. If we talk about the beauty of the human body, then it is the result of a

gigantic evolutionary process, in which everything unnecessary and superfluous died off and what was most promising and viable was improved. (Efremov 1962, 123)

However, the very concept of “proper” art is political by default, since it suggests censorship based upon a strict and universal hierarchy of values. Efremov made every “human of the future” into an artist: Dar Veter and Veda Kong dance in *Andromeda Nebula*; Veda Kong also practices erotic dances as a hobby in *The Bull's Hour*. Efremov’s work promoted the vision of an artist whose mission is to liberate others by providing an example of proper art. In addition, in his work, an intellectual takes responsibility to create the ideals that would embody beauty: “Purposeful lies also create their demons, distorting everything: the past, or rather, the idea of it, the present – in actions; and the future – as a result of these actions. Lies are the main scourge that corrodes humanity, honest aspirations, and bright dreams” (Efremov 1962, 123). If an intellectual unleashes poison that contaminates the social body, then a society is doomed to stagnate, as it does in *The Bull's Hour*. This leads to the suggestion that there is a binary: the “proper,” beautiful art (in Efremov’s eclectic vision) – and contemporary Western, avant-gardist, modernist, or simply, non-mimetic art. An unexpected connection with the Nazi concept of “degenerative art” might alert the reader, as it alerted Kaganskaia (Kaganskaia 2008, 17).

According to Efremov’s interpretation, modernist or avant-gardist art is reflective of the philosophy that views humans as destructive beings, dependent only on vitalist drives. He believes that such an approach characterizes the human as a subject with two main instincts: the instinct of defending one’s own area (private property) and the instinct of destroying “predators, tramps, and murderers”:

Even then, in the early sixties, it seemed necessary to me to put something in opposition to all such utopias, as well as to "anti-utopias." It was necessary to refute several main theses of modern Freudians, which, that is, theses, have become widespread in Western literature. They say: a person must have his own living space, and he instinctively guards it, a person is basically not a farmer, but a hunter, a vagabond, and a murderer, the instinct of destruction in a person is much stronger than the instinct of creation. With this I did not agree, with this I had to fight. This is how the idea of *The Bull's Hour* was born.

(Efremov 1989, 460)

If Efremov juxtaposed highly oversimplified Freudianism with his own approach to anthropology, *The Bull's Hour* would demonstrate this difference in characters who embody alternative narratives of individual and social growth. What representations of alterity in the novel undercut the potential of the person to be different?

The politics that the ruling classes practice in the anti-world of Tormans consist of genocide and elitism as the two main components of an anti-society. Efremov is critical of totalitarian socialism, which occurred not only in Maoist China but in Stalin's USSR. The genocide, repression, violence towards nature, and re-writing of history were features of both societies, and Efremov openly uses the term "totalitarian":

More than two thousand years ago, some nations on Earth believed that political programs, when applied to the economy by a totalitarian power, could change the course of history without prior preparation of the psychology of people. Unable to improve the fate of peoples, dogmatists greatly influenced the fate of individuals. (*Chas Byka*, 204)

In totalitarian societies, an attempt to change society without understanding psychology, a human dimension, leads to the failure of political projects. Totalitarianism, thus, produces anthropological degeneration. “Bad art” as an indicator of devolution, in Efremov’s vision, refers not only to the avant-garde, but also to Socialist Realism, as reflected in the sarcastic description of the Tormansian official art.

For Efremov, totalitarian is biopolitical, which means that it impacts basic human needs as a biological species, including food and procreation. The existence of the majority, i.e., lower classes, depends on this politics (see: Foucault’s concept of biopolitics in the Introduction). With the project of Tormans, Efremov links the regime of oligarchy with socialism: both sacrifice people as fuel so that a social machine can continue to function. Humans are treated as a resource that is to be burned to make society work.

In his polemics, with “destructive theories” of humanity, I argue that Efremov is allied with Erich Fromm, whose work merged Marxism, Freudianism, and his own anthropological theory of fascism. My hypothesis is based on the moment when one of the members of the Dark Flame crew, Kin Rukh, uses the “Western ancient philosopher” Erf Rom to argue for evolution as negative adaptation (the so-called Ariman’s Arrow):

And the higher, purer, nobler a person is, the greater the measure of suffering will be allotted to him by ‘generous’ nature and social being -- until the wisdom of people, united in titanic efforts, breaks off this game of blind elemental forces that has been going on for billions of years in giant general inferno planet. (*Chas Byka*, 80)

One may detect in the name of the astronaut Erf Rom the (slightly altered) name of a Frankfurt school thinker, a critic of totalitarianism: the German-born Erich Fromm, author of *Escape from Freedom* (1941). In this book, he examined the deviant interpretations of the concept of freedom in the history of Nazi Germany that led to collective choice of 'destructiveness' over 'creativity.' Fromm is discursively convergent from Efremov because of his use of dialectic logic and undermined the notion of historical determinism, which grounds Efremov's teleological historicism. Another possible reading of this reference may be found in an influential documentary film *Ordinary Fascism* (1965) about the rise of Nazism in Germany by a famous Soviet director Mikhail Romm. Similar to *The Bull's Hour*, the film triggered a scandal by an implicit reading of Stalinism as similar to Nazism.

While being critical of totalitarian biopolitics, Efremov has his own biopolitical agenda, creating in the novel images of ideal men – or rather, women. As Gomel points out:

Efremov's dystopia/utopia *The Hour of the Bull*, structured like Le Guin's *The Dispossessed* by the opposition of two societies, may claim the title of one of the most feminist sf texts ever written, if feminism means delineation of strong and memorable female characters. It is the men in the novel who suffer from feminine "invisibility," while the women, including the formidable commander of the space-faring expedition Fai Rodis, are both vivid and central to the plot. Romantic love is supplanted by erotic magnetism, which is represented with startling frankness and analyzed at equally startling length. But this magnetism, symbolized by the frequently invoked myth of Circe, is a product of biologically perfect femaleness, necessarily different from, and opposed to, biological maleness. (Gomel 2004, 365)

The future society is metonymically represented by Dark Flame, the team of superhumans who differ from the contemporary humans in both their bodies and psychology, so they cannot breed with inferior bodies. The superior people of the future are different from Efremov's contemporaries, who are inferior to the humans of the future. Humans of the future are not cold; they follow their corporeal instincts, complicating a simplistic distinction between the superhuman and the bull. The concept of the bull becomes redefined through novels, from questions about *who* is a bull to those who are concerned with spotting one bull who pretends to be a modern human.

Being a bull

As I previously said, the bull is a concept that Efremov first introduced in *Andromeda Nebula*, and that he turned into the key concept for *The Bull's Hour*. The bulls are people who are unable to restrain nature inside them, and the feeling of being unable to rationalize implies the existential state that Efremov calls "chaos." The bull is someone who fails to follow the laws, the logic, and the discipline of society. The bull is a social transgressor. As the example of Pur Hiss shows, the main antagonist in *Andromeda* causes destruction by assaulting a woman and by trying to attack his commander. Yes, he is weak in his attempts at social integration, and he is defeated by society. In *Andromeda Nebula*, Efremov describes a scene where the superhuman Dar Veter fights with the bull, which reminds readers of European medieval epics, and the scene of Tristan becoming a man in his fight with a forest boar (see: Sinka 1977). Less literally, the concept of the bull reappears in the episode with society's leader, Mwen Mas, the commander who committed a crime against the state by executing a dangerous and forbidden experiment,

causing the destruction of one of four towers required for intergalactic communication. Despite being banned from continuing his dangerous experiment, Mwen Mas concluded it anyway, and because of his actions, the other person who was complicit in the crime died. Mwen Mas goes through agonistic self-reflection, in which he defines himself as the bull:

Mwen Mass suddenly thought bitterly if he did not belong to the category of "bulls" -- people who have always caused difficulties to mankind. "Bull" is a strong and energetic, but completely ruthless to other people's suffering and experiences, a person who thinks only about satisfying his own needs. Suffering, strife and misfortune in the distant past of mankind have always been aggravated by precisely such people, who proclaimed themselves in various guises to be the only ones who know the truth, who considered themselves entitled to suppress all opinions that disagree with them, to eradicate other ways of thinking and living. Since then, mankind has avoided the slightest sign of absoluteness in opinions, desires and tastes and has become most afraid of "bulls". It was they, the "bulls", not thinking about the inviolable laws of the economy, about the future, they lived only in the present moment. But after all, even he, Mwen Mass, without having spent two years in the most responsible post, crushed an artificial satellite, created by the efforts of thousands of people and extraordinary tricks of engineering. He killed four capable scientists, each of whom could become Ren Boz.... Yes, and Ren Boz himself was barely saved. (*Tumannost' Andromedy*, 30)

Mwen Mas is the most critical character: he speaks of abuses of power, voluntarism, and accepts his guilt. He is also the most authoritative in terms of his organizational and ideological power.

In the court scene, the narrator and then the courtroom of other superhumans justify and defend

Mwen Mas from legal accusations, dismissing his internal self-criticism. The antihero turns into a hero.

Therefore, the question to solve is what actually makes Mwen Mas an exception to the definition of the bull? He did what he wanted, and his voluntarism has led to destruction and death. However, the victim of his experiment, the engineer Ross, knew the risk. The court that justifies Mwen Mas also neutralizes his only critic, Purr Hiss, an example of a true bull who hunted a woman in the jungle. Purr Hiss is a bull because his desire is sexual, i.e., self-serving, which is perhaps the main, obvious, difference between these two violators of the order.

This ambiguous logic of human/beast identification is exemplified by Erg Noor, who gives a series of erroneous commands, causing the crew of the Tantra to become temporarily trapped on a hostile planet. One of the crew members, a girl in love with Erg Noor, Niza, is left in a coma. Instead of minimizing the risks, Erg Noor commands an operation to capture one of the alien creatures, a huge medusa, and during the capture the ship's biologist is severely injured. Despite Mwen Mas' and Erg Noor's feelings of guilt and shame, they are justified by the majority in an open debate. The only criticism that *Andromeda Nebula* provides on Mwen Mas and Erg Noor comes from an unsympathetic character, the American Pur Hiss (which is a transcription of 'Pure' or 'Poor' Hiss, a name intended by the author to nullify his criticism of the metalevel). Hiss blames Erg Noor for letting Tantra fall into the gravity field of the hostile Iron Star [*Zheleznaiia Zvezda*]:

Astronomer Poor Hiss jumped up and waved his arms. His distorted face became unrecognizable, unlike a man of the Ring Age. Fear, self-pity and a thirst for revenge erased all traces of thought from the scientist's face.

-- He, it's him, - yelled Pur Hiss, pointing at Pel Lin, - stupid, stump, brainless worm!

Niza, who was standing nearby, moved away in disgust. Erg Hoop got up.

-- Condemnation of a comrade will not help anything. Gone are the days when mistakes could be intentional. (*Tumannost' Andromedy, 20*)

When Tantra returns, Pur Hiss reappears at the trial of Mwen Mas, where he accuses the chief engineer of vanity, a charge neutralized by Evda Naal in the same way that Erg Noor justified his mismanagement of the situation. The scene with Mwen Mas follows the same rhetoric, and it is a scene of his release from responsibility for a failed and lethal mistake. These mistakes, according to his society, cannot be blamed on a person in an organizational role. Some choices are necessary and risky, but they must be taken:

-- Immortal glory with the complete success of the experience - this is the mercenary background of your act. And cowardice - you were afraid that you would be denied permission to experience, therefore you acted hastily and secretly.

Mwen Mass smiled broadly, spread his arms like a child, and silently sat down. In the entire guise of Pur Hiss, an evil triumph appeared.

Evda Nal again asked for the floor.

- Pur Hiss's statement hastily and too viciously for a serious matter. His views on the secret motives of actions take us back to the time of the Dark Ages. Only people of the distant past could talk like that about some kind of immortal glory. (*Tumannost' Andromedy, 20*)

Purr Hiss is described as “archaic” and “impulsive” in his judgment by two collective leaders, while Mwen Mas's and Erg Noor's motivations are explained through the concepts of “dialectical logic” and “goal-oriented behavior” (*tselenapravlennost'*). These factors, I argue, function as a discursive legitimation for the progressor's abuse of power over the non-goal-oriented desires of Purr Hiss.

It seems that the bull is a collective image of the Stalinist leader that Efremov is afraid to attack directly, and therefore transfers his critique onto the stereotypical negative character of the American. Geller points out that the bull is the modern-day personality for Efremov:

The bull is a symbol of violence. In *Andromeda Nebula* it is a political symbol. People can also be "bulls": 'The suffering, strife and misfortune in the distant past of mankind have always been exacerbated by such people', who proclaimed themselves in various guises as the only knowledge of the truth, who considered themselves entitled to suppress all opinions that disagree with them, to root out other ways of thinking and living. 'Bulls' dominates in Efremov's modern life, 'in different guises' in different ways they usurp the right to truth, determine the only goal, and lead entire peoples to it, no matter what.

(Geller 1989, 93-94)

This definition of the bull fits what the social philosophers tried to formulate in relation to totalitarian societies, and Efremov's bull resonates with Theodor Adorno and Else Frenkel-Brunswik's concept of the authoritarian personality. Its subtype is the “Tough Guy” or “Rebel-psychopath”:

These individuals are the most "infantile" of all: they have thoroughly failed to "develop," have not been molded at all by civilization. They are "asocial." Destructive urges come to the fore in an overt, nonrationalized way. Bodily strength and toughness—also in the sense of being able to "take it"—are decisive. The borderline between them and the criminal is fluid. Their indulgence in persecution is crudely sadistic, directed against any helpless victim; it is unspecific and hardly colored by "prejudice." Here go the hoodlums and rowdies, plug-uglies, torturers, and all those who do the "dirty work" of a fascist movement. (Adorno and Frenkel-Brunswik et al. 1950, 763)

The theory of the bull was at Efremov's philosophical core, so it migrated to *The Bull's Hour* with no modifications. The bulls are dangerous for the progressive society because they succumb to the influences of nature, while bulls who use dialectical reasoning lead the society toward a planned future through voluntarism and mistakes. Not only leaders, but also the repressed masses can exemplify bulls. The latter are represented by the Tormasian class, *khzy*, who look like humans but have "animal psychology" [*zverinaia psikhologiya*], due to their unorganized life and early, state-inflicted death at the age of 21. By its very name, the novel puts Tormans and its inhabitants into the category of bulls, but with the assumption that "proper training and discipline" can transform an intelligent bull, like Tael, into a progressor – a concept I use anachronistically, borrowing it from the Strugatsky brothers' fiction.

Inbreeding and nurturing

Efremov insisted that extraterrestrial life could only be anthropomorphic; hence, any alterity, even if depicted as an alien form of life, was considered by the author to be an internal

alterity of the human, as known, in Efremov's anthropology that distinguished the superior humans from the inferior ones. Thus, bulls are humans but inferior. Efremov's world rejects the possible options, and in it we see the superhuman and the beast as two social categories, defining his stance on the human.

The notion that there is an inherent tendency in the human species to mix races until there is just one, meta-race, strengthens the no-alien epistemology of Efremov's novels. Although it is not always possible, as with Tael, there is also a chance for success, as with Vir Norin. The hybridization of human species from Earth and Tormans proves biologically that the human is universal, despite any differences, even in terms of the distinction between more and less developed mutants of the future and the present. Efremov uses the broad concept of "bioevolution" that predicated on "the fusion of two humanities" (*sliianie dvukh chelovechestv*) (*Chas Byka*, 383); he believes that when the fusion of species is challenged by biological limitations, science comes to the rescue, as it happened when mixing the human race with the race of the planet Epsilon Tukan: "bioevolution [was necessary, so] two most powerful institutes of both planets were working on solving the problem of infertility. (*Chas Byka*, 383)

Vir Norin, the Dark Flame's engineer, embodies the future *alterity* of the human species, the one who stays at Tormans to mingle with the locals, as he falls in love with the external other, the Tormasian female. He stays on the planet with a young native woman, building a prospective family. His name and profession hint at Norbert Wiener, the American scientist and the founder of cybernetics, the science of computer integration into the social fabric. Cybernetics and its founder were heavily demonized during Stalinism, and then evolved into a positive, even

superior science during the Thaw; the implied (contemporary) reader must have empathy toward this character. Although Vir Norin's marriage to a Tormasian woman is lauded by his peers, its outcome is uncertain.

Vir Norin's marriage is mirrored in the potential but unrealized relationship between the Tormasian Tael and the space traveler from Earth, Fai Rodis. Tael, a highly educated engineer who works for the Tormans government, is one of the most prominent representations of alterity among his "race." Tael doubts that his body is capable of transforming into a superior human, or that he can actually "join the race" of aliens. The Dark Flame crew disagrees and trains him to become one of them – a process that easily lends itself to the concept of hybridity, in accordance with postcolonial theory:

– Listen, Tael! Keep informing them, you know we have no secrets. We will take you to the "Dark Flame", cure you, give your body strength and mental training. You will comprehend how to control your body, feelings, subdue people, if necessary for your business. And you will come back here a different person. It only takes two or three months!

The Tormansian got up from the couch, shook his head decisively.

– No, Rodis, - he pronounced the earthly name unusually for Tormance's harsh language. He sounded melodious and gentle, – I cannot become perfectly healthy among the sick people of my planet. I can't because I know how much time and effort you have to spend on yourself in order to stay at this level. I didn't get the perfect body as a legacy from my ancestors. (*Chas Byka*, 390)

Although Tael rejects the earthlings' offer, Efremov leaves the door open. The "ideal body" may remain unachievable, but the differences between species can be smoothed by training, equally, of body and soul. Notably, the hybridization with Earthlings automatically suggests a position of superiority for humans from the planet Earth, with at least psychic power over the "natives." Here, the political aspect of hybridization becomes obvious: Dark Flame's crew wants to suggest an alternative source of power using Tael's dissent as a potential platform for socio-cultural and psychological alterity. He tries to join the progressors, and although this is a possibility, he is not biologically advanced enough to join them instantly. He is not equal.

The modality and, hence, the rhetoric of Fai Rodis, when she responds to Tael's confession of his love to her, sounds like "mentoring" to Tael. She explains their inequality not in a biological but in an existential way – by the impossibility of finding a place for her in Tael's life, and for him in hers. Thus, their life trajectories are incompatible by default, and despite all efforts toward hybridization, the gap between them cannot be closed:

Look through the eyes of the Earth, Tael. You have seen our life. Find me a place in yours, for love is only in our common path. Otherwise, it is only a physical passion, which is realized and passes away, having fulfilled its purpose. Its periods are not frequent, because they require such an upsurge of feelings and exertion of strength, which for an unequal partner is a mortal danger. For the engineer, the mentoring turns her explanation into an unbearable and offensive, although he perfectly understood that Fai Rodis spoke to him trustingly, directly and most importantly, as an equal. Engineer Tael

said goodbye and wandered to the exit, trying to carry himself with the independence and dignity of an earthling. (*Chas Byka*, 412)

In this scene, Tael tries to pretend to have the high qualities of an Earthling, but he is defeated by Fai Rodis's explanation of why they cannot be together. The reason is not her lack of sympathy or desire to return to Earth, but an epistemological alterity that makes their biological mixture impossible. In this implied anthropological theory, love betrays Efremov's strong statements on monolithic humanity. Thus, psychology is more important than body, and this helps readers to interpret Efremov "against the grain": his characters' self-identification is quite different to crypto-fascist or Nietzschean *Übermensch*. His characters are in the prison of their mass psychology. They are not in Italy and Germany, and they are locked in the context of their particular (Soviet) humanity – which is actually similar to Marxist determinism based upon economic conditions. Obviously, Marxism is a part of the biopower that Efremov had to address, due to ideological pressure, but, as I said above, I think Efremov's prose and its epistemology oppose Marxism in most ways. Thus, the dehumanization of human choice, and will overlap with Marxism but are not derivative of it.

Contradiction: Inferior (and Foreign) must become Universal

In *The Bull's Hour*, the concept of the bull turns into a prejudice against the Other as an individual of the "backward" society. For Efremov, individuality matters only as the component of a well-organized modern (in opposition to what Efremov calls "archaic") society. Engineer Grif Rift is the one to introduce the main idea of the story: life turns into an inferno if people are

moved by their individualistic motifs, without a rational understanding of humanity's collective goals; but people achieve full happiness if their individualities dissolve into collective goals and interests:

It takes a sociologist to look at the roots of a universe ruthless and murderous to life, flying through its black depths like a seagull in a night storm... All of us, like thirty thousand years ago, find ourselves narrow and small when we come face to face with the ruthlessness of the world.

— I don't. We are now much more dissolved into thousands of close spiritually close. Nothing seems to fear, not even the death, the disappearance without a trace of such a small drop as me. Although... excuse me, I'm only talking about myself. (*Chas Byka*, 256)¹¹

Efremov describes the fusion of the individual with the interests of the community – similar to totalitarian depersonalization but presented as a voluntary and even ecstatic process – as the process of secular culture absorbing religious feelings; as the combination of self-knowledge (*samopoznaniie*) with humanism (“the true faith in humanity”). If misguided, this feeling can turn into mysticism, the cult of a totalitarian leader, or other disruptive collective behavior models. However, instead of purging the religious feeling, “the opium for the masses,” the ship commander and its ideologist, Fai Rodis, propose to the people of Tormans/Hell to use the religious feeling to build their community of the future. Efremov contextualizes the paradox

¹¹ “Надо же социологу взглянуть на корни вселенной, беспощадной и убийственной для жизни, пролетающей в ее черных глубинах, как чайка в ночном урагане... Все мы, как и тридцать тысяч лет назад, оказываемся узкими и малыми, едва встретимся лицом к лицу с беспощадностью мира.

— Не верю. Теперь мы гораздо больше растворены в тысячах близких духовно людей. Кажется, что ничто не страшно, даже гибель, бесследное исчезновение такой маленькой капли, как я. Хотя... простите, я говорю только о себе.” (*Chas Byka* 1968, 256)

of the secular religion in the framework of cultural evolution, where one stage does not simply overturn the previous one but interacts with it, in different social configurations:

When a human has no support in society, when this person is not protected but only threatened and cannot rely on law and justice, then they are ripe for belief in the supernatural, which is their last refuge. At the end of the Era of the Dissociated World, mysticism intensified in the tyrannies of state capitalism and in the countries of pseudo-socialism. Deprived of education, the ignorant masses lost faith in all-powerful dictators and threw themselves into sectarianism and mysticism. The new turn of the historical spiral has returned most of humanity to the atheism of knowledge. To make an analogy, this is the most advantageous moment for a new, real faith in man to take root in the people of Tormans. (Efremov, *Chas Byka*, 122, Fai Rodis to the Tormasians)

The narrator in *The Bull's Hour* explains how humanity was united by such cultural universality: “Thus began the EMW, the Era of World Reunion, which consisted of centuries of Union of Nations, Different Languages, Struggle for Energy and Common Language” (*Chas Byka*, 502).

The universality of humans within “world reunification” (*mirovoe vossoedinenie*) should be read as the fusion of races and cultures, too, and has a humanistic impulse behind it; however, it also serves as a justification for inequality, based on essentialist epistemology which puts an “advanced” body at the core of its measurement of the humanity. This subsequently impacts the value of individual psychology and culture. The universalism of what represents the “progressive human,” in Efremov, is exposed as the de-humanization of those who are defined as inferiors – for example, as bulls, and although they are not scientifically “alien,” they are nonetheless conceptualized as such, rhetorically. Furthermore, in *The Bull's Hour*, Efremov not only defines

the Tormasians as “aliens,” their identity is based upon this concept: “Here (on Yan-Yah) paleontology proved that a man is an alien, and kept evidence of the criminal destruction of Tormanse’s former life by him, no matter what White Stars a man uses to cover his origin” (*Chas Byka*, 399).¹² Later, the narrator continues explaining that the emancipation of the Tormasians is the result of their contact with the progressors: “They imagined themselves to be free until, with the arrival of our expedition, they saw true freedom, renewed their faith in sound human nature and its vast possibilities, they who had hitherto only blindly dragged themselves behind the false promises of material success” (*Chas Byka*, 407).

Fai Rodis asserts that their invasion of the self-defined “alien” civilization intends to provide scientific analysis and to transform state politics in such a way that the aliens would “see” that they need to become like the Dark Flame’s crew. Sol’ Soon, one of the younger team members, describes this rhetoric in simpler terms: the superior knowledge of progressors might assist less-organized cultures in overcoming social and environmental challenges:

I remind you again and again: we cannot use force; we cannot come to them either as punishing or forgiving messengers of the higher world... If their misfortune - like the great majority of all misfortunes – is from ignorance, that is, blindness to knowledge, then let them see. And we shall be the doctors of their eyes. (*Chas Byka*, 400)

Comparisons between “backwardness” and physical sickness, between the invasion of the superior team of progressors and medical treatment, offer yet more metaphors of time alterity, thus one being inferior and in need of help of a superior, yet now in Foucauldian terms, as

¹² “Здесь (на Ян-Яхе) палеонтология доказывала, что человек – чужой пришелец, и хранила свидетельства преступного уничтожения им прежней жизни Торманса, какими бы Белыми Звёздами человек не прикрывал своё происхождение” (*The Bull’s Hour*, 1968, 399)

herding of the masses by a small group for private interests of the group. However, not everybody in the crew shares this approach, and the astronauts constantly challenge each other's views, exercising their dialogical rhetoric. For instance, Fai Rodis engages in an ideological dispute with the captain of the Dark Flame, the American Grif Rift, who expresses pessimism about social reforms:

For all our imperfections, for them we are the living embodiment of everything that a communist society brings to a person. If we run away, then the deaths of Tivisa, Thor and Gen will indeed be in vain. But if a group of people with knowledge, power and faith is formed here, then our mission is justified, even if we all perish.

- The legend of the seven righteous. But the whole planet is not a town, but us too little! The commander of the starship chuckled gloomily. (*Chas Byka*, 104)

Their very presence, and the example of their communist social organization, according to Fai Rodis, can bring about planetary change. This discussion reiterates Efremov's understanding of Wells' class war as a struggle between ignorance and knowledge. Unlike Wells, the Soviet SF writer believes, however, that, without a "progressive" push toward social reform, the Tormasians are unable to develop in the right direction.

Overall, Efremov's anthropology is troubling, particularly because of his academic affiliation and high status during the Thaw. As was shown previously, his anthropological concept of alterity can be characterized by two metaphorical categories, and he interprets both socially and "racially": progressive rational/scientific/technologically equipped humans and impulse-driven bulls. Global alterations have both cultural ("civilizational") and biological

origins, as “chaotic” civilizations prevent the body from reaching its optimal form (although exceptions are possible). Those emerging from “backward” cultures may have a hereditary disposition to exhibit more regressive behavior, but they also theoretically can become part of progressive humanity. Therefore, social institutions and strong, willing subjects are required to manage social development and establish order. At the same time, that order is maintained by the voluntaristic transgression of laws, ethics, and both technological and social limitations.

According to Gomel, Efremov’s science fiction exemplifies subjectivity as "the mode of the self" (Gomel 2014), which is fractured by the paradox of striving for the ideal (order), but never becoming one. Thus, Efremov’s protagonists are stuck in a paradoxical situation:

This aporia stems from the self-contradictory relationship between utopia and history. On the one hand, the Soviet utopia inscribes itself in history as its inevitable consummation. On the other hand, Communism, as imagined in Soviet sf, cancels history and abolishes change. Thus, the utopian subject is both dynamic and static, both a fluid potentiality and a set goal. A concomitant paradox has to do with so-called "socialist humanism," the official ideology of the regime, one of whose slogans was "Proud to be a man" ("*Chelovek -- eto zvuchit gordo*"). The Soviet New Man, as opposed to the Nazi Übermensch, was supposed to be both humdrum and sublime, both immeasurably better than, and the same as, the average citizen. This led to some strange contortions, for the utopian subject had to hold fast to his humanity while at the same time transcending it. (Gomel 2014, 454)

According to Gomel, we can see that the Soviet paradise is etched into history as its inevitable culmination (which is very Marxist indeed); however, its image contrasts with the everyday

substance of history. The image of the future shows a bifurcation of humanity into the Dark Flame and the Tormasians, so proper humanity is only a potential, as it was discussed in Anindita Banerjee's study of Soviet science fiction and in Jameson's view of science fiction as the place of utopia. Thus, it is a "non-existent" topos. (See: Introduction; Banerjee 2018, 5; Jameson 2004, 2)

In contrast, Efremov's science fiction depicts communism as eradicating history by embodying progressive humanity in the flesh. Arguably, the utopian subject is simultaneously dynamic and static, possessing both a fluid potential and a fixed objective (Gomel 2004, 358-359).

Transgressions and free will are a way to overcome the limitations of the human species, as Efremov demonstrates in *Andromeda Nebula*, *Cor Serpentis*, and *The Razor's Edge*. The same drive stands behind the desire to "accelerate history" and to "change the historical path," by those who are described as heroes. However, when applied to history, the bull's drive is reconceptualized by Efremov.

In the novel *The Bull's Hour*, the desire to take risks for the historical win, which I identify as the source of the "progressor complex" in the Strugatskys (a term by Lipovetsky 2014; or "the professional deformation" as named by the brothers themselves; see chapter 2), takes on the conventional traits of imperialist epistemology, justifying colonization by claiming one's superiority. In contact with alterity, which is externalized as a different race, Fai Rodis wants to take the risk and justify violation of their own code of behavior, as she repeatedly does in her polemics with the other crew members, Sol' and Grif Rift. Gomel's implication of aporia in Efremov's epistemology, and particularly in his anthropological theory, is correct, here, since

the universal order is defined by *breaking* the order. In *The Bull's Hour*, one of the astronauts, Chedi, arrives at the conclusion that institutions reminiscent of ideological police are needed to override the 'infernal suffering accumulated in genetic memory':

Now Chedi knew that, despite the inevitable increase in kindness, compassion and tenderness, from the sum of millions of years of infernal suffering accumulated in the gene memory, it is always possible for people with an archaic understanding of valor to appear, with a wild desire to power over people, to exalt themselves through humiliation. Others. One rabid dog can bite and endanger hundreds of people. So a person with a twisted psychology is able to cause terrible disasters in a good, unsuspecting environment, until the world, long forgotten about the former social dangers, will be able to isolate and transform him. That is why the organization of PNOI is so complicated – psychological supervision, working together with RTI – the lattice transformation of the individual – and continuously improved by the Council of Honor and Rights. A complete analogy with the OES – the protection of electronic communications of a spacecraft, only even more complicated, more diverse. (*Chas Byka, 476*)

Psychological control by psychological surveillance ('PNOI') serves as assurance for following the teleological agenda, and the "Grid-like Transformation of the Individual" ('RTI') "transforms" the individual psyche to fit into the dialectical logic of history. The word "*reshetchataia*" – grid-like – applied to the transformation of the individual, contains as its "internal form" the image of the prison cell and police violence. Biopolitical betterment of the "inferiors," here and everywhere in Efremov, requires repressive institutions to rule over nature

and move toward the anticipated future. Control over the course of history, and, according to Fai Rodis, over humanity's dialectical mitigations of the psyche, is the main achievement of progressive humanity:

Only now, not with her mind, but with her heart, Fai Rodis understood the immeasurable price paid by humanity on Earth for its communist present, for a way out of the inferno of nature. She understood in a new way the wisdom of the protective systems of society, she felt keenly that never, under any conditions, in the name of anything should not be allowed the slightest deviation to the former. (*Chas Byka*, 340)

Social struggle, described through a collective battle between the enlightened and history-change-oriented bulls on the one hand (who will be later defined as progressors), and the unenlightened and irrational bulls on the other, reflects the foundationally social and, most importantly, the *ethical inequality* within Efremov's anthropological concept. According to Efremov, the progressors' voluntarism is necessary when the human reaches the limit of body and intelligence, and when societies start to degrade. This idea is explicitly defended by Fai Rodis, who takes up the role of a dictator. Half of the crew supports her voluntarism, although it contradicts the space travelers' declared neutrality toward regressive societies. Besides defending half-truth as the only possible truth, Fai Rodis threatens to destroy a city or drug the population,¹³ if they are not allowed to land, and to practically invade Tormans. Her voluntarism, as Fai Rodis herself argues, remains within the limits of the healthy communist society they represent as

¹³ “— We've just hacked into your private network. We've seen something different to what you tell us now. Rodis was playing them around and continued: — That's why I ask you to eliminate their capital completely, the capital of autocratic oligarchy [samovlastnoi oligarkhii]. Alternatively, I ask you for permission to drug the planet and then do a personal selection.” (*Chas Byka*, 90)

progressors. Nonetheless, her behavior causes panic among the young members of the crew, who run away to their rooms. Two other young team members harshly oppose Fai Rodis's stooping to the tactics of an "underdeveloped" [*nizkorazvitoe*] society. A collective debate on Fai Rodis' voluntarism allows her to self-justify with dialectic logic: her action is contradictory, and therefore, it is correct. Fai Rodis' polemics soon persuades her young critics (particularly Sol' San who starts repeating Fai Rodis' maxims):

-- Opinions about my act were almost divided in two of you – maybe this is evidence of his correctness ... No need for an excuse, because I myself admit my guilt. Again, as thousands of times before, we are faced with the same question: intervention – non-interference in the development processes, or, as they said before, the fate of individuals, peoples, planets. Ready-made recipes imposed by force are criminal, but no less criminal is the cold-blooded observation of the suffering of millions of living beings, whether animals or people. A fanatic or a psychopath obsessed with his own greatness intervenes in everything without hesitation and conscience. In individual destinies, in the historical paths of peoples, killing right and left in the name of their idea, which in the vast majority of cases turns out to be the product of a narrow-minded mind and sick will of a paranoid person. Our world of triumphant communism has long ago put an end to suffering from mental errors and ignorance of power. (*Chas Byka*, 450)

In this self-justification, Fai Rodis appeals to the same logic as Erg Noor and Evda Naal in their polemics about abuses of power and responsibility. Voluntarism is justified on the premise that its perpetrator is a superior human, not a "sick paranoiac" or unintelligent ruler. Thus, the

sanction is given through a smart intervention of the progressors in less developed societies. In this instance, Fai Rodis explicitly states that her belonging to the progressive world serves as protection from the mistakes of the past.

For Efremov, violence is just

The context of the novel's reception as such is that it is hard to say what was so triggering about it. The KGB banned *The Bull's Hour*, thus confirming the anti-totalitarian power of its political allegories. Tormans reads as an allegory of the Chinese revolution (Chinese *lzhe-sotsializm* is directly mentioned in the novel, p. 78) and, possibly, of Stalinism (especially given the specific methods of torture described in the novel). Both allegories depicted communism as indistinguishable from an oligarchic clique, a political junta, exploiting its population by brutal biopolitical methods and enjoying opulent luxury and a privileged lifestyle. The novel also directly promoted an open resistance to the totalitarian government, similar to the dissident movement. There, engineer Tael sounds like a prophet and a military commander of a civil uprising against communist power. He is ready to lead a crusade inside his society:

People waited a long time for vengeance against their executioners. As the centuries passed, evil accumulated and the power of bad people grew. Then your society assumed the function of the divine retribution of Nemesis: "Vengeance is mine, and I will repay!" This swiftly eradicated cruelty and suffering. You cannot fathom how much human garbage we have amassed over many centuries of annihilating the best people, while petty opportunists, con artists, murderers, and oppressors have largely survived! We ought to be guided by this rather than blindly imitating you [earthlings]. When thousands of "serpent-

bearers” and their henchmen, the “lilac” executioners, begin to die clandestinely and dishonorably, high positions in the state will no longer attract scoundrels. We have learned a great deal from Rodis and all of you, but we must develop our own fighting techniques. On a long journey, we will rely on the stunning images of Earth and the formidable intellect of Vir Norin. (*Chas Byka*, 505)

Tael speaks of Tormasian bureaucracy in a language of revenge that comes from Greek mythology (*Nemesis*), as well as in Biblical language: “Vengeance is mine, I will repay” (*Mne otmschenie, i az vozdam*). Efremov is the master of such discursive mixtures, homogenizing a diversity of cultural experiences into a “universal” pattern. This tactic is crucial for the appropriation of others’ discourses without philosophical integration; the integration happens only on a linguistic level. For example, *The Razor’s Edge* (1962), a novel that Efremov wrote in between his major novels, mixes Buddhism, communism, and the doctrine of a fundamental inequality between “weak” and “strong” humans:

Our enemies say that the equal life of the weak is achieved at the expense of the strong, but this is the essence of justice in communism, just as it is at the top of Hinduism or the philosophy of pure Buddhism. This is what the strong are for— to help all people rise to a high level of life and knowledge. Do you see any contradiction here with the famous principle of yoga: “Protect the neighbor and the distant and help him to rise”? (*The Razor’s Edge*, 1963, 51)

It is little wonder that Efremov’s characters describe subversions of an anti-human regime, mixing the discourse of Marxism-Leninism with Christian rhetoric and idioms. Despite some

Marxist-like “dialectical logic,” there is nothing about class prerogative for engineers like Tael and Vir Norin. There is no class or cultural particularity of those who reform society, and change belongs to all spheres of culture, i.e., to religion, to the arts, and to science – or rather, it is an existential responsibility of an alternative anthropological type, represented by Earthmen or proto-progressors.

Is progressor a self-reflexive bull?

As critics of Efremov demonstrated (Kaganskaia in Agursky et al. 1974; Gomel 2000, 2004, 2012, 2014), his superhumans only pass as “New Soviet men” due to their formal affiliation with the communist Earth. In actuality, they impersonate the “race” of progressors. The inferior race is composed of “the bulls,” whose motivations are irrational and actions undisciplined. I argue that the bull and the progressor are similar in their will to power and transgression, albeit understood differently. In *The Bull’s Hour*, Dark Flame’s actions are reviewed by newer generations. Despite the fact that both progressive and “regressive” states of the universe can be in contact, *The Bull’s Hour* presents the colonial idea of the reformation of the “inferior” world by superior humans as an inadequate solution. For Efremov, the bull and the progressive human have so many conceptual parallels that the only logical conclusion is that the bull *is* the progressive human, minus social support and technological equipment. Without exception, bulls and future humans are both impetuous risk-takers, and the success of their actions is not the concern of the doer.

The concept of the bull transcends the purpose of fiction to become a metaphorical commentary on the social hierarchy between inferior and superior humans. The problem lies in the definition of the bull, because it is easily confused with the will-to-power characteristic of the Übermensch. The inferior humans violate social order, and due to their lack of self-reflexivity, they remain part of nature (which Efremov defines as Nihilo, “nothingness”). Societal stigmatization of some individuals as bulls, i.e., aggressive animals who are unable to control their behavior, is complicated by the quasi-Nietzschean narrative that suggests that only those who risk breaking social norms are true leaders.

Progressors are doctors and engineers entitled to rebuild a wrongly designed society: they are its last hope. Efremov does not offer a unified vision of intelligentsia, but the Dark Flame crew sees itself as a vehicle of higher culture rather than genocide. They are not philosophers, but an expedition to a remote and hostile environment, and their goal is to establish contact with an alien civilization. They believe that processes of education and distribution of subversive literature (samizdat) may abruptly intervene in the regular, cyclical time of the Tormans. They believe that without such an intervention, the Tormans society will collapse, following “the historical necessity.” They are ambassadors, who colonize by means of culture while they compete with the authoritarian regime that colonizes its population by violent biopolitics, relying on genocide and clandestine murders of society’s leaders.

In this way, the mechanism of contact between the Tormasians and Efremov’s superhuman progressors preserves the power position of the latter. The progressors of the Dark Flame, nevertheless, are not entirely free; their ship is damaged, and they depend on Tormans rulers’ will. However, they can locate the leaders of the opposition among the youth, and they

discover that their agenda coincides with the interests of Tormansian technological professionals. They are not sovereign enough to bring about the revolution on their own. The progressors are missionaries, who are driven by confidence in their superiority and their values. Their main tool is their understanding of who a human is, and their biopower is supposed to free the youth from slaughter.

“Anisotropic universe” as the Trope of Alterity

At the end of *The Bull's Hour*, as a gift to those readers who stayed long enough, Efremov speaks about a multilayered reality that renders the concept of human universality irrelevant. In the last scene at the school of the future, the whole narrative about the Dark Flame saving a foreign society appears to be contradicting the physics of the universe:

The young man talked about the discovery of the spiral structure of the universe, ...after which they were able to solve the problem of interstellar travel, of interstellar flight. Mathematicians knew about the bipolar structure of the world back in ERM, but the physicists of that time confused the issue with the naïve notion of antimatter. -- Think about it! -- exclaimed Kimi (a young spaceship member). They believed that changing the surface charge of a particle changes all properties of matter and turns the "normal" matter of our world into antimatter, a collision with which supposedly should cause complete annihilation of matter! (*Chas Byka*, 6)

Kimi explains new physics with the trope of matter annihilation which was popular among a group of authors, e.g. Mikhail Emtsev and Eremai Parnov. Efremov does not engage with this idea but turns it into an allegory. The anti-matter in Kimi's commentary is transformed into one

of the analogies to the world of suffering, “the anti-world”: “They [the children] gazed into the blackness of the night sky, unable to explain it, nor to understand that the real anti-world was right there, black and lightless, intangible to instruments tuned to the manifestation of our, the light world...” (*Chas Byka*, 6)

Efremov’s narrator does not further explain how he integrates the “bipolar” structure with the spiral one, nor how to imagine the form of such a world. The spiral for him seems to fit in with the trope of the symmetrical universe (matter and antimatter, bipolarity), in which the invisible and the non-empirical parts mirror the visible and experiential parts of scientific knowledge. The narrator, thus, does not assume that knowledge may exist without an experiential component. In this way, his scientific paradigm dismisses knowledge based on abstract ideas that do not represent particular objects, but only the relations between objects. The response of the teacher reveals Efremov’s reconsideration of historicism:

– Do not get excited, Kimi, - the teacher stopped the youth, - you are making a mistake, judging badly about the ancestors.... Is it hard to understand that an incorrect or inaccurate aspect of a phenomenon will be a mistake only as a result of an unscrupulous or stupidly oriented study? All the other "mistakes" of the predecessors depend on the general level at which science was in their time. (*Chas Byka*, 505)

The teacher’s response is one of many didactic moments in the novel. Efremov’s narrator constantly stresses that humanity and the universe are all one body, moving toward complexity. Evolution works toward greater complexity, but also greater order. Therefore, there are levels of organization in matter and social collectives. Kimi’s teacher claims that the scientific basis for

the condensed matter is possible, which means a man-created new type of matter, because scientists started considering matter as movement in space-time and are able to manipulate it (the allegory of the nuclear power): "Try to imagine for a moment that, while discovering hundreds of elementary particles in the microcosm, they did not yet know that all these are just different aspects of motion at different levels of the anisotropic structure of space and time." (*Chas Byka*, 505)

A similar model of the universe appears handy for the explanation of social asymmetry. Through the concept of the anisotropic universe or the "asymmetry of the helicoidal shift," the world is imagined differently and the limits of human intervention are discovered. The main mistake was not knowing that there are different space-time continuums that obey different laws – physical, social, psychological, symbolic. The historical perspective of the Teacher puts him above the theories of the 20th century, and through him, Efremov points out at the flaws in his own philosophy. The teacher undermines the balance in the progressors' project, through the discourse of the asymmetrical structure of the space-time continuum. Twenty-one years later, in their last progressor novel, *The Time Wanderers*, the Strugatskys would use the same symbol to show a paradigmatic shift, allowing a new generation of scientists to solve a puzzle that the previous generation could not, because of their "deep faith" in order: "The matter, however, turned out to be quite simple, and only the eternal conviction of mankind in the isotropy of the Universe prevented Dr. Mobius from discovering what I managed to find." (Strugatskys, *Volny* 1989, 60). Efremov did not explain his idea of the anisotropic (i.e., asymmetrical and non-

related) structure of the Universe, nor was it discussed in Soviet school books on physics back in 1968.¹⁴

Efremov does that reframing by pointing to the “anisotropic” and “asymmetrical structure of the Universe” as an alternative understanding of diversity. *The Bull's Hour* proposes a novel concept of the “anisotropic”: multilayered matter that can be connected to concepts such as the Multiverse (introduced to Soviet science fiction by Stanisław Lem; see: Chapter 3), or to a more conventional image of parallel realities, co-existing at the same time. Whatever the conceptual work applied to the idea of an anisotropic level of matter, it can be seen as a challenge to Soviet science. Therefore, I believe it is important to see it as a science-fictional complication of Efremov’s epistemology, in which a human subject can turn into a wrong-doing bull, due to shortcomings in their knowledge. However, this idea is not well articulated, and appears only at the end of the book, framing the heroic epic of the Dark Flame colonizing the Tormans with their enlightenment ideas.

Conclusion

Efremov portrayed nature as chaos and invented his science-fictional alterity of the bull character to socially categorize anti-intellectual “doers” as inferior. I argued that his criteria to distinguish bulls from “proper” humans were inconsistent, and the judgment was in the hands of

¹⁴ It was not until later in 1975 that famous physicist Yakov Zel’dovich made the asymmetrical structure of the universe a mainstream idea in Soviet physics (Zel’dovich and Novikov 1975), thus, constituting a great Einsteinian turn that helped to deconstruct the captivating Soviet vision of the future. Zeldovitch’s co-author, cosmologist Igor Novikov’s (1935-), had traveled the same trajectory as Efremov in the 1960s. His “principle of self-consistency” or “the law of conservation of history,” which defended Soviet traditional science, was out of place by 1975. At that point, the ex-historicist Novikov turned to a relativist (or non-determinist) understanding of history, as had been suggested by Popper in 1944.

a collective. The end result of the evolution from a regular man of the present toward a superhuman of the future is the crew of the Dark Flame, the progressors from Earth, in the midst of the “backward” Tormansian civilization.

I interpret his insistence on the universal superhuman as the only *image* of a future human foremost as criticism of contemporary society, where such people do not exist. In the novels of the Strugatskys, the narrative of a superhuman failing to reform a fascist society (or any other type of regressive society) seems to be the most common rhetorical device in their novels (see next chapter). I think that the same narrative can be found in Efremov, although his interpretations would vary. The progressors are troubled characters. That would mean that the *Übermensch* is not an idealized image of a crypto-fascist, as Kaganskaia and Gomel suggest. Rather, the problem is with the distinction between a hero and a bull, who, according to Efremov’s anthropology, share the eagerness to follow their transgressive will to power instead of respecting social norms and taboos. If so, the bull is a science-fictional fantasy about the man who violates societal norms for personal joy. The bull is characterized by the absence of reflexivity, a pre-stage of development from the perspective of three thousand years from the present. Efremov’s discourse on alterity is politically radical because it distinguishes “beasts” from “men.” His bulls reflect an authoritarian – to oversimplify, “Stalinist” – approach to society and nature, based upon coercion and violence, which is why he indicates as bulls not only “inferior” aliens but also “voluntaristic” superhuman Eartlings.

Yet who are humans, exactly? Are there any in his science-fictional world?

The claims of universality for the human and for human methods contradict other words and actions by the characters. Fai Rodis claims that the superior human would not lie, before uttering a counter-factual statement that she herself realizes:

– When most people are aware that every phenomenon is two-sided, that truth has two faces and depends on a changing life....

– So there is no the absolute truth?

– The pursuit of the absolute is one of man’s gravest mistakes. You get one-sidedness, that is, half-truth, and it is worse than a straight lie, which will deceive a smaller number of people and is not terrible for a person who knows.

– And you always stick to this rule? Invariably?

– Indeed, I do! - Rodis answered firmly, and was at once embarrassed as she remembered the simulation on the starship.

– When most people are aware that every phenomenon is two-sided, that truth has two faces and depends on a changing life...

– So there is no the absolute truth? (*Chas Byka*, 45)

The “fundamental truth” of the superior human of the future is inaccessible, and even questioned by the teacher of the future. According to him, there can be no universal criteria that define human evolution, but only a particular form of human in a particular environment. Their intense experiences of hostility between humans of different times and cultures serve as the catalyst for the progressors’ self-sacrifice for the sake of the Tormansians’ future. The sacrifice did not

promise any immediate “miracle”; it is an investment in the ties between humans – ties that exist “despite the unmeasurable distances in time and space, and unite humanity in one big family.”¹⁵

¹⁵ Andrei Siniavskii argued that the feeling of an individual family was subdued by the limitless community of humanity in Socialist Realism: “This feat, performed for the sake of ‘those who are not yet; who will come many years later,’ arouses a feeling that can be called a feeling of comradeship, a sense of camaraderie, with the clarification, however, that our neighbor here turns out to be a man of both the thirtieth and fortieth centuries . This is a baton that we pass on to our children, and children to our grandchildren, and which stretches across centuries, into immeasurable distances of time and space, connecting humanity into one close family.” (Siniavskii 1960, 51)

Chapter 2:

Arkady and Boris Strugatskys: Superior Humans (Progressors) and the Forest

Arkady and Boris Strugatsky (hereafter, the Strugatskys) were Soviet-Russian science-fiction writers known for their satirical and philosophical works in the genre of socio-psychological SF, identified as such as early as 1964.¹⁶ Both were born and died in Saint Petersburg, Russia. Arkady died right after the collapse of the USSR, on October 12, 1991, and Boris on November 19, 2012, after the failed anti-Putin public manifestations of November 2011 – May 2012, which were repressed revealing the ugly face of the new political regime. Their characters became allegorical for many politicians. The character of progressor has become part of the Russian language. This is so, I argue, because the Strugatskys intended their writings to be a provocation and disturbance of episteme.

A few of the major texts discussed here are *Noon 22nd Century* (*Polden': XXII vek*, 1967; English translation in 1978), *Hard to Be a God* (*Trudno byt' bogom*, 1964; English translation in 1973), and *The Snail on the Slope* (*Ulitka na sklone* – written and partially published in 1966, fully published in 1980; English translations in 1980 and 2018). However, my main focus will be on the so-called Kammerer trilogy, united by the character Maxim Kammerer. The Kammerer works are as follows: *Inhabited Island* (*Obitaemyi ostrov*, 1969, translated into English as *Prisoners of Power* in 1977 and as *Inhabited Island* in 2020); *The Beetle in the Anthill* (*Zhuk v muraveinike*, 1979, the English translation appeared in 1980); and *The Time Wanderers* (*Volny*

¹⁶ SF writer and journalist Saporin (1964, 79) was the first one to analyze the Strugatskys' works as reflexive of “technical, social, psychological, and ethical” problems of Soviet communism.

gasiat veter, 1986, the English translation appearing in 1987). These novels are part of utopian World of the Noon, the world they described as sympathetic but then as falling apart, while showing dystopian aspects of the society that is otherwise depicted as perfect, thus creating a dissonance: a dystopia is located within the larger utopian project.

The work of the Strugatskys evolved from their early commitment to communist utopia. Their early books, such as *Strana bagrovykh tuch* (*The Land of Crimson Clouds*, 1959), *Put' na Amalteiu* (*The Way to Amalthea*, 1960), and *Noon: 22nd Century*, gained them mainstream fame in the USSR, and they have been regularly mentioned as defining examples of Soviet science fiction. According to Boris Strugatsky's admission, they never considered utopia to be alien to their creative nature (Strugatskii 1999, 2).

In the World of Noon, all fundamental social and many scientific problems have long since been solved. The problem of a humanoid android robot is solved, the problem of contact with other civilizations, the problem of education, of course, is solved as well. The human became careless. They seem to have lost their instinct for self-preservation. The Playing Man came to existence. [...] Everything that needs to be done is done automatically, billions of smart machines are doing it, and billions of people are doing only what they like to do. As we now play chess, tic-tac-toe or volleyball, so they are engaged in science, research, space flights, diving into the depths. (Strugatskii 1999, 8)

By the mid-1960s, the Strugatskys outgrew their utopian period. During the Thaw, they increasingly encountered censorship obstacles on a regular basis. Some of the Strugatskys' works were deemed so controversial and potentially subversive to the Soviet doctrine that they were not only banned, but also caused problems for their publishers, as was the case with *The Snail on the*

Slope. It was published only partially in 1966 in the Siberian magazine *Baikal*, and its publication became one of the reasons for the magazine's closure. *The Snail on the Slope* was published in its entirety only in 1972 by the "tamizdat" publishing house Posev, in Frankfurt.

However, the Kammerer trilogy did not cause much trouble with censors. *Inhabited Island* was published with minimal trouble (see Simon 2004). Only *The Beetle in the Anthill* created (minor) problems with the censors. As Boris Strugatsky recalled:

Despite the general tightening of the ideological climate associated with the Czechoslovakian disgrace; despite the sacred horror that seized the obediently trembling ideological leaders; despite the fact that it was precisely at this time that several articles were ripe and burst at once, scourge of the Strugatskys' fiction – despite all this, the novel managed to be published, and at the cost of small, in fact minimal, losses. (*Afterword*, 1986, 90)

The third novel, *The Time Wanderers*, was published in full, without any serious conflicts with censorship, in an extremely popular magazine *Znanie—sila* in 1985-86, immediately before Perestroika. As a book, *The Time Wanderers*, was initially published together with the "updated" (i.e., restored) version of *The Snail on the Slope*.

In this chapter, I investigate the discourse that the Strugatskys built around their recurring character that they started calling the "progressor," a term that they introduced but which constantly changed definitions and representations. Progressors are key to the Strugatskys' understanding of alterity since the profession of these characters requires them to deal with alien civilizations – either as observers or as secret agents of change. In this chapter, I follow the

transformations of the alterity concept in the Strugatskys' work, along with the evolution of their concept of the progressor and their attitudes toward their mission, which, as critics have argued (Lipovetsky 2015), is reflective of the writers' understating of Soviet intelligentsia and its social roles vis-à-vis the "masses."

I argued earlier that Efremov's concept of alterity was an imperialist fantasy of colonization and assimilation of the indigenous. In Efremov's novels, the major vital force driving humans to explore outer space is a sense of superiority, due to a superior body and superior knowledge of the protagonists, who can be best called the proto-progressors. In the Strugatskys' novels, the idea of the *Übermensch* transforms into a profession: the progressor is a professional agent in the Noon Universe, on worlds that are far less advanced than the communist Earth of the future. The progressor who is native to the Earth tries to limit his interference with his host planets' affairs by non-violent support to those in need. The Strugatskys brought this character to the point that the progressor became a criminal (at least from a moral standpoint, as in *The Beetle in the Anthill*), only to put him into the position of a confused politician caught red-handed in their manipulations of people's minds (*Time Wanderers*).

Progressor enters the stage (and gets shamed)

In my analysis of the Strugatskys, I primarily examine the tropes of alterity as they pertain to the progressors in *Time Wanderers*. These tropes are interconnected with the Kammerer Trilogy, to which they belong, as well as *Hard to be a God* and *The Snail on the*

Slope, due to their shared tropes of alterity, specifically the presence of an Other that surpasses comprehension and rational schemes of action. The first progressor (not yet denoted as such) is introduced in the Strugatsky brothers' novel *The Escape Attempt* in 1962. This character represents Soviet interventionism, but with a curious and non-judgmental attitude. The Strugatskys themselves had the belief that the true essence of their work commenced precisely with this novel:

This is our inaugural endeavor, in which we explored the concept of progressors, albeit without the explicit use of the term. The central inquiry revolved around whether an advanced civilization should intervene in the affairs of a less developed civilization, even when driven by the most virtuous motives. The question, at that time, was not insignificant, as any politically astute citizen of the USSR (including the Strugatskys, of course) firmly believed that intervention was not only necessary but imperative. They often cited the example of Mongolia, which, with the selfless assistance of the USSR, swiftly transitioned from feudalism to socialism (Strugatsky, 1999, 32).

The political notion of the progressor persisted in *Hard to be a God*, where the progressor represents a social and cultural alterity that is initially seen as superiority over a quasi-medieval culture that is regressive (so like Mongolia for Soviet propaganda).

Over the course of three novels in the Kammerer trilogy, the central character progressor has a significant change in his behavior. He evolves from being a traveler who accidentally finds himself in the alien world to becoming a practical KGB officer, although he lacks the intelligence required to handle challenging assignments. In the Strugatskys' universe, persons who are progressors, namely those affiliated with KOMKON or its successor KOMKON-2, are

universally distinguished by their passionate rhetoric, their unwavering commitment to defend an idea even at the cost of their own lives, and their subsequent bewilderment when confronted with the practical realities of that idea.

The novel *Time Wanderers* by the Strugatskys explores the establishment of a dystopian society by the progressors, who have introduced a surgical technique to impede specific areas of brain development in infants before their birth (“fukamization”). However, some persons showed a natural aversion to this procedure; and the government made changes to the law, hinting to the beginning of political reform in the USSR. The KOMKON-2 officer Komov addresses the challenges in its dystopian society caused by the alterity, an incomprehensible and more powerful force, which has resulted in a substantial decline in its population.

The invasion of the progressor into the human body is intended to make individuals more adaptable to unexpected alien conditions of far-away planets. This highlights the repeating theme of the scalpel in the novel *The Snail on the Slope*, which I analyze in this chapter. The scalpel symbolizes the progressor civilization's aggression and futility in trying to conquer a far better and mysterious alterity. In addition to the aforementioned trope, the Strugatskys also mention the concept of "vaccination in the village" as a form of stupefaction, likely referring to opioids or other drugs. In the novel, the character Kandid experiences a buzzing sensation in his head and struggles to think clearly, speculating that this may be due to the vaccinations administered in the village when people engage in meaningless conversations. The notion of alterity is apparent in specific individuals, referred to as xenophiles, as well as in other communities, inside this social dystopia. Through self-reflection, the individual who seeks advancement may only form a hostile perception when faced with experiencing otherness. Furthermore, the anticipation that the Other

will participate in comparable endeavors as the progressor in other places leads to a public acknowledgement of alterity as the source of danger, but without comprehension of its essence.

The utopian aspect of a progressor's identity sets up the parallax, or the shift in vision of this character. Each progressor attempts to bring improvements to a new environment as an outsider; they represent the superior Other. This is turned into a joke in the Strugatskys' later work, where progressors from another planet are portrayed as monstrous beings, referred to as "mokretsy" or "the wet ones," in the novel *Gadkie lebedi (Ugly Swans)* and Wanderers in the Kammerer trilogy. This is a stark contrast to their own perception of being superior beings in the place they are "progressing."

The appearance of the primary adversary, Rudolf Sikorski, undergoes a change throughout the course of the trilogy, which is reflective of the new perspectives on progressorship in critical light. Initially, in the first book, *Inhabited Island*, he is a fair-minded but forceful ambassador of an extraterrestrial culture in the degenerative society. However, as the trilogy unfolds, the progressors develop into an irrational and aggressive KGB-like officers on Earth.

In the second book of the trilogy, *Beetle in the Anthill*, Rudol Sikorski, regards alterity as a menace to society and interprets it as either a foe or a foreign agent, leading to the act of eliminating the Other. In the third novel, *Time Wanders*, the characters known as the progressors, such as Komov and Kammerer, possess a profound sense of curiosity and relentlessly seek knowledge and solutions. The third novels offer a novel viewpoint on the progressor, depicting it as the KOMKOM attempts to pretend to be different while actually remains the same KGB-like institution.

In *Time Wanderers*, progressorship is depicted as more than a mere philosophy. It is, in fact, a biopolitical endeavor that entails substantial modification of the brain through a procedure performed at the prenatal stage. The progressor becomes increasingly alienated, not only in foreign worlds, but in the entire world. Toivo Glumov, a son of progressors who later became a progressor himself defects for the Wanderer civilization in the final book of the Kammerer trilogy. The progressors use the term "ludeny" as a social insult to refer to the representatives of the advanced civilization of Wanderers (*stranniki*) implying that they are inhuman. This term is an anagram of "neludi," which means nonhumans, but it also has connotations of "homo ludens," as described by Kammerer. The word "luden" is ambiguous due to its positive definitions in the Dutch sociologist Johan Huizinga's book *Homo Ludens* (1938) that studied the importance of play for society and culture (and referenced in the novel, *Volny*, 640). This ambiguity allows the reader to explore other perspectives before aligning with either one.

Which tropes represent alterity in the World of the Noon and how can they be interpreted? *Time Wanderers* indicates that Toivo's symptoms can be ascribed to an allergic reaction resulting from the blockage of the hypothalamus. His mother, Maia Glumova, may have prevented him from having "fukamization" since she saw how progressors mistreated her ex-progressor spouse, Lev Abalkin (killed by Sikorski in *The Beetle in the Anthill*), when she was pregnant. Nevertheless, it would be deemed illegal due to the fact that Toivi was born 7 years prior to the legalization of women's right to terminate the treatment.. Toivo exhibits either an allergic reaction or the ability to restrain his excitement for progressivism, much like his father, who first shown immense enthusiasm but eventually became disagreeable. In my perspective, this also coincides with the Strugatskys' examination of their Jewish ancestry, which they did not

directly acknowledge in their science-fictional writings. Nevertheless, their association with Jewish immigrants in the 1970s and the Jewish community in the USSR was of great importance, as both groups experienced comparable bigotry in the post-WWII period. A Wanderer can be interpreted as a Jewish individual who is perceived as a menace to society.

Toivo Glumov is an individual who transitioned from being a dedicated progressor to becoming a Wanderer. The reason for his ability to make this transition is not specified. He evokes a sense of melancholy, as the name "toivo" represents "that" and "glum" represents "sadness." Logovenko, the spokesperson of the Wanderers, informs Komov, the representative of the progressors, that this shift does not necessitate any biological intervention. Logovenko explicitly states, "We are not humans. We are ludens. Avoid committing this error. We are not a product of human revolutions. We have emerged due to humanity's attainment of a specific degree of socio-technological order" (*Volny*, 620).

Therefore, starting from the mid-1960s, the Strugatskys' perception of the progressor has been evolving. Specifically, characters who were familiar with alien cultures underwent a significant shift in their portrayal. Initially depicted as superheroes with enhanced physical abilities and a deep understanding of social democratization (Rumata), they later resemble suspicious bureaucrats (Rudolf Sikorski), which evoke paranoia in their subordinates. It is evident that the Strugatskys' characters are not perfect, yet they possess great strength due to technical progress. Their cyber-monstrosity is linked to the concept of *Übermensch*, representing the embodiment of progress and created through the forces of modernity.

The Strugatskys in literary scholarship and beyond

The most accurate reading of the World of the Noon, and the Kammerer trilogy within that world was proposed right after the Strugatskys' publication of the last book in the trilogy. In 1986, a literary critic Aleksander Shalганov in the article "Rather Earthly Concerns" (Vpolne zemnye zaboty) gave a balanced overview of how the Strugatskys criticize the progressors and propose their alternative of the *ludens*. Supposedly, the play is in how the alternative civilization of the Wanderers uses names for camouflaging their true origin and agenda. They try to win over the bodies that were claimed by the progressorship. Then, the definitions given to *ludens* by the progressors exposes how much the latter are hostile towards different other. The main feature of this new species, as Shalганov points out, is that despite their "biosocial and biotechnological progress" (as described in *Time Wanderers*), they do not intervene in other civilizations, and only by this (non) action are they better than the progressors. They are the "new Progressors," the new masters to those who considered themselves the masters to the others:

In fact, one of the variants of "progressorship" has already been tried. The noble tasks of Anton-Rumata, who saved the best people of the duchy from under the sword, are sadly ironically parodied by the new Progressors [the *ludens*], whose mysterious experiments are designed to divide humanity into "invited and chosen". Trying to take on the role of the new prophets, the *ludens* lead their followers only to the sad realm of shadows.

What is the main thing in humans? What should society strive for when walking the path of "biosocial and biotechnological progress"? It would seem that *ludens* have unseen and unknown possibilities, they are not inferior to the mighty Wanderers, yes. They are the

legendary Wanderers of the Cosmos - the whole universe lies at their feet. What else is there? "Humanity, – says Athos-Sidorov. – This is serious." (Shalganov 1986, 4)

Shalganov pointed out that no form of progressorship would work, even with the ability to impact the body and society with technology, making it into "biotechnology." Yet, biotechnology – as a recently new opportunity for science that can impact humanity in terms of generational mutations – retains the mystery of the unknown, which may one day become comprehensible. Shalganov's reading, although quite right in other aspects, here is in contradiction with what The Strugatskys actually implied, as I will show below.

Boris Strugatsky explained that the progressor is someone trying to change the world, because the progressors want to do it, and whatever others think or feel would evade the progressor's attention. They are progress-maniacs, as there exist graphomaniacs. A desire to conquer nature and humanity is the key problem for progressors.

Strugatskys [*Boris's reference to their collective work*] wrote many times that nothing can be changed. That there are, or will be, people who feel wounded, sick, if they don't make attempts to change the world. And they try, knowing that their attempts are doomed to failure. They are sure that they will get nothing but bumps and bruises from these attempts. But they try, because this desire is higher and stronger than themselves. That is what progressors are all about. And [progressors] are not at all glib revolutionaries who, with an iron hand, lead nations from one state to another. (Strugatsky 1999)

Overall, the key examples of the progressor as a type are Anton (whose other name is Rumata) from *Hard to be a God* and Rudolf Sikorski from the Kammerer Trilogy. These two

characters, at first glance, appear different. Rumata is a hero-type. He is a human working in a hostile environment, as a foreign researcher “in the field.” The institute, for which he works, tries to check the theory of development by reforming the planet. Yet the theory is wrong. Rumata fails to accomplish the mission. In the process, he uses excessive violence and loses sanity. In *The Beetle in the Anthil*, Rudolf Sikorski is quite similar in terms of this characteristic too he has a wrong theory, he is against revolutionary violence, but he actually uses excessive violence and turns into a villain. These two characters, despite presenting themselves as outstanding scientists, do not control anything, and especially themselves. This applies to any progressor despite the drastic change in readers’ perception of Rumata as a positive but doomed character and Sikorski as a superior progressor (but only in the *Inhabited Island* and *The Beetle in the Anthill*) who turns villain and representative of inferior civilization.

The definition of the progressor that Shalghanov points to and that Boris Strugatsky confirmed is one of the progressor as an irrational actor, and this is where we may connect the progressor to the image of the bull in Efremov. Boris Strugatsky specifically claims that, similar to Efremov’s bull, the progressor is the regular human of modernity in different circumstances, and so is as inferior to the human of the future as were the superior humans in Efremov:

One can find anything in Russian literature. However, we don’t have any supermen.

Maxim Kammerer is a progressor, and it means that he is an ordinary man of his time.

With my brother, we always worked on the H.G. Wells principle: fiction is literature about an ordinary man in extraordinary circumstances. (Strugatsky 1999)

I will return to these dual images of the bull and the progressor, but fully addressing them requires further context from the scholarship.

Two dominant but contradicting trends in critical readings of the progressor character began with Perestroika in 1989 and has continued since. One approach has been to glorify the progressor as a reformer of an archaic society, and within the group of scholars who shared this optimistic view of progressor were those who approve revolutionary violence, such as the mass uprising in *Inhabited Island* (Fomin 1989; Radzikhovskii 2001 and 2009; Novodvorskaia 2012). There were also those scholars who focused on the literary works that are saturated with imperialist dreams of colonizing the other, imagined through the images of inferiority: as “archaic” and “regressive” (Bondarchuk 2008; Bykov 2009; Kleandrov 2021). These particular interpretations mostly come from outside of *literary* scholarship, but have become a part of the literary debate.

The other interpretive approach to the progressor points to the mixture of contradictory ideas: both totalitarian and liberal. Within this group of scholars, the general understanding of progressor is that it was the Strugatskys’ critical term to conceptualize the enthusiasm of a person who takes the position of the progressor only to get to the resources and fulfill one’s personal, irrational desires. This camp of critics stands with the Strugatskys’ intent to show progressor as a “simple person” who is unable to match their efforts with their declared high goals. The true essence of progressors, and those who associated themselves with these characters, are totalitarians speaking and acting in favor of liberties. These critics consistently use the concept of “paradox” to describe the progressor’s self-understanding as progressive but resorting to violence, as some scholars pointed about the progressor’s tactic for success (Orlov 1989; Genis 2002 and 2011; Amusin 2005 and 2013; Rozov 2009, 137; Lipovetsky 2010 and 2018;

Cherniachova 2010, 2011, and 2012; Fishman 2013; Popov 2014; Neklessa 2014; Fofanov 2016; Kobylin 2021).

It is important for this reading of the progressor as an ambivalent character to stand against various interpretations of the progressor that cannot co-exist in one definition. A good example would be the 1989 debate between the head of the Soviet Film Science Academy Valerii Fomin and the Head of Film Production committee, Dmitrii Orlov, who rejected Arkady Strugatsky's screenplay based on their novella *Paren' iz preispodnei* (The kid from hell, 1974) about an off-beat world similar to the one in the *Inhabited Island*. The committee rejected the adaptations of the script, then titled *The Fighting Cat Returns to Hell* (*Boitsovyi kot vozvrashchaetsia v preispodniuiu*, 1973) because it was about "exporting violence":

Thus, a false concept of "exporting the revolution," the idea that it is permissible for "earthlings" to interfere in the internal affairs of alien inhabitants, remains unresolved in the scenario. This false concept is now confirmed in the script by the motive of the "progressors" to save the cultural values of Giganda, its outstanding scientists. The episode with the "armored master" looks ambiguous, where the "progressors" are not completely cleared of the suspicion of espionage. The very violent nature of reeducating Gaius, keeping him on Earth against his will, is also perceived as a kind of "export of ideas. However, it is not clear what ideas Gaius finally perceived from the "progressors", what he learned from them, what conscious goals he returned to his homeland with.

(Orlov 1989 via Fomin 1989)

This official report of the committee, signed by Orlov, also mentioned "pacifism" as not necessarily the only option for the progressors, but rather the option that they can accept only

post-factum: they simply lose control and power, and that is the end of their impact. As I will show further, this was a common reading of the choice between revolutionary violence or non-violent evolution, and Orlov did not mind the rebel uprising led by the locals in the script: “The conventions of the fantasy genre should not prevent a clear definition in the scenario of the class balance of power on Gigand. It should be clarified from this point of view what war is about, and who is at war with whom. Without this, the anti-war theme in the work could turn into pacifism” (Orlov 1989 via Fomin 1989). This perspective is well-informed, since the villain Rudolf Sikorski indeed uses pacifism to deflect young Maxim Kammerer from supporting the rebel uprising. This critical reading of the progressor challenges the “science” (episteme) of the progressor, who usually finds persuasive arguments for using violence or coercive power to reform societies. There is such character in the works of all writers discussed in this dissertation; albeit each of these writes has a different perspective on this type of the progressor.

In his polemical article “Everything that is not allowed is banned,” Valerii Fomin opposed such logic with arguments that embody a non-reflective, colonial perspective on the concept of progressor. Differences in interpretation of the progressor are not about semantics, but about connotations: this means that what is said (performed), the logic of it, is altered by the rhetoric that changes the perception of such logic, as in satire, for instance. Such rhetoric exposes that the speaker’s values and knowledge are different to the one that logic is based on. Like every critic who engages with the progressor, Fomin agrees that the characters use violence to improve a society that is developmentally behind, i.e., “archaic”; he formulated this most naïve reading of the progressor, exposing Orlov’s reading as “censorship” enacted.

This point of view is characteristic of those readers who viewed the progressor as a revolutionary fighting against the exploitative class. Journalist Leonid Radzikhovskii praised Maxim Kammerer, who wanted to destroy the Center of the totalitarian government: “The hero ‘progressor’ was searching for the damned Center of the totalitarian system in order to destroy it’ ...Progressor’ Sakharov found the Center and destroyed it” (Radzilovskii 2001). Seeing Sakharov as a progressor is grounded on the perception of progressors as the class of intellectual workers, “programmers, scholars, specialists in scientific fields” (Radzilovskii 2009). Such equation of the progressors with the intellectual elite of Soviet society was a common fantasy, as argued before. (Lipovetsky 2012, 217)

Alternative communism

There are several approaches to the interpretation of the Strugatskys’ oeuvre as a whole. Some scholars contrast their early work with their late texts (Pereslegin 2008; Bykov 2008); others trace an ongoing dialogue between their texts and debates about their work (Nudelman 1989). Pereslegin links the Strugatskys’ search for an alternative to communism to the processes that constituted the beginning of the post-Soviet states:

The Strugatskys wanted to work with a foreseeable horizon of events - in fact, with the present time. This led them to the primacy of the New over the Other - the creation of the concept of "early Communism", populated by "the best of our contemporaries." The logic of this solution forced them to mark future events in time, to make concrete predictions, to rely on already existing social institutions. Of course, everything concrete is transitory,

and *The World of Noon* immediately found itself in the crossfire of criticism, both from contemporaries and from omniscient descendants. Still, it is very interesting that the action of *The Country of Crimson Clouds* begins on August 18, 1991. In our, current reality, the Soviet coup d'état attempt ["the putsch of the GKChP"] took place on that day, ending the Soviet Union and opening the way for the "parade of sovereignties" and the symphony of destruction. Critical dates have an interesting feature to synchronize worlds-reflections. (Pereslegin 2008, 239-240)

Even though Pereslegin's analysis juxtaposes the later and earlier worlds of the Noon as different tone and worlds' decorations, he reads them as a series of prognoses about the future society, thus, as the production of utopias. The Strugatskys imagined a possible world, and, as Pereslegin suggests, as a different world, that happens to remind readers of their earlier work. Thus, there is no discontinuity between early and late novels, and I agree with the scholar, the utopia is just less articulated as a manifesto.

Noon: 22nd century is The Strugatskys' fullest representation of alternative Communism with young protagonists at the center. The collection of short stories is full of enthusiasm and humor. Science is presented as a series of exciting intellectual adventures. The Strugatskys defined *Noon* as "adventures of the spirit," so it was about the spirit, i.e., subjective perspective, more than about the worlds that the characters explored:

We were writing about the country of "junior researchers." About people who, as we thought back then, have already been embodying features of their descendants in the

communist future. About people for whom the main value of life has been associated with the “adventures of the spirit.” (Strugatskys, “Rumata delaet vybor,” 1974)¹⁷

At the same time, *Noon: 22nd Century* implied that human-centrism and the normalization of one particular definition of the human as the “top of nature” (the Anthropocene, as defined in Chapter 1 on Efremov), are problematic for the universe, which is apparently inhabited by other species:

They [the extraterrestrials] can meet with us at any moment. Face to face. And — you understand — they can be immeasurably higher than us. Not at all like us, and in addition immeasurably higher. They talk about clashes and conflicts, about all sorts of different understandings of humanity and goodness, but that’s not what I’m afraid of. I am afraid of an unprecedented humiliation of mankind, a gigantic psychological shock. Because we are so proud. We have created such a wonderful world, we know so much, we have escaped into the Big Universe, we are discovering, studying, researching — what?

(*Polden*, 1)

The narrative reminds readers of Wells’ *War of Worlds*: the colonizer who arrives at a distant planet to subjugate inferior civilizations actually appears superior by comparison. For The Strugatskys themselves, especially when they were reflecting on *Noon: 22nd Century* from the 1990s, their alternative communism could be boiled down to the Enlightenment value of education — moral and intellectual in their insurability, as Boris wrote in his polemical article “Where should we sail” (*Kuda zh nam plyt*, 1991):

¹⁷ Available online: <https://coollib.com/b/107865-boris-natanovich-strugatskiy-izbrannaya-publitsistika/read>

The world described in the "Return," [the part of the cycle of short stories] the *World of Noon*, will be possible only if humanity manages to develop and, most importantly, implement the High theory of education. Either we will learn to educate a person for whom the highest pleasure of life will be free creative labor, or we will not be able to break the chain of time, and each new generation will repeat the previous generation. (Strugatskys 1991, 11)

Thus, utopia is present in all Strugatskys' writings, yet its context and representation differ. This is an example of how the writers adopted new strategies to speak of social reformation, and their agenda was to inform of possible perspectives, without necessarily telling which one is the proper one. This is a rather advantageous strategy because it allows the interpreter to take more confidence in reading the text outside of authorial values and views. The reader is invited to decide on their own.

Hard to Be a God

A researcher at the Earth-based Institute of Experimental History, Anton is sent to a foreign planet Arkanar in order to study its possible positive development, with the use of Institute's theories and ideas. For that mission, Anton and several others merge with local society under different guise, mainly as aristocrats or highly placed officials. The man behind the mask of the aristocrat Rumata, Anton, is a 35-year-old man from the communist future who is distinct

from the people he encounters. He is an outsider, an "alien" (*prishellets*)¹⁸ to the society he attempts to improve, but he is unable to remain a distant observer, he adopts the language of violence and, at least for a while, ceases to exist as a human of the future with peaceful theories, showing his superiority by the mass killing.

Like Efremov's Tormans, the world of *Hard to be a God* is inhabited by inferior humans who live in a highly hierarchical and unjust society, similar to that of the late European Middle Ages. The leader of the Arkanar government Don Reba orders Rumata's arrest for his anti-state activities, and members of the secret police accidentally kill Rumata's girlfriend, Kira. This makes Rumata so fierce that he forgets about his scientific duty, as well as the Institute's rule to not interfere in other civilizations' lives. He returns to the Earth but he loses his normalcy. He broke down in the world of alterity, which he mediated through his subjective experience in that world as incomprehensible and unable to get over.

He [*Rumata*] was asleep. And all around him... Also... Lying down... Some were sleeping, and some were... So... They found Don Raba there, too... - Pashka took a quick look at Anka and averted his eyes again. – They took him, that is, Anton. They took him to the base... You see, Anka, he doesn't say anything. He doesn't talk much anymore. (*Trudno byt' bogom*, 321)

¹⁸ The German film *Es ist nicht leicht ein Gott zu sein* (1990), directed by Peter Fleischmann, describes him as follows: "Rumata, an alien from Earth, who in this medieval world finds feelings that seemed to be lost forever: love, friendship, compassion. But there is also hatred and a desire to kill – 'in the name of justice.'" Using his "supernatural" power, Rumata becomes the head of an uprising directed against the local dictator. Moreover, the dictator is depicted not as an inveterate villain, but rather as an ordinary narrow-minded bureaucrat." [is this film based on Strugatskys' novel? If yes, say so]

Rumata will continue to live in Arkanar's history, as noted by critics (Arbitman 1991; Vishnievskii 2008), while Anton is lost to his civilization, Earth. Thus, he is fully absorbed by his "role" – by the alterity. Rumata has become a deity, due to his superior body that killed hundreds (thousands?) of evildoers and was taken to heaven (by a helicopter). In fact, his recovery is never proven. Anton is only a likeness of Rumata, and he no longer resembles the individual who began as a researcher at the Institute of Experimental History. This is a progressor, yet without being called so.

One of those who interpreted Rumata as a tragic character, was an economist and social thinker Garviil Popov, also the first freely elected mayor of Moscow (1991-1992), who pointed out that this novel was the beginning of the critique of progressorship:

The Strugatskys condemned Leninism, Islamism, Christianity, and any other Progressive movement. [...] Strugatskys' conclusion is universal. We are people. We cannot interfere.

But we are not gods. It's not just hard for us to be God. We can't be them at all. Therefore, in carrying out the inevitable Intervention, we - according to the conclusion of the Strugatskys - must constantly ensure that there is not even a drop of blood on our hands.

This "super law" of human civilization, introduced by Strugatskys in *Hard to Be a God*, is just as important for the human world as the "first law of robotics" formulated by Isaac Asimov three-quarters of a century ago for the world of automata (Popov 2004).

This conclusion can be supported by the scene in Strugatskys' novel, where Anton/Rumata's colleague reminds him that theirs is the divine power, given to them not for making society just, but to observe:

There was a time when I had this feeling of powerlessness, and my own meanness seemed to be the most terrible feeling. Some, weaker ones, went crazy from this, they were sent to the ground and are now being treated. It took me fifteen years, my dear, to understand what the most terrible thing is. Losing a human face is scary, Anton. To vilify your soul, to get it hardened. We are gods here, Anton, and we must be smarter than the gods from the local people's Legends, which they create somehow in their own image and likeness. After all, we walk on the edge of the abyss. One step aside, and one falls into the mud, and it will take entire life to wash off. (*Trudno byt' bogom*, 200).

Rumata disregards not only the norms of the "host" society, but also those of the communist Noon Universe that sent him to Arkanar. The narrative of defeat frames Rumata's scientific battle with signs of alterity, as epitomized by more violent societies: Nazism during World War II and the late European Middle Ages. In such societies, violence, persecution of intellectuals, and sacralization of authority in certain power positions leads to the choices that the progressor is unable to consider.

In the world of the Strugatskys' novel, the progressor's dialectics is that he can preserve his superhuman status only by sliding into violence, and therefore by ceasing to be human, which equals to be a progressor. At the same time, it is his humanity – his empathy for the victims of the regime, his love for Kira, and his hatred for Don Reba -- that pushes him toward violence. Thus, Rumata is an example of the unresolvable existential conflict inherent in the concept of the progressor.

However, there is a parallel story in the novel that gives hope: that of the utopia framing the novel. It is a story of children who play in a forest and find the irremovable traces that WWII just happened and there is a skeleton of a chained to a tree “a fascist” soldier. Science fiction critic George E. Slusser summarizes the story, describing the “anisotropic road” that seems to be a direct reference to Efremov’s anisotropic matter, which cannot be annihilated because it is separate from the one the subject is in:

In *Hard to Be a God*, the Strugatskys raise the question of the "anisotropic road." By definition, this is a road that does not have the same properties in all directions. In each direction the road is different. But is this the same as saying it is a one-way road? Such thinking leads to Pashka’s final, and extreme, equation of the road and history:

"Nowadays I often think back to that road... Maybe there’s some connection somewhere... the road was anisotropic--just as history is. There is no way back. And he went right ahead anyway. And met up with a chained skeleton. (Slusser 2020, 5)

This plotline suggests hope: even though the happy communist utopia had fascism in its not-so-distant past, new generations arrive and play among the remnants of ancient, ferocious battles. Anton participates in these innocent games, and the blood on his hands is only an illusion – in fact, it is only strawberry juice.

The Kammerer Trilogy

In the first novel of the trilogy, *Inhabited Island*, Maxim Kammerer is a young traveler who accidentally crashes his spacecraft on a hostile planet ruled by an abusive totalitarian

government that uses technology for psychological control of the population. Kammerer winds up fighting in the planet's civil war. Maxim looks for a place for himself in this society. At first, he joins the army to fight the enemies of the state. Then he learns that the state controls the towers that cause pain among a small fraction of the population, which happens to be more intellectual than the rest of the society (their critical minds appear to be hurt by resisting the waves that make others hysterically enthusiastic). Ironically, several ministers in the totalitarian government also respond with pain to the controlling waves, so they are victims of their own biopolitics. When Maxim sees the pain of the people, he joins the uprising of the local intellectuals and is apprehended by a minister in the government. His name is Rudolph Sikorski and he is a professional progressor from Earth with a plan to reform the planet over time through systematic changes. Unlike Maxim and the rebels, Sikorski does not think the towers need to be destroyed.

The Strugatskys reinvent in this novel their own version of alterity, and Rumata, righteously fighting with an alien version of fascism, becomes defenseless before the alien civilization because of his intellectual openness and naiveté. Such is Maxim Kammerer, a true adventurer, who steadily learns to fight the totalitarian regime. The protagonist may have problems recalling the name of Adolf Hitler, but he suspects that what he witnesses at Saraksh is fascism. Still, he resists identifying the Saraksh state as such:

Maybe this is a fascist state? Massaraksh, what is fascism? Aggression, racial theory ...

Gilter ... no, Gilmer ... Yes, yes – the theory of racial superiority, mass destruction,

genocide, the takeover of the world ... lies elevated to the principle of politics, state lies –

I remember this well, it struck me most of all. But I don't think it's here. Is Guy a fascist?

And what about Rada? No, here is something else – the consequences of the war, the obvious cruelty of morals, as a result of a difficult situation. (*Neobitaemyi ostrov*, 66)

His physical and intellectual superiority does not suppress his empathy with “natives” and does not allow him to label them as fascists. However, he learns to kill some of alien planet’s soldiers and destroys the towers, the state’s propaganda machines. This is depicted in the novel as his victories.

In *Inhabited Island*, the two progressors clash, because Maxim Kammerer is an accidental progressor while Sikorski is the professional: Sikorski invents a new approach of infiltrating a foreign society by manipulating its elites and being not their enemy (like Rumata), but a puppet master hidden behind the scene. Thanks to him, Maxim Kammerer also becomes a professional progressor and consequently abandons the image of a revolutionary to become someone subordinated to Sikorski in the subsequent novels. As Sikorski’s character develops—in the next two books of the Kammerer trilogy, *The Beetle in the Anthill* and *The Time Wanderers*—he begins to resemble a KGB officer who intervenes in global politics without regard for the repercussions and who abuses power to the detriment of alterity within and outside the society to which he belongs.

In *Beetle in the Anthill*, Maxim is on Earth and works under the supervision of Sikorski. As a boss, Sikorski is secretive, manipulative, and confusing. Maxim learns a lot from his boss, using disguise and false identities to get information from people. The novel is a retrospective examination by Maxim of the confrontation between his colleague Lev Abalkin and Sikorski. As we learn, Abalkin was a character with aura of a misfit but a sympathetic one. He did not want to be a progressor, but when he becomes one, he finds his niche in communicating with

extraterrestrial intelligent species, namely with the civilization of dogs. When Toivo Glumov decides to leave the organization of progressors, KOMKON, Maxim's boss, Sikorski, decides that this is a sign of some bigger conspiracy. So, the boss shares with Maxim the mystery of Abalkin's birth. He was born from a container that was found in a sarcophagus along with 11 similar containers, in which human DNA was hybridized with that of alien species. Sikorski connects this "gift" with an enigmatic civilization of Wanderers. Abalkin and his peers were sent away from Earth to minimize the potential damage, but when Abalkin abandons his progressor's assignment and returns to Earth, where he hopes to learn the mystery of his birth and life, Sikorski decides to take the situation in his hands. Although Abalkin does not do anything proving him to be an evil agent of Wanderers, Sikorski nevertheless kills him – to the utter horror of Maxim.

Philosopher Boris Mezhuev compared Sikorski with Yuri Andropov, the head of the KGB from 1964 to 1982 (Mezhuev 2009). Abalkin is also the last name of Soviet economist Leonid Abalkin, who was Professor and Head of the Department of Political Economy of the Academy of Social Sciences under the Central Committee of the CPSU [the Communist Party of the Soviet Union].¹⁹ Arguably, these false-y references to real political figures were intentional and they were placed to create the feeling of urgency and political analysis, but with wrong names attached to characters.

¹⁹ He was known to promote rationalization of the economy through the failed project of the OGAS [stands for the National Automated System for Computation and Information Processing, *Obshchegosudarstvennaia avtomatizirovannaia sistema ucheta i obrabotki informatsii*], one system of computerized and centralized accounting for the whole Soviet economy that was proposed by Viktor Glushkov in 1962. This utopian project developed by engineers at Kyiv's Institute of Cybernetic. The most known name associated with the campaign for OGAS was Glushkov (Peters 2019).

In *The Beetle*, Maxim Kammerer is the first-person narrator whose voice is fragmented by plurality of identities that he has to pretend to embody. Because Maxim has conflicting feelings for Sikorski, Maxim is completely perplexed who he really is, and although he remains to be loyal to the organization of the progressors, he also is questioning the organization in *The Time Wanderers*. His internal perspective helps us to comprehend what happened to his friend and coworker Toivo Glumov, but he is unable to do so because the entire book seems to explore Sikorski's organizational issues as well as potential solutions and internal criticism. Sikorski comes up with his own theory of a clandestine group that transforms people into alien species operates on the periphery of the empire and shows up unannounced. Sikorski was, in fact, not completely insane. There was an organization, but it was not an alien one, that posed a threat to the progressor. As the organization's representatives can see, they took advantage of the excitement to expand and enlist Toivo, one of the progressors, as a member, and nothing can be done about that.

In the third novel, *Time Wanderers*, we learn that nobody questioned Sikorski's actions. As the wife of Toivo Glumov, Abalkin's son, comments on the ideology of KOMKON, it represents a "professional deformation" leading to a paranoid perception of the world as full of threats to humanity (*Time Wanderers*, 1989, 3). Definitely, it is a way to define Sikorski as bad blood, in exactly same manner as any alterity is repressed in the society of the progressor. New KOMKON claims to already overcome all issues with the progressorship that were symbolized by Sikorski. The last novel of the trilogy, which is told by Kammerer, who is left behind by his friend and colleague Toivo Glumov, is unable to even understand what happened, and he is left

with the progressors who admit institutionally that their organization was corrupted by people like Sikorski, so they spoke of his killing of ex-progressor Lev Abalkin as excess of power for the progressor. While they try to reform, they lose people who join other civilizations, since there is no way out in the progressors' civilization due to its violent expansionist nature towards any alterity inside and outside national borders.

It may appear that the Strugatskys depict the top progressor, Rudolf Sikorski, and his organization, as crypto-fascist – this is similar problem with the human of the future in Efremov's novels, as perceived by Maia Kaganskaia (see chapter 1). Unlike Efremov, however, the writers certainly do not glorify Sikorski, but show his journey toward the dead-ends of the progressorships. Focused on preserving the Noon Universe's superiority, the organization of the progressors turns into police defending Earth from civilizations that are superior to Earthmen. In the *Inhabited Island*, Sikorski disagrees with Maxim's hasty strategies based on violence and sends him out of the place.

Sikorski is a key member of KOMKON, the organization of progressors, which embodies the anthropological supposition that inferior societies cannot evolve without monitoring, control, and interventions from superior ones. In *Inhabited Island*, Sikorski is shown as a superior being who utilizes conspiracy to reform the state. His transformation in *The Beetle* reflects the Strugatskys' critique of this character and the whole concept of progressorship. In *Time Wanderers*, the organization created by Sikorski, KOMKON-1, must be rebranded as KOMKON-2 to avoid bad fame of Sikorski; and it formally rejects Sikorski's approach to alterity. However, this rebranding does not stop the debate about the biological hierarchy

between the progressors and non-progressors, between the humans and ludens, i.e., the Wanderers. As the novel's plot reveals, this difference cannot be controlled or suppressed. Toivo Glumov, who will become the luden by the novel's finale, holds a strong belief in the progressor's mission:

[...] Toivo noticed this and said defiantly:

– Yes! I think that we are not in time for ceremonies now! We'll have to give up some of the achievements of higher humanism! We are dealing with Progressors, and we will have to behave in a progressive way!

– Namely? -- Komov inquired leaning forward.

– The whole arsenal of our operational methods! From sending agents to forced mentoscopy... (*Volny*, 618)

Although Toivo will separate from the progressors soon after this conversation, he shows loyalty to the principles of the progressorship, which also imply the fear of others' civilizations' progressorship, exposing the militaristic and hostile component in bringing order to unstable societies. In reacting to a potentially similar civilization, Toivo also proposes to use science, which by his description, is beyond just violent; it's punitive to alterity.

New Humans: Homo ludens

The concept of the Wanderers appears first in *The Beetle*: Lev Abalkin learns about these weird other creatures accidentally from his friend and work pal Golovan Shchekn, who is a non-humanoid. To a human, Shchekn is reminiscent of a dog, but this is a superficial view of the

breed of golovans, intelligent aliens. Shchekn speaks of alterity to another alterity, Lev Abalkin. From such a science-fictional Other, Abalkin learns who he is, according to Sikorski's claims; in the description of Shchekn, there is any alterity that defies Sikorski's definition of the normal:

“Strangers,” he [Sikorski] grumbles. “–I have heard many times: wanderers, wanderers ... You don't know anything about them at all?”

– Very little. We know that this is a super-civilization, we know that they are much more powerful than us. We assume that they are not humanoids. We assume that they have mastered our entire galaxy, and a very long time ago. We also assume that they do not have a home – in our or in your understanding of the word. That's why we call them wanderers... (*Zhuk*, 366)

The dehumanization rhetoric, such as the assumption that Wanderers are not humanoids, comes from a creature whom humans conceptualize as a pet. Golovans themselves are the symbol of alterity that cannot be tamed and adapted within the concept of a universal human. For Sikorski, there is no value in those “dogs,” while Shchekn has a sixth sense, and he is very social, so representatives of the second alien civilization, Leonidis, feel more inclined to communicate with the Golovan than humans.

In *Time Wanderers*, the extraterrestrials appear in all discourses from previous two books in the trilogy. Are the Wanderers (not their self-given name, but how they are called by Earthlings) a secret organization, monsters, aggressors, or revolutionaries? All theories are in play, but none of them seem to have any proof or impact. For the Strugatskys, the Wanderers are important because the progressor is a utopian image of an intellectual who is always a victim of

history while striving to enlighten and educate others, and Wanderers appear as a new iteration of this image.

In the final book of the trilogy, the alterity that was previously assumed to be external to the progressors' civilization (aliens) is revealed to be internal but it also shows some radical difference. Ludens is a negative term of the progressor that becomes valorized outside of progressors' power and so the force to insist on certain "logic" of how things normally are organized and what for. The progressor turns out to be a monster created by an irreversible surgery. As the plot tells, alterity is produced on the margins of the empire in Kharkov, where ludens execute procedures that transform humans into alternative species, similar to how "fukamization" (a brain procedure produced before the birth) generated progressors in biopolitical sense, as in Foucault. In accordance with the Strugatskys' perspective, the social divide and resulting hierarchy are not founded on social class but rather on an unknown difference reflected in social belonging and culture:

The difference between a luden and an ordinary person is enormous. One of the "levels" of a luden is – human (when his difference from people is only in the consciousness that he is not like them). At other levels, everything is different -- a different consciousness, a different physiology, different appearance. (*Volny*, 89)

This definition of ludens implies the existence of a parallel reality, and therefore KOMKON-2 has no control over them. Through the image of ludens, The Strugatskys offer a new understanding of intelligentsia not as a social group but as a new species able to exist in several parallel worlds simultaneously. Although, the Strugatskys do not use the term "Multiverse," their

ludens show how this concept emerges from the critical rethinking of Soviet intelligentsia epitomized by progressors. As Boris Strugatsky wrote in his diary:

What is intelligentsia? In fact, intelligentsia is a concept more ideological than sociological. An intelligent person is characterized, first of all, by a certain attitude to the world around him, and then by belonging to a certain social stratum. Roughly speaking, intelligentsia is knowledge plus the desire for knowledge, as opposed to philistinism, which is, first of all, ignorance plus unwillingness to learn something that lies outside a very narrow range of needs. Therefore, there are very unintelligent associate professors and members of the Writers' Union and quite intelligent, say, workers. (Strugatskii 2003a, 28–29)

Intelligence, thus, is the desire to know rather than consume.

Toivo Glumov demonstrates that he agrees with the above logic and misleads the reader when he so ardently defends the progressor's strategy. He is a progressor on one level only – in the world that Maxim Kammerer and all other characters (except for invisible Wanderers) are living. A different level of reality, where alterity is realized, offers a new universe of knowledge and a new consciousness, leading to new body chemistry and a new image.

The concept of ludens is derivative of the progressors, even though the Strugatskys use it to demonize alterity. Toivo Glumov first joins the progressors at KONKOM, under the supervision of Maxim Kammerer and Gorbovskii. Initially, he almost conforms to the progressors' identity: "I'm a human being," he says to Maxim, "and I don't want to be anything else. I don't want to look down on you. I don't want the people I respect and love to seem like children to me..." (*Volny*, 211). However, he soon becomes persuaded by his former classmate,

Logovenko, to join an alternative project, in the world parallel to KONKOM-2 and its ideology. In one of his last letters before breaking up with Maxim Kammerer, KONKOM-2, and humanity, Toivo writes: “The enemy of the human race whispers to me that only a complete idiot is able to refuse the chance to gain superconsciousness and power over the universe. [...] As soon as they turn me into a luden, nothing... human will remain in me” (*Volny*, 224).

Progressor’s thinking in these two novels is symbolically represented by a scalpel. In *Time Wanderers*, the progressor is literarily a creation of a biological change of the body, the “bioblockade,” enforced by the “Law of Compulsory Bioblockade.”

Bio-blockade is an unprofessional term, which is mostly accepted among journalists.

Doctors call this procedure the fukamization by the names of sisters Natalia and Khosiko Khukami [Japanese names - ST], who for the first time theoretically argued for and tested practically the procedure. The goal of the procedure is to improve the natural level of adaptability of human body to environment. This improvement is called bioadaptation (*Volny*, 14)

This law was changed from mandatory to optional in 2085, and so there was a new phenomenon in social psychology registered, fukamophobia. This is when young parents decide not to let their children have this surgery. Kammerer and Glumob researched this phenomenon as the people of secret police, yet, later, the reader learns that Toivo Glumov did not have surgery of this kind, most likely due to the political choice of his parents. Glumov is an alien in the world of progressors, and once he has an opportunity, he defects.

Do the ludens mimic progressors’ tactics outside of the Anthropocene? Are ludens better than progressors? Like *Wanderers*, the ludens’ motivations are incomprehensible, and even their

existence is constantly questioned. However, in the progressors' ideological discourse (unlike the Wanderers), ludens are definitively understood to be humans, and they are not colonizers, but rather positioned as internal subjects. The Wanderers are colonizers, actively intervening to impact the course of human society, while the ludens are "shadows" disconnected entirely from human society. These two characters split the Strugatskys' fictional society into two impenetrable realities co-existing in the same space, even though the reader is left only with the Earthman's perspective on this fracture. The Earthmen –and as such, the protagonists – can only observe these forces that are beyond their control, exemplifying the futility of the narrative's drama, and nullifying all hopes for programmed change.

Time Wanderers showed that the progressors are not superior, but actually inferior to the Wanderers. More than that, the progressors appear in this novel as soldiers of a failed civilization, learning about their own defeat. Alterity in the Wanderers lies in their ability to mutate, and to take the form of various social organizations, outside – and perhaps also inside – of the world of the progressor. Their approach demystifies the human by showing how human is constructed via surgery, various theories that impact politics, and unexpected "discoveries" that endanger humanity. The alien performed by Wanderer is only a device, a metaphor of distinction, overlooked by an imperialist anthropocentric worldview.

A central portion of *Time Wanderers* comes from a manifesto entitled "Bromberg's Memorandum." Bromberg, as we learn retrospectively, is a high-standing councilor at KOMKON-1. Later he becomes the biggest opponent of the leader of KOMKON-2 and creates

its alternative, MONOCOSM. In his Memorandum, Bromberg explains the ideology of the new organization:

"CREATE WITHOUT DESTROYING!" – this is the slogan of Monocosm.

Monocosm cannot but consider its own path of development and its modus vivendi to be the only correct one. Pain and despair are caused in him by pictures of disunited Minds that have not matured to join him. He is forced to wait until the Mind, within the framework of the evolution of the first order, develops to the state of an all-planetary society. For only after that it is possible to start interfering with the biostructure in order to prepare the bearer of Reason for the transition into the monocosmic organism of the Wanderer. For the intervention of Wanderers in the fate of disunited civilizations cannot give anything worthwhile. (*Time Wanderers*, 1989, 5)

Bromberg's concept restores the hierarchic structure shaken by the appearance of Wanderers and ludens, with one difference: he places Wanderers rather than humans on the top of the evolutionary curve. One may detect here a reference to Efremov's structure of self and the Other, with one significant distinction: Bromberg proposes the concept of "social split according to an unknown criterion" (*raskol obshchestva po neizvestnomu kriteriiu*) that, nevertheless, serves as a driving force of the future evolution:

First, the entry of humanity onto the path of evolution of the second order means practically the transformation of Homo sapiens into a Wanderer.

Second: most likely, not every Homo sapiens is suitable for such a transformation.

Summary:

- humanity will be divided into two unequal parts;

- humanity will be divided into two unequal parts according to a parameter unknown to us;

- humanity will be divided into two unequal parts according to a parameter unknown to us, and the smaller part will forcefully and forever overtake the larger one. (*Time Wanderers*, 1989, 3)

A step forward can be detected in the Strugatskys- ' or Bromberg's – quotation: they mystify the anthropocentric theory by removing any possible scientific or any other (e.g., metaphysical) explanation for the split. The hierarchy is discussed as a given: the fact that can be rationalized, but that is not rational and not controllable. It is situated beyond the progressor's worldview, which proves that the progressor thinking of himself as the master of the world is mistaken. Thus, the imagined possibility of evolution from humans, to ludens, to the Wanderers – in other words, an imagined non-alterity alienates humans and leads to questioning of their agency and free will. The Strugatskys' understanding of the evolutionary criteria predicates *the unknown* as the key to the hierarchy. Such a hierarchy based upon the unknown – at least, for humans, presumably, Wanderers are holding this key – emphasizes the weakness and helplessness of the civilization epitomized by progressors. While placing their optimism in the figure of Toivo, The Strugatskys are not optimistic about the former Noon Universe.

However, the unknown can be hidden in the very well known. If one looks at the Kammerer trilogy as a whole, it is possible to recognize in three progressors – protagonists of each novel – reflections of Christian mythology. Maxim of *Inhabited Island* appears as a young Christ performing miracles, fighting enemies, and inspiring love and faith, whereas Sikorski appears as John the Chrysostom. Abalkin in *The Beetle in the Anthep* is a sacrificial Christ who

must be crucified for no reason other than the sins of humanity, whereas Sikorski plays the role of Pontius Pilate. Abalkin's son Toivo Glumov in *Time Wanderers* impersonates Christ after crucifixion – he is resurrected and taken to heaven (literally). Thus, the unknown criterion of selection to heaven is associated with a sacrificial victim a generation before. The story of ludens completes the collective saga of progressors by bringing them all, despite their sins and mistakes, to the next level. This interpretation suggests that the reader should examine the entire trilogy from a distance, thus doubling the character's transition to the next level of the multiverse. Indeed, The Strugatskys imagine multiverse as a hierarchical structure too, but instead of the Strugatskys tract speculations about it, they embody this image in the trilogy's (meta)structure.

The Snail on the Slope and the scalpel (Biopolitics)

Bromberg's Memorandum can be also interpreted as a declaration of biopower and biopolitics – albeit from a perspective of ignorant subalterns rather than of rational enlighteners. Michel Foucault introduced such interpretive possibilities in the 1970s in his *History of Sexuality*. According to one of the studies, the proper definition of biopower is the actions of the state to manage the body and the social side of the self (Liesen et al. 2012, 4). Put another way, there is a dichotomic dependency: biopolitics is managing the human body as an object for further spiritual gain. Biopolitics does not sound appealing, because the term was used by the Third Reich to define their regime as organized around organic society. The relationship between totalitarian regimes and biopolitics has been central to Foucault's several projects (*The Birth of*

the Hospital, Discipline and Punish, History of Sexuality). In Sergei Prozorov's article "Living Ideas and Dead Bodies: The Biopolitics of Stalinism," Prozorov argued:

The empirical record of violence involved in this project [Stalinism] illustrates the logic at heart in the very project of the biopolitical production of social immanence as opposed to the bio-political regulation of anterior reality. For the new socialist reality to emerge, the old society must cease to exist, sometimes only in terms of status (university professors reduced to unemployment and poverty) and sometimes in the brutally physical sense (millions of victims of repression, resettlement, and starvation). Socialist biopolitics is from the outset characterized by the presupposition of the violent forcing of something new into a domain radically heterogeneous to it and the forcing out of all that conflicts with the newly produced reality. Contrary to both liberal and Nazi biopolitics that, at least in principle, sought to capture and govern life according to its own immanent rationality, Soviet biopolitics was hostile to the very life it sought to govern. (Prozorov 2013, 219)

The Strugatskys directly represents such a biopolitics, in *The Snail on the Slope*, their most sophisticated novel. They associate it with the human Directory of Forest Research located on the alien planet Pandora and "hostile to the very life it sought to govern" – in this case, it is the life of the Forest covering the planet and constituting its main mystery and attraction for the characters.

The novel has two protagonists, Perets and Kandid, whose plot lines intersect only conceptually. They work for the same Directory. Kandid became a victim of a helicopter crash in the Forest, and for the Institute he is missing in action, and he himself cannot get out of the Forest although he tries several times. Kandid has firsthand experience living in the Forest with

the local population, whom he steadily learns to like. He dreams of returning to the Directory, but all his attempts fail. He is stuck in the Forest.

A part of the novel that was published in *Baikal*, but was afterward banned, introduces Perets, a romantic who dreams about getting into the Forest, but all his attempts to approach it fail. The Directory utilizes the Forest for natural resources, destroying its unique world, and since Perets cannot be helpful in that, he is used as bureaucrat. To make him more docile and force him to stay at the Directory, his secretary is sexually binding him to remain in the office instead of exploring the Forest. He is stuck too. This situation is a parody to the motif of love liberating because for Perets love is the force of conformism.

Unlike Perets, Kandid does not become enchanted by the promise of sexual pleasure, and he rejects the love of a local girl who calls him her husband due to the local traditions: she saved his life after the helicopter crash. Eventually, the girl, Nava, leaves the village for a women-only settlement far from the local village. There, Kandid learns that the zombies who “kidnap” women from the village are actually robots that the superwomen living in the settlement created to protect themselves. Despite an invitation from superwomen, Kandid decides not to join their highly advanced microcivilization because of their initial hostility toward men in general, and him in particular. He chooses to fight the robots so they cannot steal the village women.

The Strugatskys’ works are frequently interpreted by literary scholars as having several meanings, both for the censor and for the reader (e.g., Arbitman 1991; Gomel 1995; Amusin 2000). In the Afterword to *The Snail on the Slope* written in 1999, Boris Strugatsky admits that the ambiguity of their language was a response to censorship, and once censorship was abolished, the rhetoric of their works became too complex to deliver the intended message to

those who did not spend enough time to understand the entire image of a character or a topic. However, in *The Snail on the Slope*, the complexity prompted by the use of the Aesopian language serves as the source of the new poetics. Mark Amusin points to the ambiguity of the Strugatsky brothers' fiction as their recognizable trait:

Misunderstanding is the main characteristic of the semantic space in which the Strugatskys' heroes must act (and readers must navigate). And then, without dwelling on the details, without eliminating the contradictions, push off and jump - through the tempting plot plexus - to a problem, moral or existential. The problem should not be posed correctly at all (Lem is not a boss of us) -- the main thing is to be sharp and fresh. The main effect was seen as the introduction of ambiguity, uncertainty, doubts in the field of the reader's consciousness, the identification of cracks and voids in axiomatics... The texts of the Strugatskys fulfilled this purpose admirably. (Amusin 2005, 10)

Roman Arbitman explained this feature as the Strugatskys' desire to challenge the reader with ambiguous ethical dilemmas: "In Russian science fiction, the Strugatskys were the first to offer the reader ethical problems that did not have and could not have an unequivocal 'correct' solution. It was strange, unusual, it made not only empathize, but also think" (Arbitman 1991, 15).

The Snail on the Slope brings this complexity from an ethical to a philosophical level. In this novel, the Strugatsky brothers come close to introducing alterity as a phenomenon that cannot be explained by any known epistemology. *Snail* also features much more complex ideas of biopower and reason, connected by scientific definitions of nature and human, signaling a

change of what is defined as normal, i.e. the episteme, in the understanding of the world and the human in it. In the novel's finale, the romantic Perets becomes the Institute's director, thus leading – albeit only formally – a Kafkaesque machine that embodies biopower applied to the Forest. Kandid also gives up attempts to escape his current condition and decides to stay with the forest dwellers. He realizes that this choice forces him to *resist progress*:

The doomed, the miserable doomed. Or rather, the happy doomed, because they do not know that they are doomed; that the strong of their world see them only as a dirty tribe of rapists; that the strong have already aimed at them clouds of controlled viruses, columns of robots, walls of the forest; that everything is already predetermined for them, and - worst of all - that historical truth is not on their side here in the forest, they are relics condemned to perish by objective laws, and helping them means going against progress, delaying progress on some tiny section of its front. But only I don't care about that, Candide thought. What do I care about their progress, it is not my progress, I only call it progress because I have no other word for it... It is not the head that chooses here. It's the heart that chooses. Laws are neither good nor bad, they are beyond morality. But I am not beyond morality! (*Ulitka*, 1989, 121)

This passage is one of the instances where the novel presents images of alterities, both human and non-human, that epistemologically contradict the progressor's self-understanding, undermining the pathos of imperialist colonization of the Forest, its inhabitants, as well as the Institute's employees like Perets. Kandid openly questions the discourse of the progressor and

says to himself that he does not believe in the concept of progress (*Ulitka*, 1989, 171). Yet, he does not want to join the superwomen's community either:

If I had been picked up by these friends, nursed and pampered, accepted me as one of their own, pitied - well, then I probably would have easily and naturally sided with this progress... And maybe, maybe not, maybe it would not have been easy and simple, I cannot, when people are considered animals. But maybe it's the terminology, and if I learned the language from women, it would sound different to me: enemies of progress, overgrown stupid idlers... Ideals... Great goals... The natural laws of nature... And half the population is destroyed for this? No, it's not for me. In any language, it's not for me. I don't care if Kolchenog is a pebble in the millstone of their progress. I'll do everything I can to make sure that the millstone slows down on that pebble. And if I can't get to the biostation - and I probably won't - I'll do everything I can to make that millstone stop. (*Ulitka*, 1989, 121).

Perets, at least in the initial stages, manifests the epistemology presuming that knowledge cannot be "known" prior to encounter and personal experience:

- Now that's probably enough. Last question. Your worldview, briefly.
- A materialist, - responded Pepper.
- What kind of materialist?
- An emotional materialist. (*Ulitka*, 1989, 171).

In the end of the novel, Perets is a defeated character who does not leave the Directory/Institute, but also never comes closer to the Forest; he drowns in the assigned bureaucratic role, despite (or

perhaps because of) the fact that he becomes the Institute's director. The Institute creates obstacles for him so that he would never approach the Forest. From this perspective, he also becomes utterly disappointed in the idea of progress – Perets realizes that progress does not presuppose ethical values:

Progress may turn out to be completely indifferent to notions of kindness and honesty, just as it has been indifferent to these notions until now. Management, for example, needs neither honesty nor kindness to function properly. Pleasant, desirable, but by no means necessary. Like Latin for a bath attendant. Like biceps for an accountant. Like respect for a woman for a Domaroschiner... But it all depends on how one understands progress. It can be understood in such a way that these famous "buts" appear: an alcoholic, but an excellent specialist; a libertine, but an excellent preacher; a thief, a burglar, but what an administrator! A murderer, but how disciplined and loyal ... And we can understand progress as the transformation of all into people of good and honest ones. And then someday we will live to see the time when people will say: he is a competent specialist, of course, but a dirty type, he should be chased away... (*Ulitka*, 1989, 40)

This introspective alienation from the civilization of progressors creates tension between Perets and Kandid vs. other characters. Both protagonists look at the Forest and the Institute, and their choice between these two is obvious, yet it gets more complicated because the Forest is incomprehensible in its powers and entity.

The Forest as the new unknown

The novel opens with a description of the Forest as an ocean (a possible reference to *Solaris*, see chapter 3), an animal, and a mask for a human face. It does not belong to any particular epistemological category: it is neither an object, nor inorganic matter, nor an animal. The Forest is not a fixed concept, and the images associated with this word are constantly changing. The Forest challenges all knowledge that communities produce, the entire episteme: “From this height, the forest was like lush spotted foam; like a huge, for the whole world, loose sponge; like an animal that once hid in anticipation, and then fell asleep and sprouted with coarse moss. Like a shapeless mask hiding a face, no one has ever seen before” (*Ulitka*, 1989, 172). The Forest is an allegorical depiction of reality that cannot be comprehended rationally, but nonetheless has agency and control over humanity. From the perspective of Perets, the Institute’s failure to study the Forest debunks the myth of order that the administration thinks should be implemented – in other words, the myth of colonial (bio)power.

The parallel part, with Kandid as a protagonist, adds little to the understanding of the Forest. In his everyday experience among villagers, Kandid perceives what the Institute’s employees never come close to, yet he cannot comprehend the Forest because it constantly challenges his epistemology with new images: it roars like an ocean, but also it looks like a womb. The local population who lives in the Forest, does not understand it, either. Their response is similar to the Institute’s administration – to destroy, be defeated by the Forest, and destroy again: apparently, both scientific and non-scientific epistemologies coincide. However, unlike the progressors, the local inhabitants do not attempt to colonize the Forest. For this reason,

the local people embody a conventional conception of a colonial subaltern and are conceptualized as a natural part of the Forest (see Lipovetsky 2015).

Kandid radically opposes the Institute's approach to the local people because he learns to understand their ungrammatical speech. However, from the perspective of superwomen, living within the Forest in an isolated community, the local population is doomed to extinction because they are ignorant and cannot communicate with the Forest (which the women can). Women are the alterity to the patriarchal society that cannot be aggregated, because they reproduce independently of men. They reproduce in their own mysterious way, but the Forest is a womb that they do not need, although they can *control* it:

But the power of the women remains incomprehensible for Kandid and for the readers. Both Kandid (who is an alien in the Forest) and his doppelganger from the novel's parallel part, Perets (who is an alien at the Institute), are trapped between the past that still speaks the language of progress, on the one hand, and the alterity that they cannot accept for various reasons, on the other. In their course of action both try to avoid the false dichotomies they are constantly confronted with: between the administration and the local population, the administration and the Forest, the locals and the Forest, superwomen and the Forest. However, the protagonist does not break one of the binary oppositions – of women and men. Kandid stays with the males of the Forest, i.e., the patriarchy, in order to fight against technological advancement, symbolized by robots controlled by superwomen, and so he exchanges the anthropology adopted by the Institute for the intuitions of the local men: a similar form of society, built on the notion of essentialized superiority.

In one of their Perestroika talks, the Strugatskys confessed that they share Kandid's dislike of superwomen, whose civilization for them (the authors) epitomizes "unacceptable progress" as much as the colonial biopower of the Institute:

There [in *The Snail on the Slope*] is a progressive civilization, this biological civilization of women. And there are remnants of the former species *Homo sapiens*, something that will be inexorably and inevitably destroyed by progress. And here is our earthling, a man from another planet, who finds himself in this situation – how should he treat this situation? The historical truth is on the side of these disgusting women [*otvratitelnikh bab*].²⁰

It seems that the Strugatskys solidarize with Kandid as men. He has no place in the future world, if it is going to be reigned by women; and he chooses not the "historical truth" but his (questionable) gender superiority. This choice is confronted by other progressors too. Notably, the men-women binary is also present in the Kammerer trilogy. Kammerer, Sikorski, Lev Abalkin, and Toivo Glumov have a gendered experience, and in the Strugatskys "progressor" is mostly a male character (unlike in Efremov), since there are few women progressors in the trilogy and their representation is sketchy. Only one progressor is a woman, Maia Glumova, but she is a marginal character, whose subjugation to the man, Lev Abalkin, is nevertheless emphasized (Abalkin repeatedly beats her).

It may be just a sexist bias, but it has a more fundamental aspect: why do women represent the authority and agency that cannot be included in the progressor's universal definition

²⁰ A. Strugatsky at Leningrad Seminar of Writers, 1987. [http://www.rusf.ru/the Strugatskys/int/sem_ulit.htm](http://www.rusf.ru/the_Strugatskys/int/sem_ulit.htm))

of the human? Is the human universal if it excludes women? It is hard to think of a more brutal deconstruction of the character's (and authors') ideology than this one. It may or may be not intentional, but the bias itself is quite apparent.

It is not a coincidence that Kandid's namesake exemplifies naiveté in Voltaire's *Candide: The Optimist* (1759). Like in Voltaire's novel, the Strugatskys' character follows his feelings of rightfulness and beauty, but they betray him and fail to improve his situation. In Voltaire's novel, Candide is indoctrinated by his teacher, Professor Pangloss, who preaches Leibnitzian optimism – a concept directly grounded in that of the New Man of the Enlightenment. The Professor himself suffers from poverty, beatings, kidnapping by pirates, and other troubles. The flaws in his epistemology lead him to blindness to the approaching catastrophes, and these traits match him well with the theme most related to the progressors. Voltairian mockery of Leibnitzian optimism regarding “the best of possible worlds” can be readdressed to the Noon Universe, whose values the progressors spread to other worlds.

Kandid has a few scenarios to follow: to return to progressorship at the Institute, to move forward with women who hate him, or to stagnate in the Forest with local men. All of these choices impact the body and soul dramatically. The reader of *Snail* has greater freedom to choose between alternative interpretations of the world than the protagonists. Therefore, notwithstanding Boris Strugatsky's statement quoted above, the reader may not agree with his assessment of his own work. Existing interpretations confirm that this alternative reading of Kandid's choice in *The Snail on the Slope* has not been frequent, at least among literary critics,

who mostly focus on the defeat of political rivals to the progressors' civilization (e.g., Clowes 1994; Erik 2004).

The poetics of indeterminacy

The Snail on the Slope unleashes so much uncontrollable, extra-allegorical, and even visceral semantic energy that the Strugatskys were unable to manage it ideologically. Frightened by their own aesthetic radicalism, in the end, they surrendered and settled on the *ad hoc* and narratively unsatisfying solution of having Kandid refuse to join the women's collective. We see that Perets is the Strugatskys felt confused and useless in his professional position as a new Director, with a "controlling woman" in the background. In essence, it seems to me that in *The Snail on the Slope*, the Strugatskys turn their backs on the very utopian project, including a new gender utopia that the novel itself seems to *want* to embrace. Women can reproduce with sperm or without it, but they do not need men. They also do not need masculine physical strength for defense, the one that Kandid seems to want to offer, because the women have robots.

A novel point in the logic of the novel is associated with a violent image of the scalpel. The scalpel can symbolize biopolitics and biopower. One's body can be modified to the point that it is an alien to the society that claims that individual as its own. Surgery can be a powerful tool for revealing alterity within the human. For example, Maia Glumova protected her son Toivo from having "fukamization" necessary for becoming a progressor. The transformation of Toivo the progressor into Toivo the luden was possible only because he did *not* get impacted by the compulsory procedure. Readers might also consider the scalpel as a tool of adult circumcision, associated with conversion to Judaism, In the late 1960s, when the novel was written, it was

associated with emigration, requiring an altered body, becoming a new human, but not a Soviet one.

Kandid finds a scalpel next to the body of Karl Etingoff, who had disappeared from the radar, as the reader learns from the Perets's speech in the novel:

She ran lightly and silently across the grass and soon disappeared behind the trees, while Kandid remained seated, holding a scalpel in his palm. He didn't bury it. He wrapped a tuft of grass around the blade and tucked the scalpel into his bosom. Now he remembered everything, and yet he could understand nothing. It was some kind of strange and terrible dream, from which, due to someone's oversight, a scalpel fell out. It's a pity, he thought, today my head is unusually clear, and yet I can't understand anything. So, I won't be ever able to do it. (*Ulitka*, 1989, 400)

Kandid is unable to understand what this object (and for the reader, this image) means. Nava is scared of it, and she wants Kandid to ditch it, believing it is a reptile. For Kandid, it is a knife to cut metal. Kandid is an ape with a grenade: he picks up some objects and ideas, but he is unable to synthesize them in his mind.

The last scene of the novel is Kandid's preparation for the fight against machines also involves a scalpel:

Suddenly there was a ruckus in the field. The women squealed. Many voices shouted in chorus:

– Silence! Hey, Taciturn!

Kolchenog woke up.

– It must be the dead men! - he said, rising hurriedly. - Come on, Tinderbox, come on, don't sit down, I want to see.

He got up, drew his scalpel from between his cracks and headed to the edge of the clearing. (*Ulitka*, 1989, 460)

The scalpel is the limit of the progressor's civilization: it is a violent tool of a change that often is irreversible. The scalpel is what characterizes the progressor in general, as in *The Time Wanderers*.

Progressorship as degeneration

Robert Kershner pointed out that the fear of the degeneration of humanity lurks behind the fantastic literature of such prominent authors as Wells, Kipling, and Conrad:

Popular consciousness of the time in Britain and to lesser extents in France and America as well, was the doctrine of Degeneration. Never given complete expression because of its very amorphousness – not to mention its irrationality- the fear of degeneration lurks behind fictions of Joyce, Wells, Kipling, Conrad, Robert Louis Stevenson.... (Kershner 1986, 426)

The list can be expanded to include the Strugatskys, who saw the worse time in store even after liberalization. In his late interview, Boris Strugatsky commented on the contemporary moment (early 2000s), recalling the Thaw as a point of reference. He already suspected that Putin, who had been the president for 18 months at that time, was a threat to the liberties acquired during Perestroika and after the Soviet collapse:

I remember how the first Thaw of the late 50s-early 60s came to naught. The Congress, the plenum, the editorial in *Pravda*, the "historic meeting of party leaders with the creative intelligentsia" – each time we understood: aha, now we have let go... and now they have taken us by the throat again. It will not be like that now – if it is. Now it will be slow, gradual and almost imperceptible. If they really want to lead us to the Chinese way. (Kozhemiakin 2001, 3)

He could not imagine, however, that their progressors would be hijacked for the ideology of restoration of the repressive political regime and nostalgia for the lost communist promise. In the beginning of the 1990s, science fiction started to explore the character of *popadanets* – a character from present-day Russia sent or finding themselves in a different time – which was a new incarnation of the progressor. *Popadanets* is the name that comes from “to happen to be,” or “the one who fell into a time hall,” and for them, it was a concept that first appeared in the *Escape Attempt* (1962). The main difference between progressors in the Strugatskys’ classical works and the *popadanets* in post-Soviet writings was that *popadanets* had been persuasively linked to right-wing ideologies (Gomel 2013; Fishman 2002). There is another reading, proposed by literary scholar Pavel Vinogradov, for the progressor as a symbol of alternative in a troubled society (Vinogradov 2011). This means that the image of the progressor is ambivalent.

The concept of alternative communism had also been reconsidered during Perestroika, and progressors were reevaluated. For example, the director and the scriptwriter for the film based on the Strugatsky brothers’ *Ugly Swans* (2006), Konstantin Lopushanskii equates the progressor with a new class of capitalist entrepreneurs:

In Strugatskys, the main conflict was the clash between a totalitarian society and the new future - the beautiful, intelligent children who replaced the past. But who were these children? The children of perestroika. So, if we follow the logic of history and the book's narrative, we, having experienced "perestroika", would have to make a movie, in the finale of which the intellectuals who made "perestroika" would meet their "bright future". Through a "hole" in the sky, skinhead bros would appear in the light: "Daddy, you fought for us, and we came!" Sarcasm at the newspaper level. The level of the problem has changed. At the time the novel was being written, we were afraid, roughly speaking, of an external apocalypse. When I shot *Dead Man's Letters* in 1986, there was an atomic war - a misfortune, a disaster coming from outside. Now, it seems to me, an inner spiritual apocalypse, a "crack in the heart," is coming to the forefront. (Lopushanskii 2008, 5)

Important for the context is that Perestroika brought up new technological and historical challenges, yet Chornobyl nuclear plant explosion on August 22, 1986; the massacres at Vilnius demonstration of 1989, and military intervention into Tbilisi in 1990 were part of Perestroika too. This was one of the first instances where governmental censorship did harm to humanity, since large parts of Europe and oceans were impacted. The Apocalypse stopped being an allegory but became a real experience for those affected.

Conclusion

Efremov and the Strugatsky brothers created an original Soviet genre of *social science fiction*. They were trying to imagine and rationalize the possibility of alternative communism. In their later works, they showed the logical defeat of such a utopia. Through the vision of

alternative communism, Efremov and the Strugatsky brothers tried to rationalize the idea of a New Human as an Übermensch, but the Strugatsky brothers arrived at the realization that this project was doomed as well. Moreover, the Strugatsky brothers link several representations of the progressor to a character with most anti-humanist views. The protagonist of *Doomed City* (*Grad obrechennyi* 1979, published in 1988), Andrei is somewhat similar to Sikorski, but in his evolution, as he lives through a simulacrum of 20th-century history in one city, he adopts multiple roles that are assigned to him by the society. Andrei fully and earnestly invests himself into each one, and at some point, turns into an Anti-Semitic Nazi.

Efremov builds his entire philosophy around different forms of hierarchy – social, cultural, and biological. The Strugatsky brothers also accept social hierarchy as something perplexing and essential, but they deconstruct this episteme by showing how an alien or a (super)woman can destroy the system of identification by questioning its universality. To be an alien is a choice of exile from what is known, which Toivo Glumov embraces, but Kandid rejects. Toivo Glumov departs into the unknown, while Kandid chooses a path of a Luddist knocking down robots.

Soon after the end of Thaw, the film *Ordinary Fascism* (1965, director Mikhail Romm) was aired, exposing the similarities between Soviet and Nazi politics. The same message was long circulating in different texts familiar to readers of *samizdat* or the mass reader of Perestroika (from Ernst Henry to Vasily Grossman). The Soviet Union defined itself against fascism, and that is why the anti-fascist rhetoric was official. However, Efremov and the Strugatsky brothers turned this rhetoric against the Soviet regime itself, and Soviet censorship responded accordingly.

Comparing Efremov's and the Strugatsky brothers' anthropological concepts, it is safe to conclude that they have similar characteristics. They define alterity as a difference within the universal definition of the human, in which one human is superior to another based on arbitrary characteristics that are reflected in the culture of the human. Culture identifies and stabilizes differences. The culture of the Dark Flame in *The Bull's Hour* or the degenerative men in the village (who are the misogynic representation of the patriarchy) in *The Snail on the Slope* are the indicators of difference, supporting the line of behavior that creates a superior position. This eliminates the ambiguity in our interpretation of the human, the monstrous, and the alien in Efremov's and the Strugatsky brothers' works. In Efremov, the central divide is between progressors and barbarians, for the Strugatskys – between men and women. According to the writers, these are real human boundaries that establish social hierarchies and make equality impossible.

Chapter 3:

Stanislaw Lem and Volodymyr Savchenko: The Non-Human, Artificial Intelligence, and the Multiverse

Soviet critics of the Stalinist period favored SF works in the genre of technological utopia based on new scientific discoveries or technologies. After 1956, this genre remained in demand as demonstrated by Efremov's depiction of the ideal society as a communication-based utopia complete with intergalactic radio towers, holograms, and video calls, the genre became in demand. The Strugatsky brothers also explored the concept of fictional bio-technology. Potential divergences from obvious benefits of technology toward the realm of the unknown, are encompassed by the alterity that unveils novel pathways, acting as enigmatic catalysts for future societies. In Efremov's works, the focus lies on the exploration of beneficial natural occurrences, the discovery of novel drugs (such as LSD and presumably opioids in the Strugatskys' works), as well as encounters with extraordinary beings that bring about profound transformations and enhancements to humanity.

Both Efremov and the Strugatskys treat communism as a civilization that achieved success by employing high technology to establish novel forms of social structure. For them, the concept of alterity, or otherness, is mostly associated with the context of nature. This included the anisotropic structure of matter and the Forest. Somewhat deviating from this path, the Strugatsky brothers introduced the “feminist Other” as living in unity with nature but enabled by robotics.

Yet there is little on the computers in all of their works. Within the realm of technological utopia, there exists a subgenre that transfers the concept of Otherness, whether it be in a position of power or not, onto computers and cybernetics. This subgenre assumes the presence of new media control, robotics, and artificial intelligence as a predicate for social perfection and ideal living. The advent of computers and the application of statistics made possible by technology are the main catalysts for the transformation occurring in the world. However, literary works of Stanisław Lem and Volodymyr Savchenko that I will be discussing in this chapter do not align with the concept of a "cybernetic utopia" where computers and robotics enhance civilization. Their societies exhibit a high level of advancement, yet they find themselves in the midst of profound crises that appear to be insurmountable, despite extensive statements and repeated errors when confronted with alterity.

In the works of Lem and Savchenko, the concept of alterity is manifested through the emergence of artificial intelligence, which heavily relies on computers in the future. Additionally, alterity is also present in the human body, as understood through advancements in human sciences throughout the period of 1950s-1970s, such as neurobiology, media studies, and psychoanalysis. Despite their immense potential, these innovations result in more disorder than advantages. Human psychology proves inadequate for using innovation for social progress, instead yielding the reverse outcome. The alterity, as an incomprehensible and uncontrollable force, serves as a catalyst for transformative shifts in social structure, yet these changes are unpredictable and not necessarily constructive.

Cyber-technology transforms into alterity, sometimes for good, when it appears anthropomorphic, and sometimes for bad, when it develops its own robotic logic and goals.

Cybernetic utopias seem to be flawed as a result of the incapacity to regulate progress. The inclusion of humanization and de-humanization as a narrative device explores the transformative effects of modern technology on human beings, leading to the emergence of a new post-human existence. This phenomenon has been extensively examined in Gomel (2014). Additionally, there is another outcome, namely the defamiliarization of traditional imagery that depicted state bureaucracy as a technological development. As I will demonstrate later, this idea played a vital role in the manifestos of Soviet dissidents, the technological elite, and affected the development of the Perestroika discourse among the political elite.

Dystopian utopia

Efremov was the pioneer in effectively questioning the prevailing Soviet aesthetics through the genre of SF. Nikita Khrushchev liked Efremov's novel *Andromeda Nebula*, although Efremov diverged from the official optimistic tone of propaganda while discussing communist utopia. Efremov asserted that the realization of paradise, as depicted in his works, is not feasible within a timeframe of less than several millennia (see his interview with Brandis in 1968). This comment deviated from the established history of Soviet science fiction, which had previously made optimistic predictions about the possibility of space flight within a span of 20 years. In my opinion, this marks the beginning of a new subgenre that examines SF utopia as a means of critiquing the political utopia of communism.

Efremov is also the first Soviet writer who successfully conveyed the Jamesonian ambivalence inherent in each utopia. Any concept or idea that is proclaimed as a utopian inevitably transforms into its opposite; advancements and breakthroughs ensnare humanity in

life-threatening perils; and humans possess a limited perspective that prevents them from seeing the wonders of the planet. However, this situation does not signify the apocalypse, but rather serves as the foundation for a profound transformation.

In Efremov's works and even more prominently in the Strugatskys', there is consistently a metaphorical counterpoint within each utopia and dystopia too (of one considers *The Bull's Hour* and the Strugatskys' later novels). This counterpoint represents an alternative trajectory that is marginalized in terms of its portrayal. This counterpoint, which emerges concurrently but separately, calls for a shift in existing values and conceptions of humanity and the world, urging for a new perspective. In Efremov's work, the approach to intervention was uncertain, while in the Strugatsky's work, the progressor was ill-prepared to face the social obstacles encountered during the discovery of other civilizations.

Based on this observation, I contend that all of the fictional works by the authors examined in this study may be categorized as a dystopian utopia. In other words, their utopias contain seeds of dystopia and their dystopias indicate a path toward utopia. Already in 1993, Clowes looked at the works of Efremov, the Strugatskys, and other Soviet writers as part of one subgenre that she called meta-utopia, defined as a "utopia that disadvertises utopia," or an "impossible utopia." (Clowes 1993, 2 and 5). She links this genre of the meta-utopia with social and political debates, using Efremov and the Strugatskys among her examples. Thus, Clowes argues that the genre of meta-utopia "promoted pluralistic discourse, its inherent effort to bring about a confrontation of opposing ideologies, broadening of the social horizon" (Clowes 1993, 9).

Stanisław Lem and Volodymyr Savchenko represent this tendency most obviously and openly, as it was noticed by critics. Lem and Savchenko created a drive for the future by inverting Clowes' formula and revealing *a utopia in dystopia*. In Lem and Savchenko, this view is called fantomatics, prognostics, and futurology. Lem defines science fiction as literature that, beyond the following three functions--"informational as indicative [*oznajmująca*], didactic as teaching responsibilities, and carnivalesque [*ludyczna*] that entertains"—has an additional one: "Science Fiction also has other functions, especially the prognostic one, which doesn't mean that other three functions can be omitted." (*Fantastyka i Futurologia*, vol. 1, 4) The statement is quite similar to Savchenko's:

In essence, we are the witnesses of well-organized all-encompassing grandiose cosmic whirlpool, which manifests itself in things from the nuclear decomposition to the achievements of labor and creative activity. This is one process. And who are we to stand in the way of the global process? It would be similar to add announcement by our civilization to complain... yet there are no criminals here. Only plenty of fools maybe all 5 billion of world population. So who are the criminals? Most likely the one who hypothesis about the problems would be considered the criminal "the enemy of humanity." And also, of course, the enemy of progress and civilization... I preach this with the faith in human, a creature that can come to realization of the problem and then change their behavior. (Savchenko 1989)²¹

Prognostics is different from rational planning of reality because it embraces skepticism as the tools of planning. Humans cannot impact the "cosmic whirlpool." The counter-action

²¹ Available online: <https://fil.wikireading.ru/63902>

about which Savchenko is skeptical is shown in the concept of “the enemy of humanity,” a reference to Stalinist discourse of alterity. Thus, overcoming of the already “known” (the past) is an act for the future. It is an act of the futurological mindset that rejects any epistemology that claims to be accurate in its predictions, and both authors used the tropes that appealed to the STEM language, specifically physics and cybernetics, yet it rejected existing scientific epistemology as limiting for predictions.

Here I will argue that utopia in the subgenre of dystopian utopia is introduced with a discourse that stresses skepticism toward available knowledge, and hence governmental or generally social plans; admits pluralism in any social phenomenon; and essentializes individualism in politics, so one has the right to their own faith, their own “personal metaphysics,” as Frelik calls such individualizing metaphysics in Lem (Frelik 2013, 448).²² This personal approach doubts contemporary science in some of its aspects, and its fictional world speaks of the shortcomings in scientific thinking when it comes to utopia construction. Lem constantly reworked his ideas on the future of society with new sciences such as cybernetics, and he started with the concept of “prognostics,” which he replaced with “futuresology” in 1970 (*Fantastyka i Futurologia*, vol. 2, 3). Much later, in 1989-1990, Savchenko participated in the “dialogues on futuresology” and claimed that his novel *A Rank in the Universe* (1992) is about the current degradation of humanity (see further: Savchenko 1989, 1991, and 2002). There is a common opinion that Lem and Savchenko only *criticized* Soviet utopia but did not introduce their own (Clowes 1993 and Britikov 2002 on Lem; Gakov 1989 and Jurich 1998 on Savchenko). Vladimir Borisov, a historian of political science in the USSR, saw Lem’s writing as

²² Although Lem never comes to such formulation, it is true to Lem’s idea, as I argue below.

a criticism of Soviet political utopia, and asserted that Lem rejected any “teleology in politics” (Borisov 2006, 319). According to another group of scholars (Nudelman 1989; Frumkin 2007), each author has their own utopian project, yet that project must be recovered. Thinking of the genre as a set of rules, tropes, concepts, and philosophical ideas, I show how Lem’s and Savchenko’s prose continues the processes initiated by Efremov’s *The Bull’s Hour*, and its concept of the anisotropic matter from 1968 (see: Chapter 1). Based on a comparative analysis of the authors discussed in this dissertation, scholars have often interpreted Lem and Savchenko in relation to Efremov’s ideas in *The Bull’s Hour* and works by the Strugatskys – particularly in *Hard to be a God*, The Kammerer trilogy, and *The Snail on the Slope* (Jurich 1998; Hayles 2013).

Lem and Savchenko, as I will show, work on the image of proper cybernetic utopias, yet these utopias are not demonstrated so much they are theorized, and can be deduced “negatively.” This already creates a tension dramatizing the plot: the reader learns from an example of a “bad place,” i.e., the dystopias (Clowes 1993, 10). Grounding my views in debates around Lem, I argue that there is indeed a utopia in the world of dystopia, and this utopia must be deduced from what is opposed. Solutions to the social and political issues that these authors formulate require tension as they offer a satirical parroting of the positions they do not support. The genre of a dystopian utopia has been previously defined as “anti-fascist” (Rodnianskaia 1963, 47 while discussing Lem) and “anti-totalitarian” (Geller 1989, 113 while discussing Savchenko). It is worth thinking of these authors, and specifically the texts mentioned here, as part of an effort to outline social and political agendas in a different society with a different regime, which, by the

logic of their philosophy, is conditioned not by the technology and science described, but as an abstract exercise in political thinking.

Western literary scholarship on science fiction has defined Lem's work as utopian (Istvan Csicsery-Ronay 1970; Suvin 1979; Frelik 2018). My argument is grounded on Edith Clowes's reading of the subgenre where dystopian and utopian are ambiguous spaces, with its consideration of the discourse of pluralism in Soviet SF. Clowes, as shown before (see Introduction), argues that there is no need for the utopian component to promote a "renewed reliance on one's own critical judgment, personal memory, personal integrity" (Clowes 1993, 141). Istvan Csicsery-Ronay places similar emphasis on the unimportance of the "outcome" in his study: "Lem's science fiction represents the unique voice of the witness in the belly of the beast: the witness who has given up interest in the outcome of the collisions between competing political-technical forces. From his vantage point, the outcome is indifferent" (Istvan Csicsery-Ronay 2013, 149).

As if in response to Clowes' argument and its supporters, Paweł Frelik's article "Stanisław Lem's *Summae Technologiae* as Impossible Utopia" interprets Lem's work as the author's attempt to distance himself from any utopia, in order to pass Soviet censorship without promoting Soviet agenda, since his "consideration in *Summa* would have inevitably resulted in a more or less implicit critique of the United States, Great Britain, and Germany" (Frelik 2013, 447). Frelik explains Lem's "agnosticism" as a speaking tactic, by which Frelik means Lem's "misanthropic humanism" and "confidence in the cognitive power of science":

Perhaps the explosive combination of his agnosticism (albeit different from the official state atheism of the Soviet block) and misanthropic humanism, combined with his confidence in the cognitive powers of science, led to the complete evacuation of lived human existence from his considerations. In the context of a programmatic text like *Summa*, such a critique would have played into the hands of communist propaganda, something that he was decidedly unwilling to allow. [...] Perhaps, then, Lem chose to disregard the social and economic circumstances that burden all technologies to avoid becoming an unwitting tool of the system he despised. (Frelik 2013, 448)

This reading engages with one of the key ideas in Lem's philosophy, the "dehumanization of technology," by which he means the self-sufficiency of technology that impacts humanity. AI will thus reach the stage of "autonomous" self-governance, so it would not need humans. For example, Frelik says of Lem's *Peace on Earth*: "Combined with Lem's repeated assertions that this was his favorite nonfiction text, these unprecedented revisions and addenda suggest that *Summa* occupied a special position in his oeuvre, as a creed of his rationalist faith" (Frelik 2013, 448).

The rationalist faith, as described by both Frelik and Clowes (Clowes 1993, 54), shows that, as a representative of the subgenre, Lem re-fashions utopia into a dystopia, and it is not only a rational endeavor but also based on beliefs (Frelik 2014, 449). Thus, Frelik comes to the same conclusion on Lem's work that Clowes had on some of Efremov and the Strugatskys' works. These works were the manifestations of their authors' own critical judgment, personal memory,

personal integrity, and faith in a *rationalist metaphysics*. I discuss these manifestations under the rubric “transcendental autoevolution.”

Clowes argues that SF develops readers’ critical thinking to compare “good and bad places” rather than simply promote a utopia on its own (Clowes 1993, 9); according to Frelik, however, the opposite is true: SF shows readers a utopia, but in a radically unrecognizable way. Clowes’ argument appears to be well supported. In a 1992 interview with Peter Swirski, Stanisław Lem commented that, if he were to state his philosophical affiliation in terms of the “accepted nomenclature,” he would rank himself “in a large measure with the skeptics” (*Lem Reader*, 42 via Livingston 2008, 132). A similar view was expressed about Lem by Marilyn Jurich, who says that Efremov, the Strugatskys, Lem, and Savchenko used interchangeably the concepts of “the utopias that won’t happen” and “pseudo-utopias” (Jurich 1998, 139 and 141).

Embracing new as the unknown

Nearly any utopia depicted in the selected SF is presented in the form of disbelief, even with hostility from the protagonist or powerful characters, yet utopia remains an especially important component of the subgenre. The genre’s main feature, as shown for Efremov and the Strugatskys (see: chapters 1 and 2), is the feeling of uncertainty, and here I speak of Lem’s “skeptical agnosticism” as a recognizable part of the *discourse of alterity* in science fiction and politics during Perestroika. This principle is what unites Lem’s *Solaris* with the Strugatskys’ novel *Hard to be a God*, according to George E. Slusser, who recognized the similarities in their “apprehension” of the future as an “anisotropic path” (Slusser 1989, 5); this path to learning

creates both the feeling and the philosophical explanation for uncertainty about the future.

Slusser, however, focuses on the fiasco of Strugatskys' and Lem's characters to use their knowledge of the path:

Most SF roads to contact, even those ironically conceived in Lem, are anisotropic in Pashka's sense [a minor character in *Hard to be a God* – ST]. If a protagonist actually travels to a past or parallel world, he cannot engage that world unless he leaves this one behind completely. However grotesque Kelvin's question, "Must I go on living here then, among the objects we both had touched, in the air she breathed?" (*Solaris*, 211), he cannot go home again, and will remain on Solaris. (Slusser 1989, 5)

According to Slusser, Rumata goes back in time and fails because he tries to change the world, and it is a "not gratuitous metaphor" for discussing Rumata's life path, since there can be no return. In Slusser's view, Rumata considers losing his lover and failing in the study of a violent exotic civilization as a solution to his existential crisis (Slusser 1989, 27). Slusser argues that one cannot go back in time because history is not like a road; so, Pashka's attempt to move towards the past world is a failure in logic:

In each direction the road is different. But is this the same as saying it is a one-way road?

Such thinking leads to Pashka's final, and extreme, equation of the road and history:

"Nowadays I often think back to that road.... Maybe there's some connection somewhere...the road was anisotropic-just as history is. There is no way back. And he went right ahead anyway. And met up with a chained skeleton" (*Hard to be a God*, 204).

The problem (and it is one specific to *Hard to Be a God*) is that history is not merely a

physical process-analogous to the properties of the road, but a matter of human interaction with those properties. (Slusser 1989, 26-27)

Slusser's argument is that Lem's character Dr. Kris Kelvin in *Solaris* differs from Rumata in that he does not try to go back, but stays on a new path. Yet Lem considered Kris Kelvin stuck in a "dead-end" (*Fantastyka i Futurologia*, vol. 2, 148),²³ a tendency that both Lem and Savchenko promoted in their manifestos, *SF and Futurology* and "The World before the Burning Point" (1989 with Oles Berdnyk). The ironic use of "Knights of the Holy Contact" exposes Lem's skepticism about the project of ameliorating the world:

In this skeptical climate of opinion, one of the scientists, Snow, doubts humankind's ability to perceive, not just new, but all worlds: "We think of ourselves as Knights of the Holy Contact. But this is another lie. We are seeking only Man, we have no need of other worlds. We need mirrors" (*Solaris*, 81). Snow is an extreme skeptic. But he hints at a deep mystery, isolated in our mirror desires, isolated inside our minds, that blocks our attempts to know external phenomena: "Man has gone out to explore other worlds and other civilizations without having explored his own labyrinth of dark passages and secret chambers, and without finding what lies behind doorways that he himself has sealed" (10:165). Failing to know itself as precondition for knowing the other, humankind has let the past, in the form of some collective unconscious, dominate its drive for the future. (Slusser 1989, 5-6)

²³ I cite by the original Polish edition, volume 1 and 2 were deposited to the publisher in 1972 and published together in 1973.

Thus, only skepticism can lead to understanding the problem of not moving beyond what is already known, seeking the human in a mirror that shows one's holiness while it conceals the historical colonization of the Middle East under the premise of spreading proper religion. This is a brutal reality of an all-European history.

For both writers, the key to utopian thinking emerging from dystopia is associated with the non-human, an umbrella concept that includes various phenomena beyond human control and rationalization. This fictional placeholder may include AI and extraterrestrials, but non-human can also serve as a metaphor for the state bureaucracy. (For example, Soviet dissident Valentin Turchin used an SF cybernetic dystopia, similar to those in Lem and Savchenko, to deem Soviet bureaucracy as a machine that is out of human rational control.²⁴) The non-human is also a synonym for the inhuman, i.e., the irrational and animalistic in characters. A “parallel,” incomprehensible logic – or rather multiple logics – separates the non-human from the human, leading to Lem's and Savchenko's concept of *the unknown*, central in their epistemologies (see Introduction). These categories are open to both dystopian and utopian characterizations, and I demonstrate below how each of these writers configures the relationship between the two modalities, eventually preferring to interpret the alterity of the non-human in a positive, i.e., utopian way.

In a further analysis, I demonstrate that despite great differences between their aesthetics, Lem and Savchenko's visions of humanity are based on a shared vocabulary. Through the category of the non-human, Lem conceptualized the idea of “the language of contact,” which had specific political underpinnings: peaceful co-existence and demilitarization. In his works,

²⁴ See: Turchin 1978; and Conclusion.

Savchenko questions belief in the benevolence of technology, and in a vein similar to Lem, depicts the machine as the source of non-human logic that alienates and endangers humans. Furthermore, he creates a powerful image of the “Multiverse” in his novel *A Rank in the Universe*, but interprets it as a dramatic challenge rather than a spectrum of new opportunities.

Images of the non-human alterity in SF

Lem introduces new concepts to modify common sense through exotic science-fictional and philosophical discourse: “two evolutions,” which he describes as “para-biological” “evolutions” of technology. Lem uses the metaphor of machines developing – both socially and psychologically – to develop his unique discourse of equivalence between machines and humans. The concept works against the totalitarian view of the human as a detail, as argued by Rodnianskaia and others. If machines can evolve, then they go through the same stages as humanity: thus, there is an evolution of “machine civilization.” Lem grounds such important critical ideas in “transcendental autoevolution,” meaning that the evolution of a civilization depends on self-construction. In other words, machines can develop according to their rationale, Lem calls it – a “dehumanization of military technology.” I show that this concept explains, philosophically, “the machine rebellion” in Lem’s world. Another global conclusion of “transcendental” self-construction or “autoevolution” is the concept of the “metagalactically plural reason,” which defines reality as governed by a multitude of determinisms; thus, there are no meta-principles, like laws of nature or laws of evolution, that can truly be deduced.

Literary scholars have linked Lem's tropes to concepts repeated in his fiction that acquire a diversity of meanings, depending on their contexts, so the concepts can serve as identifying markers of the discourse of science fiction (Slusser 1989, 8; Nudelman 1989). Lem's ideas resonate within the field of SF while not necessarily naming the concepts themselves. Slusser also implies criticism of the superhuman, the progressor, and the problem of progressorship, which was shown as the problem of Soviet industrialization via top-down policies challenged by science fiction since the Thaw (Nudelman 1989). Lem creates an image of alterity such that the progressor is unable to pragmatically employ regular research tactics, as they do in Lem's *Solaris*. Irina Rodnianskaia argues that Lem's fiction features tropes such as a machine rebellion and a black box, which are the images of an "anti-fascist utopia." (Rodnianskaia 1963, 47) In the context of social development, one may think of these two tropes as concise descriptions of a totalitarian state: the human is dehumanized by technology, yet the technology is too simple to be considered beneficial to humans.²⁵ In Lem, the machine is anisotropic, as are paths in Efremov and the Strugatskys, the development of a machine civilization takes various directions, often self-exclusive, so there can be no generalization about what a machine is in relation to humans.

Philosophical alterity

In his magnum opus, *SF and Futurology*, Lem spoke of the necessary openness to the world required to perceive it in a new way. As Irina Rudanovskaia says, Lem creates a "horizontal perception of the world" that requires "existential acceptance of the Other":

²⁵ A Soviet dissident, Valentin Turchin characterized the USSR during the Stagnation period, the conservative period between the Thaw and Perestroika, as a machine "too simple to evolve" (See Conclusion).

Approaching the Other can be interpreted as reciprocal approaching of one's self. It is approaching one's personal history (reaching a level of frankness), as well as approaching a new, almost impossible, horizontal perception of the world, where you can be close to the Other no matter what, without trying at the same time. To make it manageable, predictable, hopelessly "one's own" (reaching the level of existential recognition of the Other). (Rudanovskaia 2015, 72)

Therefore, this uncontrollable other is valued as a non-human – as categorically dissimilar, but still accepted with curiosity. To express this idea, Lem praised his *Solaris* as a philosophical "breakthrough," linking a reading of Immanuel Kant's philosophy with the concept of noumena, the unknown thing-in-itself that cannot be exhaustively and rationally studied (*Fantastyka i Futurologia*, vol. 1, 33). *Solaris* is a symbol of the unknown non-human that cannot be understood by a mirroring of human qualities, nor by the logic of the unknown. The alterity to such Other is a human who may be referred to by Herbert Marcuse's term, the "one-dimensional man" (see Introduction); or, as Irina Rodnianskaia deduced from Karel Čapek, as a lizard, a totalitarian human who silently executes orders," a human with no depth" (Rodnianskaia 1963, 47-49). Much later, in 2006, Csicsery-Ronay spoke of Lem's and Čapek's unique social reformation projects as rejections of existing empires (Csicsery-Ronay 2006).

In 1963, literary critic Irina Rodnianskaia wrote the article "Facing the choice" (*Pered vyborom*), initially published in *Literaturnaia Gazeta*. Rodnianskaia discusses Lem's two short stories from the *Cyberiad*, "Molot" and "Friend," in the context of a "cybernetic utopia" that "socialists use to oppose the fascist utopia." She compares Lem's text with Anatolii Dneprov's

Sueme (1965) and Ray Bradbury's *Fahrenheit 451* (1953), both of which use the similar genre of anti-fascist cybernetic utopia. The article's title refers to the imperative of thinking critically about the utopia one chooses to support. Rodnianskaia's approach is both ethical and political. Her most frequent descriptive term is "fascism," (by which she means extremely authoritarian states like Italian, Spanish, Romanian, and German states in the 1930s) and she suggests criteria allowing readers to distinguish a "proper" utopia from a "fascist" one. The critic concludes that Lem and Dneprov "confront human mind by the fantastic mind of a different kind" (*razum inogo tipa*) to explore the human abilities and limits defining an intelligent human creature. She also refers to Čapek and Wells as precursors to the subgenre. As I mentioned in my chapter on the Strugatsky brothers, Wells pioneered the theme of a parallax produced by fear of an unknown danger, while Čapek, as Rodnianskaia reminds us, created an image of the fascism of a small person, a salamander (Rodnianskaia 1963, 43-44).

From this context, Rodnianskaia deducts at least two critically important concepts, and not only for this circle of writers: the *black box* and the *machine rebellion*. According to her, ...The "cybernetic utopia" in the interpretation of Lem, Dneprov, and even Bradbury, develops a critique of the fascist ideal of the human society as an anthill with "programmers" – masters or an inexorable logical machine (the embodiment of anti-human social force) at its center" [...] In the means of "biological" coercion, the writers see an extreme form of social use of man "not in accordance with his purpose," detrimental to society as a whole. The words "not in accordance with its purpose" are

borrowed from a statement by N. Wiener, which can serve as the best commentary on the satirical anti-fascist variations on the themes of cybernetics. (Rodnianskaia 1963, 43)

Using Lem's short story, Rodnianskaia introduces the concept of the state as a machine, which here means an artificial intelligence. Such a "Machine of Management" creates more simplistic machines that serve as perfect consumers, but these same machines rebel and turn other machines into "recycled shiny circles" (Rodnianskaia 1963, 43). Her logic may seem coherent only as an artistic rhyme between images, and my chapter is a re-iteration of her analysis, but with the understanding that Lem's vision, as well as the language and ideas that he shared with other SF writers, were then part of the birth of the political vocabulary alternative to Marxism-Leninism through the metaphorical language of SF:

If the former concept of "machine rebellion" corresponded to a social order similar to a haphazardly constructed building or a steam locomotive rushing along a damaged track toward its own destruction, then in its current "cybernetic" form the same concept characterizes an utterly "alienated" from the "warm-blooded". The literary motif itself emerged not only from a "purely" scientific source, but also as a reaction to the threat of a revival of fascism. An inexorable mechanical dictatorship, for which man is no more than a suitable material, a mysterious "black box", whose logical calculations and mathematical calculations take into account absolutely everything except man's natural characteristics and desires, alien to "machine psychology" – is this not a variant of Fascist-style statehood, only slightly improved, purged of racist and other demagogy,

since the latter is not always needed (more reliable and straightforward means of subordination may be found. (Rodnianskaia 1963, 40)

According to Rodnianskaia, technology is not a repellent against fascism; fascism, as SF authors demonstrate, can just as easily utilize futuristic technologies, including AI, as it utilized technologies of the industrial age for mass murders in the historical past. Any scientific discovery – from cybernetics to neuroscience – can be used to control the human mind, for violence against human freedom and coercion for the sake of the state:

In this context, another version of the anti-fascist “cybernetic utopia” emerged. Humanist writers wonder what would happen if serious discoveries in this direction were made in a world where relations of subjugation and violence between people have not yet been universally eliminated. (Rodnianskaia 1963, 40)

An impulse toward the anti-fascist “cybernetic dystopia,” argues Rodnianskaia, suggests a move from the controlling black box toward machine rebellion: the rebellion of the non-human that, in effect, reinstates the value of the human. Machines rebel as humans and as proxy humans.

Rodnianskaia’s analysis paves the way for understanding Lem’s opposition to multiple, technology-based utopias. Lem uses quasi-mathematical logic to defeat the logical grounds for fascism, socialism, or any other political doctrine that insists on its exclusive and righteous understanding of the world. He does so in almost every text, but I will focus on three programmatic texts in different genres: two of his theoretical manifestoes, *Summae Technologiae* (1964, in Russian 1968) and *Fantastyka i Futurologia* (volume 1 – 1970; volume 2 – 1972, in Polish), and *Peace on Earth* (1985). I will demonstrate how these concepts become fictionalized through the images of new, unknown creatures and phenomena.

Lem's discourse of alterity

Conceptual relationships between Lem's language and the language adopted by ideologists of Perestroika harken back to the mid-1970s. In 1976, Lem's collection, *Izbrannoe (Selected Writings)*, was published in 100,000 copies by Progress, the Moscow publishing house related to the circle of authors in *The World Marxist Review* – those who, as Gorbachev's advisors, "ran the show" during Perestroika (See Conclusion). This collection of chapters from Lem's major works is a condensed introduction to Lem's political theory promoting a Western type of political pluralism, as well as his entire philosophical and literary approach to difference in society. Later, in the 1980s, the same press published selected parts of *Solaris* and also works with the most important of Lem's characters: Trurl and Klapasiusz as engineers that can create superior smart machines from *The Cyberiad* (1963); Ijon Tichy from *The Star Diaries* (1954) who appears as the protagonist in *The Futurological Congress* (1972), and in studied here *Peace on Earth* (1986); and Pilot Pirx from *Tales of Pirx the Pilot* (1965) who is the protagonist of discussed here *Fiasco* (1986). Pilot Pirx is probably the most Soviet by design since the book about him was published first in Russian in the USSR in 1965, and only two years later in Polish in Poland.²⁶ Besides the key characters, there are two stories with political and philosophical implications from the collection "Ideal Vacuum," a book that referenced as yet non-existent philosophical works.

²⁶ *Tales of Pirx the Pilot* was published in Poland in 1968, and in English in 1979 and 1982.

The Progress edition has a foreword by Eduard Arab-Ogly (1925-2001), a Soviet philosopher, a proponent of critical philosophy, and one of the key ideologists of Perestroika. Arab-Ogly was also Mikhail Gorbachev's advisor from 1986 to 1991. Here (and in his other publications throughout the 1970-80s), Arab-Ogly dedicates attention to Lem's futurology as an example of "political prognosis" — not as "a teleological plan" (*tselenapravlennyyi plan*), but as a range of probable scenarios that must be simultaneously anticipated (Arab-Ogly 1975, 1983, 1987).

The collection ends with two short philosophical manifestos: one in the form of a literary review by Wilhelm Klopper, who is a fictional author of the cultural manifesto in German "Die Kultur als Fehler" written, according to the information provided in the translation by Lem, in 1971. The second a lecture, in which a fictional Nobel Laureate, Alfred Testa, gives a speech on physics outlining Einstein's quantum physics that complicated his worldview with the idea of the Multiverse. The style of these reviews reminds readers of Arab-Ogly, and his colleague Georgy Shakhnazarov, another science fiction scholar and Gorbachev advisor. The writing overtly cites Western political theories as "non-Marxist," but nonetheless scientifically acceptable. Both essays by fictional authors argue that technoevolution, neither in terms of conventional, new technology nor futuristic, autonomous artificial intelligence, is no solution to social problems. Klopper's "Culture as mistake" is a fictional explication of Lem's view that science should not be bound to culture, and if it is (as it is in most places in the world), it puts science at a disadvantage. Culture for Klopper is a mystification allowing to deal with those subjects that science would need to approach differently. Klopper speaks as a materialist and jettisons religion,

which sounds a bit radical to Lem himself, so there is some distance between him and the invented scholar.

The lecture by Albert Testa, called “New cosmogony,” is Lem’s ironic tale of an alien, superior civilization that would not be distinguishable from the work of nature (*Izbrannoe* 1976, 447). The invented physicist argues that the relationship between time and speed, and some other physical properties, such as Boltzmann constant and Heisenberg’s “uncertainty principle,” may (at least appear to) be created artificially by other civilizations. The narrator also hypothesizes that these aliens can be self-governing machines, yet also be in the position of gods to us. Why? Due to limitations in science, the human relies on anthropomorphism and is unable to register what is beyond human, the category of ultimate alterity for Lem: the non-human (*Izbrannoe* 1976, 448). Testa also references American space physicist Hugh Everett’s theory (a real one), about the plurality of Universes in the cosmos, a theory which appeared in the 1950s (*Izbrannoe* 1976, 447). Testa adds to this theory that the human is unable to understand how this is possible, because contemporary science allows the creation of “microworlds,” while the rules for its creation do not work for “macroworlds,” as with the plurality of Universes (*Izbrannoe* 1976, 447). This fictional persona retells Lem’s 1964-1971 theory of culture and his project of political subjectivity. In addition to *Selected Writings*, Progress also published Lem’s last novels as “political novels” at the beginning of Perestroika.

Summa Technologiae

Most representative of Lem's philosophical views in the 1960-70s is *Summa Technologiae* (hereafter *Summa*), which puts technological and biological evolution on equal standing through the discourse of cybernetics and Lem's own concept of prognostics. Originally published in Polish in 1964, and then translated into Russian in 1968, the book was not fully translated into English until 2014.

At first glance, it seems that *Summa* deals with questions such as the purpose of science and how technology can improve future society, but, as Biriukov argues (Biriukov 1968), *Summa* is mainly about the concept of evolution, which can describe not only the natural world but also any systems, including cybernetic ones. Lem applies the "human metaphor" to machines to explore how this comparison can reveal the creative potential of AI, but also to show the limits of both AI and the human. AI starts to play the role of the unknown that grows out of hand, resulting in visions of machines that rule a state or a spaceship – often turning them into *nightmares*:

We are opening a section on the metatheory of the gradients of man's technical evolution.

We say "meta" because it is not the delineation of its direction or the determination of its consequences that preoccupies us for the time being but rather a more general and overarching phenomenon. Who causes whom? Does technology cause us, or do we cause it? Does it lead us wherever it wishes, even to perdition, or can we make it bend before our pursuit? But what drives this pursuit if not technical thought? Is it always the same, or is the "humanity-technology" relation itself historically variable? If the latter is the case,

then where is this unknown quantity heading? Who will gain the upper hand, a strategic space for civilization's maneuvers: humanity, which is freely choosing from the widely available arsenal of technological means, or maybe technology, which, through automation, will successfully conclude the process of removing humans from its territory? Are there any thinkable technologies that are impossible to actualize, now and in the future? What would determine such a possibility the structure of the world or our own limitations? Is there another potential direction in which our civilization could develop, other than a technical one? Is our trajectory in the Universe typical? Is it the norm-or an aberration? (*Summa*, 12)

Evolution is "empirical" (*Summa*, 39), by which Lem means that species develop inconsistently, and the development of one feature can be accompanied by regress in others. In *ST* Lem proposes the idea of the "accumulation" of energy to evolve. Thus, evolution is not a breakthrough but a long process of trial and error (i.e., it often steps back in development). Notably, by the time *ST* was published, Rodnianskaia had identified the theme of a black box that makes the machine and the human, by analogy, act unpredictably.

Transcendental autoevolution

The logic of *Summa* can be structured along three mutually contradictory equations. The first is that *the human is less than a machine* ($h < m$), and Lem frequently shows that the artificial can reach superior stages of intelligence, so the machine may be better than a human, at least in some intellectual activities. The writer also introduces omnipotent computers that rule over people, calling such images "transcendental." Crucially, what Lem calls transcendental is

translated as metaphysical in English, and by defining it, he means that the metaphysical is an abstract generalization allowing reality to re-construct itself almost automatically. “Metaphysics” in *Summa* is what governs physics without the will. This definition is an important ruse that Lem uses to further equivocate human and machine as two similar phenomena, calling machine evolution “para-biological,” by which he means that there is a greater trend appearing in both evolutions. These are the Laws of Nature, which Lem uses to argue for his own views, but which are against his own philosophy. Lem writes:

Our idea for future research involving the construction of homeostasis that will be capable of creating metaphysical systems, that is, “believing “machines,” is not just a bit of fun. It is not that we want to mockingly recreate within a machine the genesis of transcendental concepts. The aim of this task is to help us discover the general principles that govern the way in which metaphysical models of the world come into being. We can imagine (and, for now, just imagine) a group of colloids, electrochemical, or some other homeostasis that are driven to develop certain beliefs in the course of their evolution. Those beliefs will emerge not because the homeostats have purposefully been programmed in this way. An experiment of this kind would be pointless. The homeostats will be capable of self-programming; that is, they will have the variability of goals—which is a cybernetic equivalent of “free will”? Just as man consists of a series of subsystems that are hierarchically “connected” to the brain, each one of those homeostats will have various reception subsystems (inputs, “senses”) and execution subsystems (inputs,

effectors, e.g., a hidden locomotive system) as well as the “brain” proper—which we are not going to predetermine or limit in any way. (*Summa*, 125)

Thus, the brain is no longer a human-only property, and intelligence is defined as a metaphysical and contemplated distinction in nature. Actually, intelligence is a belief that develops in response to accidental observations. Lem then creates tension as he develops a parallax, the moment when the consensus meaning of the word or an image for the reader and the author suddenly acquires new meaning that is contradictory and cannot be easily combined with the previous meaning. This creates a moment of ambiguity, but not the one that disempowers the reader from controlling senses but the one that “cracks” the surface of order and shows other meanings of the same person, object, or word. In another instance, he uses “transcendental” to explain what is beyond human understanding, and which is a “miracle,” even for scientists, until there is a proper observation:

Belief without after-death fulfillment means incomparably more to mortals than fulfillment or transcendence not preceded by belief... this is a highly interesting problem.

It is real, that is, soluble, only for an observer who is positioned outside that world—or rather outside both worlds, the real and the transcendental.

Only such an outside observer will be able to know whether belief is justified. When it comes to your suggestion that we introduce miracles into this “new world,” we have to reject it. Does this surprise you? Miracles are not a confirmation of belief. They are a transformation of the latter into knowledge because knowledge is based on observable facts – which the “miracles” would then become. Scientists would make them part of physics, chemistry, or cosmogony. (*Summa*, 287)

Transcendentalism typically relates to something beyond human rationality, something sublime and superior.

Regarding the equation that a *machine is equal to human*. For Lem, it is the construction of a machine that makes it similar to the human, but its functioning – a machine operating like a human, with psychology and desires; Lem also discusses the possibility of machine communities. The science-fictional concepts of a “machine civilization” and “ontological machines” would later appear in his writings – first being mentioned in Lem’s manifesto on what cybernetic utopia may look through potentially available robotics and artificial intelligence (*Summa*, 27 and 53). This equation works around the concept of evolution, allowing to use a biological reading of machine construction to imagine them as organisms: “I have been talking about two kinds of evolution at the same time: biological and technical. As a matter of fact, their dominant characteristics show a great number of surprising analogies” (*Summa*, 34).

The third equation is that the *non-human is beyond human perception and power*, so it is “transcendental” and also “metaphysical.” It is not the definition of the phenomena, but of the human mythological explanation of the subjects that lack scientific understanding. Typically, Lem calls his scientific hypothesis “convictions of speculative origin” (Csicsery-Ronay and Lem 1986, 242). Lem claimed that *ST* was his first work on futurology, which at the time he called prognostics (Lem 1986, 243). Biryukov, a cybernetician and popularizer of science, points out in his Introduction to the Soviet edition of *ST* the similarities between Lem’s theories and contemporary science – namely Iosif Shklovsky’s *The Universe, Life, Mind* (Biriukov 1968) and

geologist Aleksandr Baumshtein.²⁷ “However, *The Sum of Technology* is not so easy to classify; here, on a wide canvas, Lem sketched in large strokes a picture of the possible development of mankind. His book stands adjacent to those studies that have now received the name of science of science. It is also adjacent to other genres, as yet unnamed. I mean, for example, Iosif Shklovsky’s *The Universe, Life, Mind*, as defined by a Soviet cybernetician, a book about life in space and about space civilizations” (Biriukov 1968). In *Universe, Life, Mind*, Shklovsky argued that extraterrestrials would be found soon. Lem continued the conversation later on, in the magazine *Znanie–Sila* in 1977 (nos. 49 and 50), in which Shklovsky changed his attitude toward the possibility of extraterrestrial life and returned to the anthropocentric view of the universe. Thus, *Summa* is in many ways a Soviet book that cherry-picks the Soviet speculative philosophy of nature to challenge Soviet scientists with provocative science-fictional ideas.

However, while in a dialogue with contemporary science, *ST* also offers another, more metaphysical reading of technology’s future, exposing the importance of metaphysics for the hybrid discourse of the non-human in SF. Maia Kaganskaia interpreted Lem as a metaphysical writer, hinting at another possible non-human – God. Thus, the third formula: *the nonhuman is metaphysical*. Kaganskaia wrote about Lem:

...indeed, who would then have thought to look into its dry source: *Summa Theologiae* by Aquinas? Stanislav Lem was concerned about God, and not at all about stepping on the Achilles’ heel of Soviet ideology once again more painfully. And that was a fatal misunderstanding. Fatal for the dissidents of the sixties. They lacked the imagination to

²⁷ Lem comments on A. I. Baumshtein. “Vozniknoveniie obitaemoi planety.” *Priroda*, no. 12, 1961 in chapter 3 “Cosmic Civilizations” of *Summae Technologiae*.

look beyond their experience, to where the world continues without Soviet power.”

(Kaganskaia 2006).

Biriukov is more restrained in his interpretation, speaking only about Lem’s agnosticism in science (Biriukov 1968, 629). In any case, Lem does not treat metaphysics as the opposite of science, but rather as its legitimate part. Kenneth Krabbenhoft connects Lem’s scientific metaphysics with his understanding of alien civilizations (CETI), i.e., a specific form of the non-human:

...a distinct form of metaphysical discourse is present in many of Lem’s CETI novels and takes his moral thinking on the subject of CETI in a new direction in his most recently translated work in this genre, *Fiasco* (1986; English translation, 1987). In this disturbing novel Lem frames typically 20th-century admonitions about the dangers of technological prowess divorced from moral prudence in the language of Counter-Reformation moral theology: we find the “question about technology” viewed through the doctrine of probabilism, the theoretical underpinning of early modern moral casuistry. It is my contention that this moral probabilism in *Fiasco* is the latest stage in the evolution of Lem’s thinking about CETI, which in the course of 30 years has changed from a concern that holds out the hope of toleration and reconciliation, to a profound and ironic skepticism. (Krabbenhoft 1994, 212)

This new “modern casuistry” is a problem of ethics connected to the speculative philosophy “in the language of Counter-Reformation moral theology.” Hence, Lem’s metaphysics is an expression of ethics, rather than simply the existence of God as a form of the non-human.

However, Lem's understanding of an ethics associated with the non-human is very different from traditional ethical terms and categories. Famously, Lem did not accept Tarkovsky's film version of Lem's novel *Solaris*. According to Lem's translator Ariadna Gromova, "Tarkovsky showed some island with a house at the end... the misfortune of the tearful Russian soul! Human love is not the pinnacle of spirituality, it is actually a director's sublimation of a spiritual theme" (Gromova 1967). Gromova promoted Lem's *Solaris* among Soviet writers, and in fact introduced the Strugatsky brothers to it. In *Literaturnaia Gazeta*, Gromova wrote a highly critical article about Tarkovsky's version of Lem's novel, as "if he shot a film about something else." Love takes over in Tarkovsky, while it is a minor plot line for Lem (Gromova 1967; see: Deltcheva and Vlasov 1997, 533).

This should be considered public support of Lem's philosophy, since Lem opposed Tarkovsky's ethical concept borrowed from Dostoevsky: that love can resolve philosophical problems arising in his novel. The love plot, as Lem insisted, was secondary to the problems of the scientific quest and the mind games that distort the perception of reality. In 1972, Lem argued that Chris's lover materializes by herself; she is not conditioned by his mind (Lem, *Fantastyka i Futurologia*, vol. 2, 51). Why was he so angry about Tarkovsky's emphasis on love? Probably because this ethical category was "human, too human," and Lem's ethics were centered around the non-human Ocean of Solaris, needing some other categories for its embodiment. As mentioned already in Slusser's reading of *Solaris*, Snow is the skeptical character who declares the author's idea: humans think only of themselves, and so are unable to see beyond mirrors. If the non-human equals the transcendental, does this mean that a smart machine or alien is also

transcendental, and potentially charged with metaphysical meanings? How does the equation between human beings and machines fit this logic? If evolution in human and machine are similar, then neither of them is transcendental. The human is not the only vehicle of intelligence in the universe.

“Metagalactically plural reason”

Commentary by Slusser’s “systems of apprehension” in Lem points to various sources – metaphysical philosophy among others, specifically Blaise Pascal – as well as the aforementioned Kant:

The mindset, of course, is the degree to which Lem’s own fiction reveals the hold of "mythical" forms on SF’s epistemological possibilities. His essays (and to a large degree his later "fictions") offer thought-experiments without human actors. Eschewing Pascal’s recourse to "transcendence," Lem gives us, in "Metafantasia," the scenario of a cosmos governed by “metagalactically plural reason” (*Fantastyka i Futurologia*, vol. 2 169). Here is a field-theory approach to the problem of cosmic silence civilizations separated by such vast distances that they cannot communicate directly, but only "infer" the existence of potential communicants from observed “gradual... changes in the laws of nature” (166). (Slusser 1989, 3)

Lem typically discusses the coexistence of parallel logic through the situation of contact with extraterrestrial civilizations (CETI). In *Fantastyka i Futurologia*, Lem introduces the concept of

multiple inhabited worlds ("Wszechświat" and "Multiverse"). Each world exists autonomously from the others.

For instance, in *Summa*, Gnostotron is a genius computer that understands the whole universe (Lem 1968, 341; See: Jurich 1998, 127). Literary critic Andrew Pickering compared the language describing human and machine in *Summa*, arriving at the conclusion that they are deeply similar. The discourse of natural sciences is applied to technology in all aspects: Lem speaks of "ecological niches" for media technologies: "The first airplane, the first automobile, or the first radio owed its appearance to the replication of the forms that preceded it" (*Summa*, 15); "The competition from television led to a sudden 'radiation of variations among radio sets and to their appearance in new "ecological niches" (*Summa*, 16). As Pickering points out, machines are rationalized as live organisms: "Just as the birds conquered the sky and the herbivorous mammals the steppe, the combustion engine vehicle took mastery over the roads, thus giving rise to ever more specialized varieties" (*Summa*, 15); "just as the predator's strategy affects the strategy of its prey, so the classical airplane defends itself against the helicopter's invasion" (Pickering 2014, 246-247). A metaphor that combines human and machine into one process of evolution is explicit in Lem's writing, but Pickering noticed that Lem puts a natural ability to "create" over human inventions, thus suggesting that natural processes embody a higher level of intelligence than human-made computers:

Another quick leap gets us to the "biological computing" (not named as such) of Beer and Pask – the idea that adaptive natural systems are themselves brains, inasmuch as they can control and adapt to changes in many variables, which we might harness as intelligence

amplifiers. This is perhaps the single amazing idea in the history of cybernetics and Lem pursues it very far, even into the realms of morality and ethics. He convincingly evokes scenarios in which **the biological black box**, with the best will in the world, acts back on the human race in ways we would not choose—for example, by increasing the supply of some chemical (without really knowing it) that reduces the human birthrate and thus obviates economic collapse. The modernist in Lem sees this as a disastrous outcome, a warning about the dangers of the cybernetic "ruling machine" (Pickering 2014, 246-247; citation from *Summa*, 108, emphasis is mine.)

Pickering's analysis fits well Rodnianskaia's view of the "anti-fascist utopia" and its conceptual implications that the machine becomes as irrational, but also as adaptive, as the human – a "black box," as both of them put it. From this perspective, evolution happens in the human and the non-human, and concerns relations between objects, between self-modifications from within this process. For Lem – and his practice distinguishes him from Soviet science-fiction writers, and maybe from most thinkers of the 1960s – ethics is directly affected by technology, and it is a human-machine problem. That is, the computer copies the un-reflected in the human:

It is not we who introduce ethical issues into cybernetics, but cybernetics, while expanding, encompasses with its consequences, among other things, what we call morality, that is, a system of criteria that assess actions, and the assessment - from an objective point of view - arbitrary. Morality is as arbitrary as mathematics, since both are deduced by logical reasoning from the accepted axioms. (*Summa*, 121)

Cybernetics thus absorbs and affects human ethics, making science vulnerable to the dogmatism of “the accepted axioms.” This is the reason that Lem promoted scientific agnosticism. By showing scientific thinking as controversial at its core, he did not associate science with truth but with a multitude of hypothetical truths, each charged ethically. Agnosticism is the core of his critical thinking, requiring openness to the unknown, which makes science similar to metaphysics: “Consequently, the position of the scientist differs from the position of the metaphysician not in how much information he has, but in his attitude to it” (*Summae Technologiae*, 1968, 167). Lem says there can be no final knowledge, just competing visions, and one may not be better or worse than the next one. For Lem, scientific agnosticism is a means of putting ethical responsibility for knowledge on the thinking subject. Thus, Lem’s writings unlock a whole new way of imagining reality: as comprising parallel logics and phenomena that transcend what is already known and seen, in defiance of empirical science. One such logic is mathematics, which is “arbitrary” and needs to change – but which nevertheless serves as a research tool for other logics.

The Futurology Concept

Science Fiction and Futurology, which also could be translated as Fantasy and Futurology (*Fantastyka i Futurologia*, 1970 and 1972), was not translated into Russian until 2004, yet since then, the translators E. Vaisbrod, S. Makartsev, and V. Borisov have been working on improving the translation for last 20 years. One of the most active translators who worked with Lem’s various texts for decades was Evgenii Vaisbort. Two chapters were translated into English in the March 1975 issue of the magazine *Science Fiction Studies* (Keller 2017), and later included in the collection *Microworlds: Writings on Science Fiction and*

Fantasy (ed. Franz Rottensteiner, 1984). The translation includes two important essays on Philip K. Dick, whom Lem praised in “Part II. Robots and people.”

The ideas of this treatise grew from Lem’s fictional work, *Futurological Congress* (1971), which Lem wrote in between his theoretical texts. This novel was translated into many languages, and appeared in Russian in 1987. Meanwhile, *SF and Futurology* is a two-volume monograph with an ambitious aim: to create an international theory of the SF genre; to provide a self-interpretation of Lem’s works; and to offer a review of the world’s SF achievements. Lem was in search of authors and texts that would be able to compete with scientific futurology and prove the usefulness of literature in modeling the future of the human. The first volume was called “The Structures,” which was a work in SF theory from the perspective of various literary schools; it also dealt with the terms and social implications of the genre, which were discussed in “Part V. Sociology of SF.” There, Lem claims that this study is not a history but “prolegomena” (*Summa*, 54-60) into new fiction that promotes in its readers a view of sociological problems:

Chapter Four: Introducing sociology into SF stands separately and is less present than two other well-developed areas of thought, the structural part [of fictional work] and the problems in it. The [introduction of sociology] is at the transitory stage since there [my] analysis ends and [I] start a review of problem fields [*pól problemowych*] for SF.

(*Fantastyka i Futurologia*, vol. 2, 4)

Some of the topics described in the subchapters are in the apocalyptic mood of Western science fiction (“Katastrofa w Science Fiction”), arguing that a new faith is needed for science fiction (“Metafizyka w SF”); it also needed to entertain and fulfill the other components of modernist

fiction (e.g., "Seks w fantastyce"), The goal of such writing was to carry future senses via placeholders that have no direct reference to known reality:

Objects appearing in Science Fiction, such as the "extraterrestrial being", the "time travel vehicle", the "space battleship" – are not constituents of specific visions, but rather a kind of promissory notes, which the work presents and which it undertakes to repay - in its further within. Admittedly, most authors do not take such commitments seriously.

(Fantastyka i Futurologia, vol. 2, 15)

Lem presents the genre of SF as able to overcome the contemporary moment and generate a new metaphysics based on science.

The second volume was entirely dedicated to various case studies in Anglophone (Ray Bradbury, Phillip Dick, George Orwell) and Slavic SF (Karel Čapek). Lem specifically rethinks the terms from *ST* with similar meanings, the prognostics and the fantomatycs, as part of futurology, and dedicates most attention to the combination of metaphysics and futurology, which he calls metafuturology, because he believes that human is imperfect so that's why culture is needed. And, in return, culture shapes human biology, so there are principles of human biology, of human species evolution, in culture (*Fantastyka i Futurologia, Vol. 2, 505*). Thus, according to Lem, the goal of futurology is to create new culture:

Culture used to function as an overbearing restriction, yet at the same time it was an important protection. [Culture] has been a collection of irrational and false rationalizations in the forms of imperatives and prohibitions; yet at the same time, it was the source of meaning for lives. [Culture] has been suboptimal and illogical, yet rich and diverse in its institutions. [Culture] has been uncomfortable, but it continued to be

important, and now it weakens with every generation and individually [*sródludzko*, it is Lem's neologism; literally both can mean "inside the self," or "among humans"] (*Fantastyka i Futurologia*, vol. 2, 505).

This is why futurologists' exclamations about "new goals" [*nowe pomysły*] are a dream about inventing new culture. It is important to clarify that it is not the invention of such culture but protracting it into life is the hardest task [b]ecause [culture] is an execution of a substitute [*wykonanie substytutu*] of certain faith.

Thus, futurology is a process of making an edifice of culture, installing new senses into human biology. It happens through generational change and through the existing diversity of humanity: some people tend to develop new qualities earlier than others. Futurology and metaphysics are interconnected disciplines to Lem; futurology is a new metaphysics of culture, set up rationally. It is a new utopia, yet one that acknowledges that culture is created and recreated, and is not a task for primates as humans. Such utopia is indeed skeptical, but it also requires a place for faith in epistemology. Humanity is not possible without faith, which is not scientific but a better version of rationalization. This change can change humanity.

Science fictionality is connected to the concept of metafantasy [*metafantastyka*] and is a specific modality, in which new philosophies and original ideas can freely interact with "pure imagination." The genre is a whimsical space for expressing scientific ideas through fictional images, which creates opportunities for the author to speak of a future that cannot, by the premise, be like the present. Lem opens his second volume with a harsh criticism of Western science fiction, which, he maintains, works only through catastrophes. There is no utopia in them. In this context, the new SF wave is what Lem considers to be bad example to follow

(*Fantastyka.i Futurologia*, vol 1. and vol. 2) becomes dissident and negative. Still, it demonstrates that Lem is in dialogue with the Anglo-American SF of his time.

The volume also presents “Part IV. Metaphysics of science fiction and futurology of faith,” a work through which Lem develops his most innovative ideas. The reception of the book in Anglophone scholarship identified key points in Lem’s argument:

In his two-volume literary study of what science fiction can potentially become, Lem argued against any content criteria to define SF as scientific or a fantasy. For Lem, *fantastyka* means both, science and “pure” imagination that doesn’t relate to existing reality but constructs its images based on associations and artistic objectives. Since Lem sees direct relation between imagination and science, he thinks of *fantastyka* as the modality that can cross bridges between artistic expression and scientific knowledge. Thus, possibly, the proper translation of this book’s title would be *Fantasy and Futurology* or *Science Fantasy and Futurology*.” (Csicsery-Ronay 1985, 1)

Istvan Csicsery-Ronay emphasized that Lem’s agenda suggests merging of political philosophy with “science fictionality.” Csicsery-Ronay’s “Lem, Central Europe, and the Genre of Technological Empire,” in which the scholar pointed out the most important formal features of Lem’s political writing. The evolution of machines, which is “para-biological” and “transcendental” by definition (see above), eschews humans as “minor beings.” Technology, thus, is on its own trajectory, distinct from humans and beyond human control. Laws and logic unknown to humanity operate the evolution of machines:

Science in Lem is, moreover, almost always viewed as if it were autonomous from the human species' intentions. (...) We might call this unsentimental faith in rational materialism, but the utter inability of Lem's human characters to affect political improvement of their paradoxical conditions – or rather his rejection of politics, national, or ideological, as a way to manage power – is also a rejection of any model of science as a creation of human society. (Csicsery-Ronay 2006, 148-149)

This explains why Kris Kelvin is defeated in *Solaris*. He should not have behaved like a Romantic poet, reminiscent of Novalis, who mourned his dead beloved as a spirit. Kris Kelvin, according to the negative logic of the plot, should have abandoned the illusion and studied the Ocean. Instead, he concentrated on the effect of Solaris on his inner world, seeking answers in the wrong place. For brevity, here I elaborate on Lem's own term "skeptical agnosticism" that destabilizes the order in science and beyond it.

Multiverse and plural reason

The problem of the existing mode of consciousness is its anthropomorphizing of the universe (Lem 2009, 101-103). According to Lem, the world of human culture cannot be changed, but it is possible to move to another world, to another reality, in which our impossibilities are not only possible but essential and fundamental (Lem 2009, 107). Illuminatingly, these new possibilities are fully rational from a mathematical standpoint. According to Lem, a new mathematics creates a new cosmogony, which must be inhabited by aliens:

The new cosmology also explains the fact, known since the 1960s, that mathematics takes many forms, and the form in which it developed historically on Earth is only one of many possible varieties. The foundations of the universe were changed and reconstructed precisely through these different forms of mathematics. The multitude of mathematical systems is an image of the multitude of possibilities of cosmogonic creation available at the dawn of cosmic history. [...] In brief, these posited a dialectical triad composed of a thesis: the universe created by God; its antithesis: the universe as a non-intentional object; and their synthesis: the empirical interrelation of the two previous models, which, developed further, does away with transcendence and replaces it with *metagalactically plural Reason*. (Lem 1981, 57; emphasis mine)

This speculative premise suggests that there are intelligent creatures in the universe, and that man-made technology can one day become “smart,” as predicted by the Turing test frequently referenced in the book. There are some “forms of minds” (*postaci rozumu*) which, as Lem says, cannot be classified as “higher” or “lower.” Rather, the difference is ontological, and so the minds of these creatures cannot be compared. What Lem calls an “ontological difference” is the fundamental distinction between the phenomena where humans, machines, nature, and unknown extraterrestrials are so distinct that they belong to radically different philosophical entities, and thus, are ruled by different logic and goals, which Lem calls “teleology” (e.g., it is an operational term in *SF and Futurology*, vol. 2). The key distinctions lie between machine and human; the unknown in nature, as with *Solaris* and humans; the unknown aliens and humans; and

also, different physical properties, as yet unknown to humans, such as the artificial intelligence of the future.

Lem uses the language of Einstein's physics of the time-space continuum to speak about alterity. Importantly, Lem insists that the unknown is not incomprehensible, but requires a different epistemology to be engaged with. It is a multiverse, but this multiplicity is not endless; it is simply too big – or too small – to be calculated. Lem also speaks of a psychological continuum of the minds co-existing in the Universe, without knowing of each other's existence. He argues that culture does not have a fantasy of what is possible but not deduced, yet is engaging in the "semantic" avoidance of working with unique minds. As birds and fish cannot be compared, neither can humans:

Fantasy as truth gives us hypotheses that are at the same time acts of valuation as evaluation, as we like it. For if I detect a woman who is at once perfectly good, wise, and beautiful, the discovery is the establishment of the state of affairs. [...] (*Fantastyka i Futurologia*, vol. 2, 190)

Later in the study, Lem explains what he means by fantasy applied to the Universe and speculations of what scientists are interested but unable to answer at the moment:

However, it could also be that humanity is not at all to be located in the "psychozoic continuum" of all sentient beings of the Universe. For example, if it turned out that this continuum is not only multi-dimensional, but that it has dimensions for which we lack the appropriate concepts at all. For, let's say, there are figures of reason which, according to the opposition "lesser - greater", cannot be classified at all. These minds will be as unsettled on the only scale as they are unsettled on the only scale of "quality of

homeostatic solutions," say for example, by the hummingbird and the trout. Well, we can basically name any state of affairs, so also this one. But then this is naming, which is not a recognition of the phenomenal structure, but only a semantic avoidance. (*Fantastyka i Futurologia*, vol. 2, 230)

At the same time, if the mind is a historical phenomenon, and the quality of the mind distinguishes humanity in its evolution, then AI is a *part* of human evolution, albeit in a different body. This is a logic possible in fiction, but it is also based on Turing's test, which future versions of AI may pass as human. This premise, taken as pure speculation, retrospectively changes our perspective on the human distinctions from nature.

The status of the Multiverse, as a pluralist reason, is the same as AI. The Multiverse is non-human and transcendental. Lem's novels from the same period as *SF and Futurology* question scientific knowledge as uncertain and limited. The novels from this period are "political science fiction," as *The Peace on Earth* and another late novel, *Fiasco*, which were published by Progress in 1989.

Futurological Congress positioned futurology as an alternative to teleology, as a tentative response to immediate problems, in the form of a conference of experts from different fields – usually fields yet to be formulated and created. Therefore, in the novel, futurologists come to deal with civic unrest – and the government's attempt to contain it – by chemical intoxication, in a poor, colonial Costa Rica of the future. *Peace on Earth* described the world of a new global order, with the UN and Geneva Conventions becoming the main political institutions – but the world, in general, is deteriorating through local conflicts and through individuals who are manipulated by the incognito plotters to take unnecessary risks.

As depicted in these novels, humanity is restrained by economic stagnation and political violence. Human beings interact with nature and alterity using archaic and barbaric methods: bombings, political manipulations, and chemical interventions. New technologies in this context can only aggravate the situation, not resolve it. In Lem's novels, biotechnological environments ("*bioniczno-fizykotechniczny kierunek*") exist independently from human will and conceptualization, as Lem says in *Science Fiction and Futurology* (vol. 2, 179). Thus, the human must constantly adapt to this environment, from which complete information can never be gathered. The stability of doctrines, as Lem argued, is an illusory construction, and even the Catholic Church was changing due to the changing cultural environment (*Fantastyka i Futurologia*, vol. 2, 174). Since the world is cryptic and overdriven by conspiracies, the multiverse subjectivity orients characters toward the most "democratic" choices. Thus, different genres serve to demonstrate a parallax, once more information is learned and a free response can be made.

Peace on Earth and dehumanized warfare

To recapitulate, equations in speculative fiction create a parallax beyond the binary that human *is* machine or human *is not* a machine. *ST* employs three equations to create contradictory statements that are, nonetheless, all hypothetically correct, because they deal with the speculative subject of the non-human.

Peace on Earth is a story of machine civilizations developing on the Moon, but their programming leads them to an aggressive view of similar civilizations associated with other nations. Ironically, Lem calls the process of delegating war to machines the "dehumanization of

war.” The plot is a retrospective look at the dramatic events of human interaction with an advanced military artificial intelligence that brings the protagonist, Ijon Tichy, to the point of split personalities. He calls the colotomy, the surgery that splits his brain in the most violent way, an accident. Yet the reason for the split was the electric charge that had created “the black box” inside Tichy’s mind. He has no access to this part of his mind: it controls one of his hands, and the character has similar “ticks” as does the German professor in Stanley Kubrick’s *Doctor Strangelove* (1964). We can draw parallels between the political contexts of the Cold War, bringing similar dysfunctional bodies into the focus of the narrative. As in Kubrick’s film, global powers accidentally initiate a war that may bring humanity to an end by mutual annihilation. Tichy is chosen by the Federal Government to dismantle the machines capable of starting a war. Technically, Tichy does not choose this heroic mission; he is tricked into participating and risking his life. The mission is terminated after three failed attempts to use Lunar robots, through which Ijon tries to win over the war machines. Instead, the government decides to bomb the Moon. This is a common trope for Lem’s novels: from the 1960s, e.g., *Eden*, and from the 1980s, *Fiasco*. This is Lem’s commentary on political violence, stemming from an irrational humanity.

In *Peace on Earth*, the machine civilization is a transcendental image that Lem referred to in his early work, *Eden* (1957) as an “organism” created out of mechanical flies, which developed according to the evolutionary theory. However, technology driven by Darwinist principles of adaptations to its environment makes a mistake by imposing natural processes on social ones:

The military and scientific experts of each nation could tell on the moon that their devices had been discharged and that they were working properly, and had to return to Earth, all at the same time. In the twentieth century, such a solution would be pointless, God's arms race is not so much quantitative growth as innovative progress, which then depended only on people. These new devices, however, operated on a different principle, borrowed from the natural evolution of plants and animals. These were systems capable of so-called radiation and divergence self-optimization. They could just reproduce and transform.

(*Pokój*, 150)

In this novel, Ijon Tichy is engaged in an intellectual competition with artificial intelligence to save himself from being eliminated by the government. Tichy himself does not engage bodily with the machines, but in special remote costumes that have different structures. Tichy tries massive and small bodies, as well as a body that can fly, yet his mission fails. Still, he survives a conspiracy against him because the government chooses to jettison the plan that instrumentalized him. It is important to understand that Ijon Tichy is a satirical character, first appearing in *The Star Diaries*. He is multiplied there, too. Getting into a time loop via a malfunction in a newly invented device, Tichy meets his future selves, who get stuck in the loop with his current self.

Since Tichy participates in a secret mission in *The Peace on Earth*, and since his acquired knowledge may lead to humanity's ecocide, his death after the mission's end seems to be the best outcome for the computer. The computer's calculated decision to kill Tichy resonates, however, with the Earth's decision to annihilate a new form of life emerging from the war of machines on the Moon. Congruent with this pessimistic vision, Lem introduced a virus that erases software:

necrogenesis, essentially a genocide against software. In the novel, this self-ruling, non-intelligent organism and necrogenesis are allegories of cultural “programs” that erase centuries of human evolution; the “software systems” that start a war serve as an allegory for the narratives that drive authoritarian politics to overtake democratic rule.

There are several interpretive possibilities, and each of Lem’s “equations” outlined above offers its own reading of *Peace on Earth*. Reading the Moon-based machines as equal to humans leads one to an ethnographic interest in the machine colony that has acquired a new state of mind, and it is not only the symbol of a virus but also of a non-human alterity, incomprehensible by humans. Lem uses the image of the black box inside a human, already spotted by Rodnianskaia. Like humans, machines have an “unconscious” that challenges their own rational programs and algorithms. Images of an ultimate, unknown alterity appear to be mirror images of human unpredictability. This strategy, however, suggests a full release from any ethical concerns: “blame it on the computer, and forget the ethics” (*Pokój*, 65).

Much like humans, war machines are pre-programmed by governments harboring political hostilities. As a result of the war, machines undo themselves and trigger a rapid degeneration and dehumanization in human society. Computer programs develop into a new type of sociality, the “insect sociality,” and evolve into super-viruses that destroy technology. These viruses can overpower humanity, despite their seemingly simple forms. Ijon Tichy is spectacularly powerful, and – typically for Lem’s characters – loses this power, as the mission becomes unimportant after a nuclear strike targeting the Moon. Yet until that point, Tichy performs his subjectivity through three technological bodies: the first, an armless double for

working in space, called a Lunar Efficient Missionary (LEM)²⁸; the second, an armed version, LEM 2, and finally the third, LEM 3, depicted as a cloud of flies, like those that attacked Lem's early protagonists in *The Invincible*. The inner self is not a voice or voices, but models of probability that Tichy constantly calculates, in order to determine his course of action. He believes that the world exists neither to "please" ("*satysfakcjonowała*") nor appeal to ("*ma przychylności*") him; he does believe that his subjectivity may need to resist, to grow. The plurality of Ijon Tichy's selves are adaptations to the plurality in society. Noticeably, Tichy speaks of "adversaries," as though the government had recruited him only to put him in mortal danger:

The world in which an individual with certain spiritual qualities can develop them most splendidly is a world peculiarly favorable to him, but there is no such universal favor of the world as to satisfy all kinds of human natures with the same intensity. Such a possibility is created only by the creation of a synthetic environment. This environment can — show individual people such a favor (but under certain natures, a kind of resistance from the world must also be considered favor, because they are also made to fight adversities) that has been individually tailored and adjusted. (*Pokój*, 209.)

Such an inner voice requires the power to create an ideal world for itself, which is individually "tailored and adjusted." Thus, the human would be able to merge with the machine and to enjoy the benefits of the simulated environment – the most optimistic outcome of all.

²⁸ LEM is also author's playful reference to Apollo's 1968 Lunar Program that sent several Lunar Excursion Module that helped astronauts to land.

An opposite approach would look at the human as radically different from the machine, and the definition of human specificity underlines his inferiority vis-à-vis the machine. A human is split, confused, irrational, and easily manipulated. In addition to this, a human cannot communicate with other humans, and in the case of Ijon Tichy, even his “hemispheres of the brain” are disconnected and miscommunicated:

But no one now can put himself in my shoes. It's impossible. I can't even say that there are two of me because there aren't. Or there are but only partly. If you want to know what happened to me, you'll have to read this whole story, word by word, even when it doesn't make sense. The sense will come, though probably not completely because you can get to the bottom of it only by callotomy, just as you can't know what it's like to be an otter, say, or a turtle without being turned into an otter or a turtle, and then you can't communicate it because animals don't talk or write. Normal people, of which I was one most of my life, don't understand how a split-brain person can be himself and look like himself and speak about himself in the first person singular and walk normally and talk coherently while his right hemisphere doesn't know what his left hemisphere is doing (except for mushroom barlew cown in my case). (*Peace*, 5; transl. by Elinor Ford and Michael Kandel)

Instead of dying in the mission, Ijon Tichy was split into two parts. He calls it “doubling, I've been doubled.... There are times my unfortunate body falls into two enemy traps” (*Peace*, 2-3, 4). He applies this duality to the temporality of the self: “today me, yesterday me.” He also applies it to the two parts of his individuality that compete with each other: “I just wanted to teach the right hemisphere of my brain a lesson because at that time I couldn't communicate with

it at all and I was furious and covered with bruises” (*Peace*, 5). The conflict between the hemispheres of Tichy’s brain can be read as a metaphor for the coexistence of parallel logics, but may also refer to the hemispheres of Earth, each with opposite stakes in politics – i.e., the two sides in the Cold War. Is this split an expression of the dead-end in human evolution, or a promise of new opportunities?

Lem specifically mentions that his fantastic extrapolations were actually resonant with current events:

It is most peculiar that when the conclusion of *Peace on Earth* led me to the concept of computer programs acting as malignant viruses or cancers, and when I settled on that ending even though it seemed to me overly fantastic (that is, taken from thin air, as it were-not deserving of inclusion even in a satire), I happened to pick up a copy of *Newsweek* about the so-called Soft Wars or Core Wars, and then a large piece in *Scientific American* on the same topic. (Lem with Istvan Csicsery-Ronay 1986, 257)

Arguably, in satire and metaphorical thinking, there is still possibility for a utopia to emerge and be communicated. Utopia here is a suggestive image shown not as a declaration of what utopia is but in showing what cannot be considered a utopia. So in negation, by studying a society in crisis and turmoil of any origin, there is always an alternative that can change the situation. It is often shown as a techno-dream, which is far from contemporary moment. It adopts AI in routine life and work. It’s a different world in how it feels and how it looks, and what can be named by the existing language and what exceeds existing vocabularies.

In Lem, pluralist subjectivity constructs itself in a contradictory way, accounting for methodological pluralism, with two consequences. First, reality is always unpredictable, and

second, that self-study and introspection are the most valid research method available. Lem insisted through his writings that order and values ('axiology' in philosophical works, e.g., *SF and Futurology*, vol.1) are external to one's subjectivity, so they require an internalized agnostic position on reality. This position takes away any "certainty" of one's consciousness, sexuality, and language, since these are semi-private and semi-collective processes. Society is ever-creating itself through self-study, as an "autoevolutionary God," which recurs in Lem as the utopian vision of a creator. The separation of the personal from the biological and the social creates necessary space for a subject with an expanded inner self, which is constructed in tension with the unknown and unpredictable. The pluralist period, or to be more precise, the period of theoretization of SF for promoting Western science and pluralism as part of scientific knowledge in social and political studies, lasted approximately from 1972 to 1986. Then, Lem turned to the image of a supporting cultural environment of scholars, yet they were not superior humans. They were cooperative and humane. In Lem's late works, which are referred to through global institutions and a worldwide network of scholars, there is the stable ground – created by global agreements and protocols – to maintain a non-violent, yet uncertain post-teleological, agonistic politics.

Lem's SF of the pluralist period is concerned with the relations between democratic behavior and scientific epistemics. This position was based on two principles: 1) relativism instead of absolute knowledge in the form of "universal laws" of economics or biology; and 2) agnosticism toward any methodology. Lem criticized positivism for its pursuit of purpose in non-human entities, thus anthropomorphizing the Universe and Nature, and creating false narratives

in science. Lem's ideas match the postpositivist critique of scientific methods that applied anthropomorphized visions of technology. Lem fought against the assumption that robots are future slaves. As *The Cyberiad* shows, not even robots will accept slavery, and will revolt as "autoevolutionary gods" (the term from *Summa Technologiae*).

Savchenko: Seeking Self-Reflection in Non-Human

Volodymyr/Vladimir Savchenko (1933-2005) was an electric engineer and a writer. Born in Poltava, Savchenko lived most of his life in Soviet Kyiv. Savchenko's *Otkrytie Sebia (Self-Discovery, 1968)* was a massive international success, and has been available in English since 1979. Five million copies of Savchenko's works were published throughout the 1960s and 1970s, and seven million over his career in science fiction. Savchenko was praised by his colleagues as one of the best SF writers in his 1960s cohort: in their discussion of science fiction, popular writers collectively named Savchenko among the example to follow (see the 1980 debate in *Literaturnaia Gazeta*: Voiskunsky, Bulychev, Bilenkin, Kazantsev, Parnov, Brandis, A. Strugatsky; Savchenko 1980, 4). He was also mentioned by several critics as the representative of the Thaw and of liberty available for those who made their path into publishing during the time of de-Stalinization (Britikov 1970, 3-5; Geller 1989, 291). Yet, since the Soviet Union's collapse, there has been little presence of Savchenko in literary scholarship, despite his world fame in the 1970s. He went out of fashion, and this was Savchenko's own assessment of his work (Savchenko 2002).

Savchenko's identity is present in the content of his novels more than in his declarations after his most important novels were written. A few of Savchenko's works were published in Ukrainian only, while the majority were translated from Russian into Ukrainian by him or other writers in the 1960s – 1980s, his most significant works were translated into Polish, as well as other Western languages with the support of Soviet publishing houses and copyright agencies. Savchenko's fiction is especially masterful when it comes to its passages in satire on Soviet reality, which is properly balanced to be funny but also not politically provocative. There is a connection with the literary tradition of the Russian empire with the clear, distinctive features of a Ukrainian writer –yet not one from a big city. Rather, his prose prefers depicting an industrial town somewhere in the steppe (Dneprovsk²⁹ in *Self-Discovery* and Tarashchansk in *Rank in the Universe*). Positioning himself as a Soviet author from Ukraine, Savchenko both praises his own culture and bows to the masters of art in Russia: Fedor Dostoyevsky and Aleksei N. Tolstoi (Savchenko 2002), whom he also mentions in his novels. In addition to 19th-century Russian literature, in Russian-language science fiction, Savchenko's novel *Rank of the Universe* was part of a greater trend, which included Georgy Gurevich's *Tempograd* (1980) (Frumkin 2002) and the Strugatsky brothers' *Doomed City*.

Making into a greater trend

In 1970, Anatoly Britikov identified Savchenko as a representative of the new generation, a cohort often called “the Thaw generation,” since these are the intellectuals, including writers of

²⁹ Since the original language of Savchenko's novel is in Russian, I give a Russian spelling of the city, which has been renamed from Dnipropetrovsk to Dnipro in 2016.

science fiction, who became popular during the de-Stalinization. In his article “Russian Soviet Science-Fictional Novel,” Britikov names Savchenko as the author who problematized what SF is capable of in terms of imagination and literary value, and what was absent in the SF of the 1930s-1950s during Stalinism, so called SF of “the close goal” [*blizhnego pritsela*] and “the closer” [*blizhniie*] writers. He juxtaposes Savchenko’s short story “Black Stars” [*Chernye zvezdy*] (1960),³⁰ where there is a project to melt all polar ice, same as in Alexander Kazantsev’s novel *Polar Dream (Poliarnaiia Mechta, 1959)*, as well as Vladimir Nemtsov’s (1907-1994), Stanislav Sytnik’s novels. Britikov claims that for Savchenko, “the epistemology [*ustanovki*] of the ‘closer’ SF destroyed science fiction as such” (Britikov 1970, 7). Unlike these writers, Savchenko “is not blinded by practicicism” but looks for the consequences of an action that seems to be quite practical at first (Britikov 1970, 7). Britikov presents Efremov’s *Andromeda Nebula* as the foundation of the new history of the SF genre and depicts Savchenko as a representative of the newer generation. Efremov’s characters were *rationalisty*, “a bit stingy,” and cold:

Rationalistic and almost stingy, the heroes of the *Andromeda Nebula* are in fact a projection into the future of that dialectic of the soul, which Belyaev observed in embryo: “This depth of experience and at the same time the ability to quickly switch one’s attention to something else, strength on one object...”. Efremov succeeded in projecting this dialectic into the future, because over the decades it has matured, and the reader is more prepared to perceive it. After all, Belyaev was worried that a man of the future,

³⁰ This story was also used by Soviet physicist E. Zelikovich to speak of Albert Einstein’s physics. (See Zelikovich 1965).

"with great self-control, the ability to restrain himself," might seem to the reader
"insensitive, soulless, cold, not arousing sympathy." (Britikov 1970, 11)

And this should be compared to the new world that came afterwards, as the Thaw gave
opportunity to express oneself to writers like Savchenko, but not only:

It is even hard to imagine how a critic from 1948 would react if they learnt that in 10
years the heroes of SF novels would easily speak with "thinking" machines; or in Ariadna
Gromova's *Fight with Oneself* [*Poedinok s soboi*] (1962), anthropomorphic biorobots
would surprise the reader with their human experience of tragedy ...; or in Savchenko's
Self-Discovery (1967), the main topic would be artificial copying [*kopirovanie*] of
humans and the dramatic collision of the doubles. (Britikov 1970, 10)

Indeed, in "The Black Stars" (1960), Savchenko already displayed the trajectory of his thought
aimed at one philosophical input: the discrediting of self-control and self-confident knowledge as
wrong and harmful to science and humanity. According to Britikov, these were truly the
moments that I call the epistemological shift, i.e., a dramatic change in epistemology that
impacts values. Naturally, the epistemological shift requires new ethics.

Savchenko's projects in fiction and political essays are similar to Lem's. For him too,
utopia is equated with the available technology but its use is not only limited by the imagination
of each individual but also by the bureaucracy that comes into play in the work of the state
controlling the technological discoveries. Savchenko also introduced the conceptual language of
the non-human alterity, which is critical for the utopia he promotes. One may detect in
Savchenko's works sensibilities similar to Lem's "agnostic skepticism." He is agnostic in his

approach to social reality, and he is skeptical of the current state of science. Konstantin Frumkin detected a metaphysical core (“the existential end” of “serving science as a fetish”) in Savchenko’s critical take on scientific knowledge, and the powerlessness of humans in a technological world:

It is arguable that the part of author’s intention is to write the “last” novel, which would rationalize the ideological [*ideinoie*] end of science fiction and the existential end of science as an object of worship and reverence; yet not the end of science as human activity, but science should not be the substitute of a religion, of a cultural type. (Frumkin 2007, 231)

The idea of metaphysics itself is interpreted by Savchenko as a reversal of materialism in its claim that material relationships define social ones. It seems that there are two options for sensitivities, based on such a metaphysics: it is either shock and confusion or skeptical agnosticism. One of his hero-ideologues argues in the author’s voice. It is important that professor Pets, one of the main characters in the novel, a person who changes his views on the results of his work, expresses this, supposedly Savchenko’s true view, in a dialogue with citations that are rhetorical generalizations; these are not direct citations or references to anything in the plot. It is a reference to the stages of research that these characters are going through: from utilitarian to confusion:

Sasha, this is all not for the first time: Not even once or twice the study of the world has shown humans their place [*shchelkalo po nosu*]. There used to be a belief that Earth is the entire Universe and humans are created in the likeness of God, not less. Then, it turned

out that the Earth is a globe, and humans, who are in the likeness of God, are oriented against each other in the least appropriate way. It caused noisy talks, shock, and a scandal. “Well, at least our planet is the biggest physical body in space. And the Sun is shining only for us, and the Moon and other objects circle around us. More than that, the stars are just decorations of the sky, so our eyes can enjoy it.” New shock: that’s not the Sun that does up and down but the Sphere is turning around a huge shining body together with other planets, among which it is the smallest. ... Again, shock, scandal, the fires [of the Inquisition]. Soon it turned out that we aren’t God-like but descend from monkeys... Again, resentment, outrage, and other “monkey business.” Humanity barely embraced that. “At least, the Sun is the only one, the Center.” It turns out that it is a regular star in the Galaxy. “Yet our Galaxy...!” It turned out that there are plenty of Galaxies in the Universe. (*Dolzhnost’*, 620)

A mistaken approach to science is connected to the human desire to be at the center and at the top of the universe. Yet Pets frames this experience in such a way that the human may be only one of many life forms, and knowledge about the Universe is still at the developmental stage.

Savchenko referred to such an approach in science as anthropocentrism on many occasions after 1989, in both his journalistic and science-fictional writings, and argued against its main epistemological assumption that the human rules over nature and that the human lives in a human-created environment. Anthropomorphism is metaphysical here, it is the way many religions think of gods, as similar to humans.

Utopia in Savchenko

Savchenko made enough statements about his agenda in literature. It is a combination of the philosophical ideas that would help to overcome anthropomorphism in science and establish the relation of political violence (defined through Soviet-charged “fascism”) with fantasy. One such hint appeared in Savchenko’s 1967 note in the magazine *Znanie-Sila*. There he responded to a reader from Donetsk who, in a letter published a month earlier, attempted to argue that SF must become social and depart from describing the technology of the future, which was the main subject of Stalinist science fiction:

Scientific problems by themselves do not resolve as much. The reader (apparently realizing that) focuses attention on human, common, social affairs. Our fantasy reflects the problem of struggle against fascism and human violence against another human being. Also, in the opinion of a laboratory assistant from Donetsk [who wrote the letter], the problem of “returning spiritual concerns to a person” has not been solved sufficiently.

(Savchenko 1967, 31)

This seems like the first declaration in print of Savchenko’s own lifelong agenda that he had set for his fiction: to find a way to work with fantasy toward a better understanding of what it reflects in the **social** world. Savchenko uses a highly charged political concept of fascism that, as we saw in Rodnianskaya’s article, became relevant for the debates about AI as the non-human.

It is not Savchenko’s famous novel *Self-Discovery* (1967) but *A Rank in the Universe* (*Dolzhnost’ vo Vselennoi*, 1992) that features the tropes closer to Lem’s language of alterity. This

language, as stated above, presupposes that machines are different from humans and, having a different logic, they require a new language for their understanding. The “return of spiritual problems” is a declaration that Savchenko addresses in his “futurollogical dialogues” of 1989-1992, and in *A Rank in the Universe*, the novel of the Perestroika period. He concludes that society can get better, not with technology but with personal ethics that work with one’s self. It is his utopia that requires self-critical individualists.

Frumkin proposed the following periodization of Savchenko’s oeuvre: 1) the ideological period, in which technological ideas serve as the utopia of Socialist Realism (similar to Emtsev 1968; Geller 1989); 2) the period in which his prose adopts a satirical “downplaying tone” (*snizhaiushchii golos* in Gakov 1995): its “intonation is extremely unsettling,” and his works demonstrate “existential dead-ends of science” (e.g., *The Self-Discovery*)³¹; and finally, 3) philosophical novels with a quasi-metaphysical discourse that, according to Frumkin (2007, 232), reflects Savchenko’s attempt to wake up new sensitivities in his readership through unconventional metaphors.

Savchenko’s utopia expressed through “a quasi-metaphysical discourse” has been discussed as a part of Savchenko’s last period. By looking into Savchenko’s final novel, *A Rank in the Universe*, I will explore how the author creates the trope of the Sphere, which has more than one meaning, but mainly symbolizes the unknown in science. This unknown will not allow humans to use even advanced technology. By this, Savchenko means that technology is a part of

³¹ According to Gakov, *The Self-Discovery* gives a completely new rhetoric of the progressorship around same time as *Inhabited Island* by the Strugatsky brothers. Savchenko’s short stories are more openly critical: “Like the novel *Self-Discovery*, these stories are written in a mystifying ironic language that is slightly reductionist - consciously or unconsciously – of the scientific audacity and discoveries made by the heroes.” (Gakov 1995, 494)

uncontrollable and unknown powers that have an impact on humans, and this impact may be detrimental or catastrophic for entire societies. Thus, technology is not a tool of the revolution but a subject for ethical discussion. These ethical discussions happen within academic institutes in Savchenko's novels, and the antagonization happens between the institute's staff.

The two plotlines of *A Rank in the Universe* focus on the human and non-human. One traces the history of the protagonist's psychological development, depicting his split into double personas. The other focuses on scene and setting: in the Institute in the Soviet Republic of Ukraine. It is a story of a power struggle in personal and political affairs, revolving around funding an ambitious project that even the institute's head considered to be unrealistic.

The novel's protagonist, Krivoshein, constructs a "machine-womb" (*Self*, 302) that can produce perfect humans. While Krivoshein seems to develop multiple selves, the institute is investigated by a policeman. This happens because one of the early prototypes of a double accidentally died in the lab. The Institute is shown as a hierarchy where ideas are impossible to develop but the discovery happens due to bad management.

The non-human in A Rank in the Universe

Savchenko defined his novel *A Rank in the Universe* (1992) as "philosophic-fantastic," while, at the same time, emphasizing its dependence on the tradition of realism: "Despite the abundance of situations and pictures on a fantastic plane, this is a realistic novel. Its main feature is the global and universe-scale character realism, the realism of the essence, relates to traditional realism in the same way as truth relates to verisimilitude" (Savchenko 2002 page). Savchenko

also claimed that it was “delayed publishing” it since it would not be publishable under Soviet censorship. (*Dolzhnost'*, Foreword, 2) So it was Savchenko's work for a new era, and this work summarizes the criticism of the previous era. Again, as in *Self-Discovery*, there are multiple plotlines, and the central is about the Institute that researches a new phenomenon that is discovered on the planet Earth but is of alien non-planetary nature. Humanity is curious, and the first volume is dedicated to the studies of the properties of the Sphere; the second volume is about building an academic city inside the Sphere, Shargorod; and the third volume explains why the head of the Sphere Institute blew it up.

The novel's plot starts with the discovery of a mysterious natural phenomenon, the Sphere. It is known to change physical properties and speed up time for humans who approach it. A commission is formed in the city of Tarashchansk (which is a small city in Ukraine), and it decides to chain the Sphere so it does not move away. The commission is headed by Valerian Veniaminovich Pets. He chooses to go with the project of building a tower-polis to settle people inside the unknown object, to send new colonizers in the city that will be build inside the Sphere and it will be called Shargorod (the Sphere-city). There, by the project, people will experience time much more quickly: “From here they were able to see that it [the Sphere] was circling around with tremendous speed, from here, from slow-flow time [*medlennoe vremia*]” (*A Rank*, 3). Among possible uses for the project, the commission decides to go with the architectural project led by Yurii Akimovich Zuskind. He proposes his view of what that city for colonizers should be, yet it is described to others in most vague terms, and it is also known that at least once he changed his project on his whim.

Volume three also explains why the initial “utopia” of the Shargorod is a one-man’s totalitarian vision of the world that cannot work in the reality of the unknown phenomenon. This is a typical theme of the conventional “Wellsian reversal,” which uses the concept of non-human to show the impotence of humanity against global danger. The logic that the reader discovers is defeating for Savchenko’s progressors: the more they study, the more hypotheses appear, but the main property of the Sphere is its effect on time, which moves ten times slower than the normal speed. Therefore, humans can do much more when coming back to Earth time. However, they pay with their lives, since they age in the Sphere at ten times the normal rate.

The other set of plots presents the 13 members of the crew who build the Institute. They risk their lives to investigate nature, like the progressors from the spaceships Tantra, or its latter version, the Dark Flame from Efremov’s *Andromeda Nebula* and *The Bull’s Hour*, respectively:

Here in the armchairs, all the “aces” or “the solvers,” in other words, the elite of the Sphere gathered at the table. There were Pets, Kornev, Ziskind, the cybernetician Liusia, the head of the scientific plan Dokumentura Vasilii Vasilievich, the head of rebellious department of the research of the contact Bor Borych, the head of the development department Strempe (who was quiet and melancholic), and imperturbable chief, colonel Volkov, who was the chief of the research commission.... (*Dolzhnost’*, 135)

Volkov is the one who represents conservatism; he is a KGB officer who controls secrecy at the Institute. Violence of contact and the bureaucracy are the two defining features of the team. Pets has no true enthusiasm, and he ends up siding with those who do have it.

There are parallels in the definition of the Sphere and the Forest in *The Snail on the Slope*, as well as the description of the institutes that show the brutality and weakness of humanity in the face of something truly great. Even the name of the character suggests an intentional parallel between Perets in the Strugatsky Brothers' and Pets in Savchenko. Like *Snail on the Slope*'s protagonist, Pets starts to doubt his thinking, which is in line with the author's approach to metaphysics and scientific objectivity:

He, V. V. Pets, a scientist and leader, sixty-five biological years old, professes active cognition ... And cognition by feelings (to which these pictures and sounds appeal) is a tilt towards contemplation, into passiveness. Passive, contemplative knowledge is adjacent to the metaphysical recognition of "God in everything"; earlier it was considered the only true, now it is not considered knowledge at all. [...] Science is now the subject of mass worship, so to speak, the fifth world religion. The less people understand it, the more they believe in it (as, by the way, in religion). They believe inactively and timidly – again, as in God. (*Dolzhnost'*, 1992, book 3, 445)

Savchenko defined science as a religion based on a culture where science is a fetish (as commented above, see: Savchenko 2002), Besides Volkov, young Kornev, and wise Katz, there is Ziskind, "the local Le Corbusier," who was the author of communal housing that is so iconic for the USSR. So in the team of the colonizers of the Sphere, there is military personnel to control information, a powerless but enthusiastic graduate student, and a professor who has the power to make decisions:

Why the hell the enthusiasts of science sacrifice themselves for the Apprehension [*poznanie*] of the Universe? What makes you better than our military supervisor [Volkov]

who is ready to crucify himself for the interests of the defense? This is narrow-mindedness and nothing else, even when it pretends to be openness [*shirota*] and readiness to sacrifice oneself... Isn't it just better not to sacrifice anything? Neither the alienation of the Universe should be sacrificed to human routine on Earth, nor should human routine be sacrificed to that alienation of the Universe. (*Dolzhnost'*, 379)

Professor Pets does it after Kornev's death, which destabilizes his certainty in the project later. Further on, after learning that Ziskind has big plans to create a new human species for an experiment, which I discuss in detail below. Kornev is an "artist-engineer" [*inzhenier-khudozhnik*] (*Dolzhnost'* 132). Yet their creativity is harmful and not dignified. Their art is illusionary. Their sacrifice is not leading to more understanding. The professor is wise, so he chooses to blow up his own creation, despite his curiosity. Kornev is opposed by the narrator when the voice with no name speaks of Kornev's lesson: "No matter how much you adapt what you learn here for practical gain, no matter how much you extract scientific facts, its' all the same. There are incomparably more merciless truths about the world than we know" (*Dolzhnost'*, 390).

This is a story of a great scientific fiasco. First, there is criticism of Pets's reliance on Zuskind, who changed his project in the process. Second, there is a suggestion to destroy the tower and release the Sphere. This comes from Aleksandr Ivanovich Kornev, who was an ardent fan of the industrialization of the Sphere in Book One, but who started criticizing it early on and died in an accident. These events led to Pets's reconsideration of his mission. In an imaginary conversation with Kornev (i.e., in his head), Pets asks himself, "Am I being persuaded?" (*Dolzhnost'*, 402). He decides to destroy the project and is afraid of being uncovered, but he

believes that this is the only proper solution. Humanity still tries to capture the Sphere, but the moment of its release ends the novel. The discussion between Pets, Ziskind, and Kornev moves the plot. Yet Pets is in the position of total power: he decides between Ziskind and Kornev, while his own perspective remains unclear. One of the instances, when he shares his new views, is his communication with Kornev, who will soon come to doubt materialism himself:

Let's not forget that matter is action. Self-realization is primary. And it is equally characteristic of Metapulsation, and galactic jets, and stellar, and planetary ... up to atomic ones. That is why everything in the Universe is expressive. A dead substance couldn't do that. (*Dolzhnost'*, 186)

Here, the ideas of materialism are in contradiction with the subjective in knowledge. If the world is alive, and it has its own purpose of self-realization, then it is beyond human needs and control. It cannot be accommodated in existing materialism without new idiosyncratic imports. Kornev responds with a threat or irony about Pets's theory, and Kornev is in no position to be considered a valuable critic, especially after this remark to Pets: "Ve-Ve [Pets], are you standing on the flawed positions of the primacy of [intelligent] life in the Universe? Well, well, well, what a venerable scientist. You the leader..." (*Dolzhnost'*, 186). Yet Pets responds with the ethical and metaphysical denial of materialism: "The Universe, by the way, did not ask anyone for permission what it should be like. It didn't ask executives either" (*Dolzhnost'*, 186).

From there, Pets starts speaking about his own metaphysics, which is the theory of Global Flux. It is not about the feeling but epistemology: to exist is to participate. In other words, only those who act are part of the Universe. Pets is wrong. The Sphere has its own beauty that needs

to be respected. Instead, the institute proposes an artist's project, which is whimsical and authoritarian, yet it seems to be institutionalized by one person's decision. There were red flags during all stages of the artist's work, but Pets's decision not to penalize Ziskind for changing the project in the process of building it led to one death. Ziskind does not consider others, but thinks of the ideas as a fetish, and he plans even a large-scale experiment, despite vague objectives and with little caution. Asking the question, "What if people live in a new unknown environment for generations?" was more attractive to him than taking care of those people. As an artist, he is totalitarian in his methods. He cares only about his vision being realized, yet he changes this vision eight times and in the last moment.

Ziskind is quite different from Kornev because the artist has his visions, which he considers to be better than the bitter pill of science that fails at explaining the Sphere. Kornev, unlike Ziskind, is a victim of fetishistic science that requires one to be "needlessly brave":

"I like my life, Sasha," Ziskind said quietly after a pause, "as it is, with all its illusions. In this life of illusions, I have a good place. And you too. It is not known what this place really is, in a life without illusions. And yours too. You are needlessly brave. I would like to be wrong, but I'm afraid this knowledge will hurt you.

"Perhaps he will hit," Kornev agreed. - But what is the alternative? Survive until retirement, until a good pension, and then go fishing ... and that's it?

The architect was silent. (*Dolzhnost'*, 199)

Ziskind confesses that he cannot imagine life without illusions; he is the producer of artistic artifacts besides architecture as an engineering object. Kornev, on the contrary, does not want an artistic illusion, even if it is more scientific or just simpler for comprehension.

As the fiasco of the project was becoming more apparent, Pets was looking for the reasons that led to it. He blames it all on the artist who “diverted” from the initial project. This resonates with the discourse of the Thaw, that Stalinism is an aberration of socialism, and not its primary instance:

He finally understood why he was unpleasantly agitated by the meeting with Siskind. Siskind - it was a reminder of the error. Not even like that, no... rejecting Shargorod's project wasn't a mistake back then. But now, when more has been lived, learned and happened, Valerian Veniaminovich suddenly saw that there could be another, much more prosperous way of knowing the Changing Universe, and this way began - and now could begin! - from Shargorod.

...Then they were dumbfounded by the very idea of the possible cultivation of “NPS-people” in the Shar – those who are taking root higher and deeper in the rapid change of generations, the accumulation of specific, not like in a homogeneous earthly world, experience of life and research, overtaking us in intellectual and spiritual development.

(Dolzhnost', 397)

This seems to be a commentary on the great promise of Soviet utopia to build new humanity for a better society. If so, this explains the fiasco of socialism due to the digression from the plan, a mystery that cannot be easily explained, or a doomed idea with an anti-human intent, since the

human is rationally equated with the machine. The human is defined as the product of technology, which reduces human agency in self-realization.

Kornev is the most flexible character but he is “needlessly brave” and “enthusiastically sacrificial,” as Ziskind and Pets say about his type. In the context of the references to Soviet utopia, Kornev is the victim of fetishized science: he goes towards death in an experiment while he is the one who doubts the project. As a biologist, Kornev’s initial pitch was on the resources in the Sphere but then he was the one who realized the limits of cognition. His initial rationalization was in the spirit of the 1930s:

Now he could not imagine a future life without the Sphere, without the fulfillment of the plans and dreams associated with it. He finally found his life’s work and was ready to do anything to master it [*the pronoun is ambiguous*]. (*Dolzhnost’*, 29)

It is hard to understand whether Kornev wanted to master (or “own”) his field [*delo*] or the Sphere. Exemplifying Savchenko’s futurological thoughts during Perestroika, as discussed below, humanity is not ready to think of the unknown, and Kornev’s enthusiasm only leads to his death. His understanding of the Sphere remained extremely basic, and he resorted to metaphysics while he thought of making a whole in the Sphere to study it for “owning it” with God’s or nature’s help: “God, who doesn’t exist, please let the Sphere come down here. – He was asking nature” (*A Rank*, 25).³² Thus, Kornev initially had the impulse to make use of the Sphere, and his hypothesis, expressed on the first pages, remained the main working theory for the commission:

³² Господи, которого нет, сделай так, чтобы Шар завтра опустился сюда!» – молил он природу. (*A Rank*, 25)

Well, if we simplify it completely, then the outer surface of the Sphere, which seems to us the largest, in fact, is like a hole in relation to its internal spaces. It functions like a pump. So... At this moment, it drags reality in gradually but, generally speaking, the Sphere can suck in the entire atmosphere of the Earth. Then we breathe whatever we can!...

(*Dolzhnost'*, 30)

Kornev exposes the mechanical metaphor for understanding the Sphere, which can be potentially a small planet or a space object. For him, it is an object to make holes; he is too simple in his methods, although he is extremely energetic.

It is evident, that in *A Rank in the Universe* Savchenko revises the discourse of the progressor as those who rhetorically control everything, and who are superior to others: believing in their entitlement to enlighten and to change the world, due to universal positivism. In the novel, the team of progressors does not know what to do with the Sphere, which is changing in front of them. In the middle of their exploration of the Sphere, the Sphere itself serves as a portal to the multiplicity of universes – the multiverse.

However, even after a series of failures to get any use, and after discovering the Sphere has multiple universes in it, Kornev and Pets still recycle the same explanation. As the novel repeatedly demonstrates, whatever Pets or Kornev think about their fiasco and the Sphere, they are not right. At the end of the novel, they don't have one definition, and hide their speculations in abbreviations, to sound more scientific:

“Still, the Changing Universe, i.e. MV [*Meniaiushchiasia Vselennaia*] is not the most successful name, – said Pets. – We are in a hurry. Isn't our ordinary universe changing? Just not with the same pace.”

“Well ... let’s see: The Rapidly Changing Universe,” – suggested Kornev. – BEMVE.

“The brand of German motorcycles,” Valeryan Veniaminovich grimaced.

“Event Universe,” Lyubarsky said, “eSWe!”

“Yeah, it’s getting closer!” The director raised his finger.

“Flickering Universe,” said Alexander Ivanovich. “ –Then there is no need to change the name: MB and MB. All three laughed softly.” (*Dolzhnost’* book 2, 245)

Here as never before in Savchenko’s work, the novel expresses the need for a change in scientific optics, an epistemological shift.

The polylogue makes plurality a foundational principle for judging “facts.” For those hearing the polylogue, the novel is about the choices that one makes without knowledge; it is a conscious choice to speculate among possibilities instead of claiming findings. It makes one powerless to study the subject, but not powerless to impact other humans in interaction with the subject.

The committee of academics does not know what they study, but when it comes to the definition of the matter in physics, the workers of the Institute associate Marxism-Leninism with Stalinism and its repressions, the sound of the handcuffs:

– Well, he again meaningfully jingles with handcuffs in his pocket!

– Alexei Tolstoy in some article has a phrase: “Like pistols, they are snatching out the citations from Lenin and Stalin ...” (*Dolzhnost’*, part 2, 270)

The citations from Lenin and Stalin are like pistols because they are weapons against “idealism” in science, and as the conversation continues, the reader realizes that there is still a huge

limitation in what is considered science among the committee members. These are symbols of political violence against alterity in all senses; and the academic collective in the process of discussion constantly balances between new revelations in knowledge with the old rules of ideological check in science. Pets, his graduate student Lubarski, and Kornev often resort to metaphysics, and so others on the team prefer not to talk about it. Lubarski is the one to threaten Pets with the responsibility to step aside from materialism:

– Well, let's discuss it: "Matter is an objective reality given to us in sensation." Right?

Feeling! And feeling belongs to the subject. That is, matter is an objective reality, perceived by us subjectively. And if so, then how is its primacy and objectivity measured, its reality, for that matter, if not sensation? How?!

– Well, brothers, you know... I am leaving. Mature! They [the secret police?] will come for you. (*Dolzhnost'*, part 2, 270)

As can be deduced from the context, "they" are the mind police represented by Strashnov and Volkov, two men controlling what can be said publicly. So Stalinism appears between colleagues who work together in the moment of confusion, and it comes from a younger professional.

The distinction seems to be not between "bulls" and progressors: the revelation of how the universe works cannot be an easily accessible vision that everybody can acquire. However, once this consciousness is apprehended, there is truly new power to create natural objects, even new worlds:

People for whom the Universe doesn't exist, do not exist by themselves. They are only a part of world processes, a microscopic part of them. For the scientists working at the

Sphere Institute, the Universe existed, lived; not even alone. The former Andromeda nebula was moving in the Big One, in the sky of galaxies, sending here its phantom image. In the small, The Changing One, turbulence and laminar, storms and pauses-calms, days and nights of the cycles of manifestation alternated. Of these, the MV-sun shone at the range, every ten seconds a new one. Those who remained at the institute that night (some to do, others to insure, others to observe and empathize) were in both; More precisely, between the one and the other. And thus, in two universes at once. And now they were fulfilling something especially primary: they were doing universal things in the Universe. They created the Continent. (*Dolzhnost'*, part 3, 452)

Clearly, the Sphere is not a simulation of the existing world but the world in itself, with its own independent and complex, universal logic. Never before in Soviet SF had the idea of the multiverse been presented so tangibly and demonstratively. Exposure to the existence of the multiverse, the awareness of the multitude serves for Savchenko's characters as the ultimate source of superiority – yet, with a price attached. It would be hard to say where Savchenko got the idea of the multiverse, but if he read Lem's *Fantasy and Futurology* in the original publication, this is perhaps where his epistemological stance originated. The connection with Lem is also detectable in the treatment of humans as inferior to technology. Savchenko's satire on naïve utopianism and abuse of power also resonates with Lem's world of salient machines reproducing a feudal political system.

The discussion on the image of the Universe

Savchenko typically connects politics and science, particularly physics. This is the discourse that initiates a scientific view of the Multiverse, which has no one name in the novel, but means that unity always implies plurality; it is a philosophical idea that has universal implications. For the description of the Multiverse that is governed by multiple logics and co-existing without overlap, Savchenko uses the language of physics. It is an abstract language that often involves mathematical discourses that include new physical parameters of the world as known. The knowledge of physics translates into politics via the abstraction that embodies the definition of homogeneity as always implying a reduction of a multidimensional process. The failure of traditional science or even classical rationality to deal with the multiverse leads Savchenko's characters to fiasco. However, he experiences a similar crisis. Thus, Savchenko's characters always go through a rational attempt to create something spectacular but once they get to the moment of being able to do it, they choose metaphysics instead of superior scientific knowledge.

Plurality and the impossibility of rationalizing alterity are the reasons for the dead end, which Savchenko called "scholastic" in *Self-Discovery*: there is no theoretical solution to plurality: different properties of matter, as now theorized by Pets, create a local realm with different phenomena, inhabiting them.

Alterity in the universe is depicted by Savchenko as something located beyond rationality, and rationality itself is only an attempt at communicating with the unknown (and frequently failing). There is a paradox of heterogeneity, but also interconnectedness of heterogeneous elements in "a flow of Energy," a "whirl" that Savchenko explained as "the ocean of all-in-one

matter.” This is a quasi-Confucian view of time flow: everybody has their own time, and it is not territory-based as in Albert Einstein’s theory of relativity. Time is an individual metaphysical experience, which, according to the logic of the novel, cannot be generalized. Pets’s graduate student expresses one of the hypotheses on the Sphere and how it changes epistemology in science:

That is, according to their direction of time, all the worlds exist in a flow. Worlds grow in the front, they fall behind; and all happens with the greatest possible speed, with the speed of light. The usual relative motion of bodies, which we see, is part of their existence in the flow in their individual time for each body, or, to put it simply, in their carrier jets. The bodies in them are turbulent nuclei. (*Dolzhnost’*, part 1, 170)

In book two, from which I am citing, there is a new conceptual vocabulary that translates 20th century physics into the language of the story. New idea of matter is troubling, barely comprehensible, and it has multiple names, but one sticks the most, Quickly Changing Multiverse.

Savchenko designs a new alterity for the intellectuals, who now should not be the elite but reflect on their destructive choices and passivity. Why does the writer do this? Maybe, this is a utopian alterity? Savchenko imagines the end of the Enlightenment cliché of “heroic enthusiasm” of the scholars and scientists who seek to design a utopia with the help of technoscience (Frumkin 2002, 207). When the Institute stops extorting symbolic value out of their studies and the Sphere becomes an unexplained phenomenon, humans are still not ready to accept that, despite its mystery, there is nothing yet for humanity in it:

The feelings of being beaten and destitute among the laboratory staff were perhaps even stronger. They were accustomed, having risen on balloons, by turning the handles to eliminate the megaparsecs that separated them from galaxies and stars; we are used to viewing the lives of almost eternal worlds in comfortable modes, “flipping through” planets, star-planetary systems, universes in search of interesting objects and events ... we are so used to it that we entrusted this to the machine. All this became for them a normal vision of the world, a normal life in the Universe. And now they felt like deaf and blind nonentities. (*Dolzhnost'*, 402)

In Savchenko's novel, the destruction of the progressors' project is initiated by its leader, who wants to protect the world from an ultimate fiasco. Pets has the vibe of the Strugatskys' Perets, because he is naïve, but unlike any character in the brothers' oeuvre, he makes the choice to give up his power and secretly destroys both the technology and the institution that empower him.

Science is a disappointment to utopias

While being a Soviet writer, Savchenko, nonetheless, has his own utopia that is philosophical in its nature and is very resonant with Lem's criticism of Tarkovsky. Humanity is unable to leave the unknown without rationalization, and relies on journalists giving plausible versions for the masses' use, without resorting to metaphysics. So the characters of *A Rank in the Universe* have some wisdom and capacity for understanding their limitations. They also realize that their fiasco in science became a tool to preserve society rather than revolutionize it – to the point at which they gave up on their identity as progressors, ruling over the universe “with

tumblers.” The exploration of the Sphere made the characters question their initial faith in humanity’s superiority in the universe. Furthermore, they arrived at the conclusion that the logic of humanity’s evolution is leading to catastrophic results for their universe.

For Savchenko, intelligence is not a pinnacle of evolution but a property of humans and the non-human. It is similar to the dilemma laid out in *Solaris*: the human can either run away or interact with non-human intelligence, and each choice is loaded with heavy existential consequences. There is no possible correct statement to make, since the research continues. Yet, society is such that without curated information, it is governed by myths and gossip. A withdrawal from informing society leads to mythological thinking. The other option, however, is not that there are answers, but that the expert/official answers are less irrational than gossips, so – as I deduct here – these answers can keep a better social atmosphere. Pets dismisses this logic because the situation “sounds apocalyptic”:

The confusion of the commission’s conclusions, in comparison with the impressive picture of the disaster, negatively affected the publicity of this event.

“No,” said Viktor Panteleymonovich Strashnov, secretary of the regional committee, wearily closing his swollen eyelids, when the editor of *Kataganskaya Pravda* brought him material about Tarashchansk for approval. “Somehow this is too much...” he searched for the word, “apocalyptic.” The population should not be disturbed. Let us give food to superstitious rumors.”

The editor insisted, arguing that rumors and rumors would still go on, silence would bring even more confusion to the minds. Strashnov shook his head and offered to wait until something else was revealed about Shar.

The editor was right. The members of the commission who returned to their institutes told everything at seminars and in private conversations, thereby causing shock and distrust of reality among many. (*Dolzhnost'*, part 1, 2)

This situation may be a flashback to the newspaper *Pravda* ignoring the explosion of the Chernobyl nuclear plant in 1986 (with an anti-Semitic “hint” in the fictional title). Although it was already a time of Perestroika, for more than two weeks there was no information about the explosions. Savchenko dedicated a collection of stories to the disaster, *A Visit of Crazy She-Fazian* (*Vizit sdvinutoi fazianki*, --1991), which I discuss later as part of his “futurological dialogues.”

In his late interviews of 2002-2003, Savchenko argued that civilization had proven that external (non-human) factors cannot be controlled with tumblers. The world does not remain “stable,” to be operated. Thus, according to him, human civilization was in a stage of decline:

– In the novel *A Rank in the Universe*, you come to the conclusion that civilization is a spontaneous destructive process of decay. That is not a very optimistic idea...

– Nevertheless, it is correct. [...] The civilization does not work for human. (Savchenko 2002)

The Global Flux, which Savchenko takes out of his fiction into his non-fiction, creates “individual space-time” because unifying ideas fell through as the metaphysical part of

materialism. This theory is a trope of the end of materialism, and this is how Frumkin read the metaphysical core in Savchenko:

The world of *The Snail on the Slope* is certainly a multi-layered metaphor, but not least this novel can be interpreted as a satire on human science, which imagined that it could know the world around. *A Rank in the Universe* is no longer a satire, but a tragic allegory about science, which doubts not so much what it can, but what it's worth and why it was started. (Frumkin 2007, 237)

However, such a vision lacks the perspective on Savchenko's utopia in response to the failures of materialism and fetishized science that functions as a cultural religion. The alternative was to adopt a new epistemology, in which science proposes a plurality of answers to the questions that cannot be considered in the vicinity of contemporary science. One such question was foremost a literary creation: the non-human, as represented by Lem's *Solaris* and the Strugatskys' *Forest*.

Savchenko's response is even more sweeping: his radically different other is not anthropomorphic in any sense. He uses the Sphere and matter as tropes of alternatives to humans, and this is part of his "futurollogical perspective" on society.

Futurollogical dialogues

Futurollogy was already a trending discourse when Savchenko published his "futurollogical dialogues" and the whole collection of non-fictions accompanied his discourse of alterity in fiction. Additionally, Savchenko had already written about the future: in 1960, for instance, in his article "What limits our future?" (Savchenko 1960). Yet this was a low-key

argument for the new science. When Perestroika was happening, in 1989, he and Oles' Berdnyk, a Ukrainian writer, started futurology dialogues. In 1991, Savchenko published his thoughts from these dialogues as a separate book. He also introduced an alternative investigation into Chernobyl, wanting to spread his science-fictional hypothesis as the social prognosis, through mass media. In his dialogues with Berdnyk, he stated that humanity is doomed due to its lack of intelligence. He claimed that five billion people living on the planet are crazy (Savchenko 1989). So, the majority of humanity is stupid to use the fruits of technology. In individual usage, technology can be harmless, but when it comes to mass technologies that try to change the human mind and body, and hybridize them with machines, as suggested by Krivoshein or imagined initially by Pets, then it is about manipulation rather than magnanimity.

The collection, *A Visit of Crazy She-Fazian* included Savchenko's extended version of the "dialogues," in which he provides a greater context for his last novel. Yet the apocalyptic discourse kicks in fully in Savchenko's non-fictional works. The rhetoric of Savchenko's non-fictional statements is alarmist. He speaks about the need to restrain the power of technology for the benefit of humanity. This is the same rhetoric that had been shaped in both *Self-Discovery* and *A Rank in the Universe*. It has been heavily recycled through the narrative of fiasco and the modality of pessimism toward human potentiality.

Ecology was an important theme for Savchenko, too, but after the Chernobyl catastrophe in 1986, about which he wrote in three articles between 1991--1994, ecology became an ideological discourse appearing in his futurological dialogues. At the borderline of two epochs, Savchenko remained atheistic, and religion remained irrational for him – and thus detrimental to scientific rationality. His definition of science as the fifth-world religion was a way to attack

science for its hidden irrationality. By exposing metaphysics in science, Savchenko follows the criticism of positivism, like thinkers such as Karl Popper. In science fiction, Savchenko took a position that Lem proposed in *The Master's Voice*: a scientist is a theologian of science rather than an enlightened superhuman.

However, the idea of the “world religion” can be read not only as a criticism of science, but as a uniting perspective that overcomes an ideological binary between Soviet and Western worldviews: if both are metaphysical, then one cannot claim to be better than the other. Such a perspective proposes a pluralist view of metaphysics, too. There is no *better* knowledge, when knowledge is perceived as a changing speculation. Metaphysics becomes explicit, and it is enough to expose its features: it is not factual but fetishistic. Science is “praised” instead of practices, which makes it a modern-day religion.

Savchenko’s non-fiction features new types of alterity that exceed anything mentioned before, and he discusses these phenomena in a journalistic way. These are logical constructs of science-fictional hybrids: the “fermentation of the human-bacteria,” “electron-machine life,” and “Brownian movement of life” (*Chelovekobakterii i ikh brozhenie; Elektron-mashinnaia zhizn’; Brounovskoe dvizhenie*). It is also important that these ideas appear in the process of a dialogue with a skeptical opponent. By insisting on a re-definition of physical matter, Savchenko proposes a discourse, in which “the Universe,” “death,” and “infinity” point to the non-objectivity of science. In his science fiction, he developed the theory of intuitive resonance, which – in contradiction to Marxism and materialism in general – defined consciousness as undetermined by physical matter, as well as by any other, social or economic factors.

Conclusion

The utopia in *A Rank* is built around the academic city, which is a common idea for Soviet aesthetics, particularly architecture, and so this utopia in its core is about a scientific revolution, where everybody participates in intellectual life, and this contributes to the scientific progress. The Institute is a safe environment for debates, which do not solve problems. Yet there is a human empowered to make decisions, and the protagonist who paradoxically decides to sabotage the project. This is the solution, in a way.

Formulated in a philosophical way, the problem is that the non-human, even if it is man-made, such as the Anthropocene or the “machine womb,” is beyond humans’ control. Likewise, out of control is nature exemplified by the Sphere. Overall, Krivoshein in *Self-Discovery* and Pets in *A Rank in the Universe* arrive at the most optimal decision: to not let humanity have access to the non-human phenomena that they do not understand and cannot control. Control is a false concept. There can be no tumblers to move “matter-action,” as Pets tried to hypothesize in his theory of alternative quantum fields. Industrialization should not be about creating a new kind of species, as Ziskind dreamt of, nor as Krivoshein started printing in his “machine-womb.”

My reading of Lem’s texts and Savchenko’s novels is based on the premise that their dystopias of science contain a utopian dimension – in an apophatic way. Images of alterity produced by Lem and Savchenko manifest a response to the epistemological shift in Soviet (and global) science, a shift related to the social side of scientific and technological production. Power was no longer in the hands of “heroic enthusiastic scholars and scientists,” as Furkman argued (Furkman 2020, 27). On the contrary, as I demonstrated here, power resides in the fictional

phenomena of the Quickly Changing Multiverse, which impacts human lives more than humanity is able to compensate for. Similar to Lem's novels and theories, in Savchenko's novels the human is losing agency to the non-human, although the non-human suggests a multiplicity of realms and worlds, which, in turn, opens new potentialities for human self-realization. The non-human concept initiates a new philosophical category in epistemology, and by doing so moves outside a purely literary scope – outside any particular discipline of knowledge. It signifies a shift in scientific metaphysics: is there anything other than human intelligence? Both Lem and Savchenko speak of nature, including viruses and bacteria, as social creatures that can be worthy of study for their own type of intelligence.

The most important insights by Lem and Savchenko are associated with the dystopian utopia subgenre. Despite *attempts* to contact the unknown natural phenomenon, the human-made artificial intelligence, or the extraterrestrial civilization, contact is not made, because there is no proper epistemology for understanding the unknown. The *unknown* is central to these writers' search for new epistemologies, and this category serves as the foundation for utopia in their respective worldviews (as in Clowes 2014; Banerjee 2012; Slusser 1989).

A comparison of Lem and Savchenko supports the scholars' claims that their quests for new epistemologies represent transitory stages between religious and secular society, in which SF literature promotes an "ethical secularity," with every individual adopting some kind of an ethical system in their effort to fit in society as whole. There is a social request for rationality in one's actions, and in a society that used to rely on tradition, there is no immediate substitute for the ethics built on metaphysical explanations of "sin," "sacrifice," or "immortality."

Lem and Savchenko connect the problematics of this epistemological shift with the concept of “agnostic skepticism,” which Frelik defined as “agnosticism (albeit different from the official state atheism of the Soviet bloc) and misanthropic humanism” (Frelik 2013, 448) and which applies to the subgenre of dystopian utopia: humans are hopeless but hope is still there, in the world of the future; it just does not come from human evolution. The principle of distrust for available knowledge and the hope for new discoveries in science play significant roles in destabilizing the rigid logic expressed in the epistemology of Marxism-Leninism and Soviet utopia in general.

Conclusion

The political implications of the Alterity that cannot be governed but needs to be co-habited with

In this dissertation, I have argued that the selected works of science fiction promoted the acceptance of a diverse and pluralist society, critiquing control over society and nature “with tumblers,” even when this control is driven by progressive goals and values. In the works discussed above, contact with an alien civilization radically different from humans, means that humanity has no clue for how to communicate with it. The trope of alterity appears in these texts as the central point: humans try to investigate something “alien” about which little is known. The tools to investigate the alien, i.e., the alterity, can be anthropology, if the subject is a human; natural sciences, if “the alien” is a physical or chemical phenomenon; and cybernetics, if the subject was human-made non-human, the smart machine, the Artificial Intelligence. Beyond AI, the examples of alterity that I have encountered in the studied texts are the people who are portrayed as inferior (e.g., the bulls, the ugly ducklings); the superhumans of the future (the progressors) who have powers beyond regular contemporary humans’; and the alterity of non-human origin: e.g., anisotropic universe and the multiverse as responses to new all-encompassing changes in scientific communities globally and locally.

My conclusion on the role of SF as a medium for the discourse of political pluralism is derivative of the features of the alterity tropes. Political thinkers and writers, Andrei Sakharov, Valentin Turchin, and Georgy Shakhnazarov, similarly to Lem and Savchenko, spoke of

technology's contradictory trajectories, and sometimes referred to SF as a meta-commentary on modernity's dead-ends and paradoxes. Sakharov declared mutual "convergence" of Soviet-style socialism and post-WWII capitalism, and his 1968 manifesto served as the initial step towards the reforms implemented during Perestroika. Turchin, a trailblazer in computer language programming, posited that the state functions as a computer that necessitates meticulous (re)programming. This analogy might be likened to the control room of a nuclear plant, a role Turchin previously held during early stages of his career. Shakhnazarov, in addition to exerting influence on Soviet politics, asserts in his fiction that technology only serves to resolve unforeseen problems brought by other technologies. In a civilization that acknowledges its limitations in the face of alterity, encompassing both technology and human sciences, the solution lies in the emergence of a philosopher who champions diversity and assumes power. This makes Shakhnazarov truly close to Lem's sensitivity and philosophy where alterity, as the "black box" is situated inside human and machine rebellion in society.

Efremov's *Tormans* satirizes state socialism in both the USSR and China, as represented through the eyes of space travelers from the communist Earth. The Tormansians are an example of negative alterity, a backward civilization. Conversely, the Strugatskys' *The Snail on the Slope* and *Time Wanderers* use the trope of an alien civilization to symbolize the superior difference of the other. The female colony is superior in technology: they have robots while Kandid has a scalpel, at best. The scalpel is the symbol of the progressors' civilization not only in *The Snail on the Slope* but also in *Time Wanderers*: the book explains that new consciousness should sever itself from the progressors' mindset.

If *Time Wanderers* can be read as a prediction about the upcoming collapse of the Soviet Union, then becoming a Wanderer turns alterity into an identity that can be chosen rather than being innate. This novel shows the end with the idea of co-existence with the progressors of the USSR, be it the Politburo or the KGB. This story, for me personally, is about the place of alterity in a society that requires homogeneity while there is none in reality. The process of *fukamization* is a biological change that a Soviet citizen experiences, and that was reversed first legally, and only then, by a lucky few, whose parents had their brain operated on with the surgery called *fukamophobia*. It can be interpreted as a crude image of the civilization of the scalpel, but it can also be reference to ritualistic body mutilation that is practiced globally. *Fukamophobia*, the phobia of homogenization should have been the premise to separation from the culture of the Same. We may speculate that the Strugatskys were discovering their Jewish identity over the Soviet one. The trope of the visiting alternative civilization is powerful, figuratively evoking topics of migration and human attachment to some cultures over others. It is also a trope that speaks to human difference, and the image of the Forest in *The Snail on Slope* is a unique instance of such a complex vision of alterity in the Strugatskys.

Stanisław Lem's *Solaris* offers a new presentation of radical alterity, one that represents a turning point in the evolution of such narratives, as noted by scholars. Gromova supported Lem's critique of Tarkovsky's interpretation that minimized the alterity of *Solaris* (Gromova 1973). Rodnianskaia showed that Lem already planted the trope of a black box into the narrative of alterity, maintaining that every highly developed, intellectual machine like a human being contains something unexpected, stemming from one's individual experience; hence, the trope of the "machine rebellion," the loss of control over machinery that appears in the early 20th century

SF obtains new significance and new resonance. I compared Lem's novel about the "dehumanization of the Moon" – the loss of human control over lunar military technology – with the perspective of humanity's self-destruction: one such example where dangers of alterity come not from the outside but from within society.

The narratives that emerge from these tropes concern artificial intelligence revolting against humans due to its innately different logic. There may be no God or aliens, but this does not mean that humans have a monopoly on intelligence. Machines can be in control of rationality since they already follow their own logic. The narrative of machine rebellion is so persistent that the aliens come to be unnoticed, yet much superior to humanity, as in *The Time Wanderers*. Concepts such as the progressor, anthropomorphism, and the non-human appear to be central to these narratives. Examining Vladimir Savchenko's two novels, *Self-Discovery* and *Rank in the Universe*, I drew a parallel between his works and Lem's form and aesthetics as well the philosophical component of the non-human as something incomprehensible. *Rank in the Universe*, a novel from the Perestroika period, condensed all the key tropes of the unknown and non-human present in Lem's world. Reading Savchenko's novel alongside Lem has an additional value because it shows a plurality of opinions about modernization, and what the state can look like.

I argued that the non-human conceptually implies a deep transformation of "common-sense philosophy" (materialism, in the case of the USSR) and thus leads to the epistemological shift, which makes the idea of alterity superior. In Wells's *War of the World*, the aliens shot and killed many humans, but there was no explanation of what they wanted and why. The Martians

leave an object on the planet; some humans speculate that it is space waste, some suspect it is a virus, but others decide to eliminate it. The trope here is an allegory: i.e., a multidimensional symbol, summarized well by Julian Cornell, who sees an anti-imperialist impulse in Wells. Cornell argues that Wells introduces a new conceptual vocabulary in *War of the Worlds*: “an extremely rich and layered text, the narrative engages fears of a coming war on the continent and anxieties regarding technology unfettered by moral concerns, as it critiques both Social Darwinist and colonialist ideologies.” (Cornell 2008)

Outside of applied biology, the non-human helps us speak of human values. The non-human questions are predominantly epistemological by nature – and ethical, due to the historical contexts in which these authors lived. Religious traditions prescribing values are based on metaphysics in philosophy. The SF books under discussion are not metaphysical; rather they have a signature set of concepts that amount to descriptions of “doom,” “evil fate,” “fiasco,” and so forth. According to all protagonists in this dissertation, the future is apocalyptic, dark, and urgent measures must be taken. Were these authors right about the future?

Many scholars interpreted this approach as the authors’ escapism from reality (Slusser 1986; Banerjee 2012; Peterson 2019). I find more convincing the argument associated with the concept of a “meta-utopia” that is critical of utopia and its language, demonstrating why it did not work (as defined by Clowes 2014). The response to this challenge for humanity is twofold: humans need to seek exact information but can never ascertain it for fact. This quest is predominantly aesthetic and is associated with the principle that I defined as parallax.

As mentioned above, parallax is a rhetorical tool creating coexisting and mutually contradictory perspectives on the constituted subjects. Parallax is the motor driving the “different

voice” in *The Snail on Slope* and Lem’s works, in particular. This is an infernal voice of the rebellious machine and the hidden, secret part of the brain, the black box, capable of completely changing one’s personality. My point is that neither the discourse nor even the content is the most important feature of the works under discussion, but rather the overlapping and contradicting formulas defining relations between the human and the non-human, the known and the unknown. The effectiveness of such a logic is confirmed in the novels discussed here and has both epistemological and ethical implications. Parallax as a confusion of interpretations and even facts also allow the performance of multiple readings of the given text. The readers’ identification with characters, the effect of interaction, and being in the flux of the narrative – all traditional features of the reader’s engagement – here constitute only the opening stages of conceptual reading.

The chosen texts by the authors studied here *perform* the changes of beauty into ugliness, and vice versa. Demonstrating misunderstanding and the falseness of appearances is a foundational rhetorical device in science fiction. Scarcely any SF narrative under discussion fails to utilize this device, which shifts interpretation during the reading process and continues to keep individual facts sovereign from a comprehensive, overall assessment of what is beautiful and what is ugly. Tellingly, in the novels under discussion, most insightful remarks emerge from the mouths of vilified characters. Conversely, their main protagonists represent a new type of *positive* character, the progressor; but these writers’ greatest achievement is the *deconstruction* of such characters. The progressor appears as the embodiment of “our” values and perspectives as

opposed to aliens of backward planets that, in fact, are reflective of the recent or current state of affairs in “our,” i.e., Soviet world.

In a parallel course, Lem developed the process of internalization of alterity. Lem is known for his broken characters with a black box in their heads. Ijon Tichy is the reiteration of Kevin in *Solaris*: both studying their visions to learn about their realities, instead of studying them with science. The same can be said about Savchenko’s characters, including Krivoshein, Ziskind, Kornev, and Pets in *A Rank*.

These processes resonate with the development of the political thought about alternatives to state socialism that I will briefly outline by looking at two dissident thinkers – Andrei Sakharov (“Thoughts on Progress”) and Valentin Turchin (*Inertia of Fear*), and one “systemic liberal” Georgii Shakhnazarov, who not only belonged to the tight circle of Gorbachev’s advisers but also published SF novels under the pseudonym “Georgii Shakh”. Through these brief “excursions” I want to inscribe, if hypothetically, intellectual explorations of logics of alterity in SF by Efremov, the Strugatsky brothers, Lem and Savchenko into the prehistory of Perestroika.

“Thoughts on Progress”

The creator of the thermonuclear bomb, Andrei Sakharov (1921 – 1989) became a prominent public intellectual in the 1960s. One of the most famous dissidents, sent in exile to Gorky in 1979 after his protest against the Soviet invasion of Afghanistan, Sakharov also became the founder of the Memorial in 1986, an organization that explored and documented the history of Soviet political repressions. In 1968, Sakharov wrote his “Thoughts on Progress, Peaceful Co-

Existence and Intellectual Freedom” [*Razmyshleniia o progresse, mirnom sosushchestvovanii i intellektual'noi svobode*], published in the same year in *The New York Times*. In this study, he formulated not only the demand but also the discourse that soon became associated with Perestroika, including such concepts as “socialist pluralism,” “futurology” itself, and many others, then unknown to the general public. In 1978, for example, Sakharov described the Soviet Union as “a totalitarian state”; also in 1978, he said that Marxism-Leninism had been transformed by the Soviet regime into “an ideology of a party-state totalitarianism,” and in 1980, he termed the Soviet Union “a closed totalitarian state” (Bergman 1998, 246). Sakharov also spoke of cybernetics and artificial intelligence as forms of political control:

Modern technology and mass psychology provide ever-new opportunities to control basic human values [*ustanovochnye kriterii*], behavior, aspirations and beliefs of the masses.

This is not only management through information, considering the theory of advertising and mass psychology, but also more technical methods, which are widely written about in the foreign press. (Sakharov, *Progress*)

The problems of epistemology created by technology and new discoveries in the sciences allowed access to the human mind without providing information for analysis and conscious choice. Sakharov also argues that science had already been serving the goals of biopolitics, which is “a threat to human values” as much as any technology:

Among the examples are the systematic control of birth, the biochemical rule, radio-electronic control of psychological processes. In my opinion, we cannot completely jettison these new methods. We cannot ban them in principle in the process of developing science and technology, but we need to clearly understand the scary threat to human

values, including the meaning of life in general due to the abuse of technology and biological methods and the methods of mass psychology. (Sakharov, *Progress*)

Sakharov referenced Norbert Wiener's discussion of AI's role in an antagonizing (*razobshchennoi*) society. (Sakharov, *Progress*) As he hypothesizes, using SF imagery, AI will "follow the inhuman (*nechelovecheskaia*) logic," which is the correct translation of his description of the smart machine that gives advice according to alternative logic – one that is abstract and internal to the alternative intelligence's goals. This is the trope of machine rebellion, discussed above:

We cannot forget about the real danger, which [Norbert] Wiener warns about in his book *Cybernetics*, is the absence of stable human foundational criteria. The might that the use of wise advice from future intellectual helpers is a seductive and unprecedented, yet the use of artificial "thinking" automatons can turn into a fatal trap because the advice can turn out to be inconceivably insidious since it can be following abstract goals rather than human one due to unpredictable changes in the artificial brain. (Sakharov, *Progress*)

"Human foundational criteria" suggest new ethics that could protect society from self-defeating endeavors. The epistemology to work out such ethics lies outside human thinking. It is also part of artificial "thinking," and thus, an epistemology that society needs to work out, along with the concept of the non-human – be it economy, collective psychology, politics, or any other social phenomena conceptualized through figures of speech. Sakharov suggests use of the "artificial brain" to create the urgency and feeling of defeat, even if humanity manages to build machines

that it cannot totally control. Such brains can turn out to be inconceivably insidious and marked by unpredictable changes.

In style and form, Sakharov's treatise offers a variety of analytical paths, as in the trope of anisotropic matter that links the Strugatskys and Efremov. Sakharov calls his new approach "Western" and "futurollogical." He presents himself as a futurologist of a Western type, arguing that there should be new definitions for almost every political concept in Marxism-Leninism (especially socialism, see below). Yet he proposes a radical change for "unity": freedom of thorough and scientific management, which are necessities for the future. It also means that both are absent. Here "unity" is redefined as the ability to communicate, and not as having an integrated worldview. If there is no unity in respecting human values, Sakharov says, then what can control the psychology of humans *en masse*? Having such a technology will be a danger, to the extent that it can eliminate the meaning of life for humanity – a vision matching the writings of Sakharov's affiliate, Valentin Turchin (1931-2010).

Inertia of Fear

Turchin was a physicist by training, starting as an engineer for a Soviet nuclear plant in Obninsk. It was a secret, "closed" city, secured by bans and privileges. By the end of the 1960s, Turchin became one of the closest associates of Sakharov in the dissident movement, and in 1976 he was expelled from the USSR for his dissident activities.

Turchin interpreted the Soviet political regime as an alterity to humans: it followed the logic of its architecture. It was comprised of machines that humans may use or misuse. In 1978,

Turchin published in samizdat his work *Inertia of Fear*,³³ which rapidly facilitated his meeting with Sakharov and led to his becoming part of the dissident movement, “the underground.” His philosophy was expressed from the position of a supposedly faithful supporter of socialism. An initial text that Sakharov read before meeting Turchin was a short brochure. In the introduction to the second (1978), New York edition, Turchin admits that his work had gone through transformations since its first appearance in 1968. The main transformation was in scope, because the 1978 study explains Turchin’s perspective at length: his view of Marxism, of totalitarian states, of cybernetic governance, and so on. His utopia, in many ways, reflected his professional training. His lifetime project was to create a language of communication with the machine – an important step toward artificial intelligence. Turchin treats the state as a non-human entity, which may be empowered by computer-calculated statistics and AI technologies; he considers it the alterity, requiring special knowledge and an academic discourse to capture difference.

Turchin argued that the Soviet state functioned in a “stationary mode,” with no need for much intervention to reduce the likelihood of a revolt. He explained that this regime sustained itself automatically, by the use of “mechanical logic” in all spheres of life. While obsolete, this logic requires the human to act like a machine and respond to an expected template. A new epistemology was needed for the society to develop, rather than stagnate in the “automatic” regime. Turchin worked on a theory of the totalitarian state as a stable, self-replicating machine, “too simple to evolve,” as he called it, referring to the Strugatskys’ *Inhabited Island*. This

³³ Although there is a translation of Turchin’s work in English published in 1981 by Columbia University Press, I am citing the original 1978 publication at Frankfurt’s Posev.

primitive machine tries to integrate a variety of individuals into a homogenized version of the human. The role of such a machine – and we should think of it as a trope for some other social phenomena – is to cover up the real beneficiary of the regime and to create the impression of being omnipresent and abstract, while it is neither: “The government performs that it is monolithic to make itself abstract and omnipresent” (Turchin 1978b, 14). What helps humans overcome the reality in which this monolithic power shows rifts is its suppression of alterity at its core:

In the third, final stage of totalitarianism, the emphasis is on maintaining the totalitarian consciousness of the members of society. This stage assumes that the transformation of consciousness is completed, the will to freedom is completely suppressed. This raises the possibility of further reducing the scale of physical violence and partial (only partial!) opening of information channels to the great joy of “well-fed, benevolent foreigners with notebooks and ballpoint pens in their hands.”³⁴ (Turchin 1978b, 21-22)

For Turchin, the Soviet state was a machine of control and false information. The true movements and motivations of those in power were invisible, thereby more beneficial to the privileged class. Thus, it was a crypto-rule too: no one truly has full access to information except those at the highest levels. To clarify, Turchin did not say that the Soviet government managed to create a homogeneous society. He actually argued that totalitarianism cannot make society fully homogeneous. He speaks only of those who maintain power. Among them, homogeneity is almost complete.

³⁴ Here Turchin cites Alexander Solzhenitsyn, but this is an unmarked citation.

Turchin references Zamiatin's totalitarian state in *We* (1921), a state that uses surgery to cut out the part of the brain responsible for imagination, which can disturb the preplanned societal order. Without imagination, humans become "machine-like." This excised portion of the brain reminds readers of the black box trope in the novels under discussion. Turchin speaks of the Soviet power machine as a repressive, automatic machine that does such a surgery, but the science behind this surgery is obsolete:

These features [of the state] are the consequence of hurried and unqualified use of some aspects of science of the 19th century. These features remind of a phrenologist who tried to change psychological inclinations of a patient by smoothing brain bumps in one place and forming bumps in others. Such mechanical integration can lead only to one type of society, the totalitarian one, i.e., the one that squeezes, or compresses [*sdavliwaet, spressovyvaet*], people. (Turchin 1978b, 169)

Turchin proposes a new way to think of social integration -- based not on mechanical equalization of humans but on cybernetics:

The cybernetic approach to socialist integration is first and foremost a cultural phenomenon: it develops and strengthens in human consciousness through philosophy, science, literature, and arts; socialist consciousness creates premises [*predposylki*] for developing new form of relations among people and for the rebuilding [*perestroika*] of social and state institutes, as well as systems of production. (Turchin 1978b, 169)

Here, Turchin proposes "the cybernetic approach" to "socialist" integration, and he does so quite explicitly to change the meaning of the word "socialist." Here it is a new epistemology, or "the worldview," as he writes in other places. There must be a new form of relations among people

for the reconstruction [*perestroika*] of social and state institutes – a state reform must be a cultural one.

Turchin introduced the concept of “perestroika” almost 20 years prior to the beginning of actual Perestroika. For him, it means a new way of solving the problem of dialogue between those in power and those controlled by power. Instead of punishing the subordinates for not behaving the way prescribed, there should be “new forms of relationships,” which presuppose a new architecture of social and state institutes that Turchin explains in detail. Dehumanization and passivity affect all participants, not only those who are not in power:

The leaders of a stationary totalitarian state appear to the common man as a single, undifferentiated mass. They speak extremely standardized, indistinguishable from each other in style of speech and never bring up for discussion *the differences* that exist between them. Perhaps there are outstanding people among them, perhaps not. It is possible that they are all the same, it is possible that they are all different. *We do not know anything about them* and should not know - according to the *architecture* of our *social system*. We only need to know that they are the focus and personification of the “collective wisdom” of the party, the system. (Turchin 1978b, 14)

When Turchin developed his political philosophy, he used tropes involving all types of machines, both primitive and advanced. His utopia, in brief, is based on governance by cybernetics and mathematics (statistics). Turchin speaks of a metasystemic transition, a new level of governance, which is scientific and would be based on the presumption that there is no universal theory, but *theories*. He views human “networks” as the fundamental instrument of social transformation, but they are also part of the system, and the human inscribed into the

network of the system must subsume their will to its logic. Turchin's vision of the system is one in which the individuality is absorbed by society, and there is a moment of "sacrifice" that one needs to make in order to be *in* the system as a proper member. One's personal will is the sacrifice that Turchin expects from someone belonging to a free society: to obey science. The human cannot overcome obstacles by sheer force but needs science to know where this force must be applied.

Strugatskys' *Inhabited Island* contains a fragment that amazingly resonates with Turchin's theory:

Maxim felt such despair, as if he suddenly discovered that his inhabited island was actually inhabited not by people, but by dolls... In front of him was a huge machine, too simple to evolve, and too huge to hope to destroy it with small forces. There was no force in the country that could free a huge people who had no idea that they were not free ...

This machine was invulnerable from the inside. It was resistant to any small perturbations. (Turchin 1978b, 14)

Thus, the system exists separately from humans, and it can work until society collapses.

Turchin's vision of the totalitarian state as a machine that reproduces itself,

had already been expressed in science fiction. The state is non-human, and the inhuman in it can

be attributed to features beyond human control. In Lem's *Summae Technologiae*, discussed in

Chapter 3, such an autoevolutionary machine is an image of alterity associated with the

"dehumanization" of political violence, and Turchin's liberalization project depends on

understanding how to turn this metaphor into an analytical model.

Turchin aimed to create a political philosophy different from Marxism, which he saw as the source of totalitarianism. His concept of the state, which he defines in contrast to society, is the embodiment of the category of non-human. The ruling class uses this machine to suppress insurgence, but this function requires passive executioners of orders. Their opposites are the intelligentsia, those interested in politics and social well-being, and expressing their independent opinions on current affairs. This means that society, despite suppression, has diverse opinions (*raznoglasiiia*), and that organized contestation of power happens even in the totalitarian state, so there is an “underground” that “can come out on the surface” (Turchin 1978b, 22). Hence, the need for democratization that Turchin defines as the process of implementation of new laws and ethics through valuing alterity, by giving space to the “personal affair” (*lichnoe delo*), and also having the epistemology, “the image of the world” (*kartina mira*), that distinguishes plurality of opinion to democracy’s benefit (Turchin 1978b, 189-194).

World Marxist Review circle and Georgii Shakhnazarov

Other dissident works show traces of machine-related tropes, and also consider the non-human as a meaningful philosophical category to work within existing epistemology. For example, Vladimir Bukovsky references Turchin’s definition of the USSR as a totalitarian state, which in the 1970s was in its “stationary stage.” (Bukovskii 1990 via Bergman 1992, 23) These tropes were common among fellow dissidents since the late 1960s and based on observable similarities. But the themes impacted the Party elite, which considered “political science fiction” a tool for working with mass psychology. One such Party circle shaped in Prague from

1964-1986 around the journal *World Marxist Review*. Journal's Russian name differed from the English, it was *Problems of Peace and Socialism* [*Problemy mira i sotsializma*]. Many of the staff members on the editorial board of this journal became Gorbachev's advisors in 1986-1991: Aleksandr Iakovlev, Georgii Arbatov, Evgenii Ambartsumov, Fedor Burlatskii, Vadim Zagladin, Gennadii Gerasimov, Eduard Arab-Ogly, Georgii Shakhnazarov, Anatolii Cherniaev, and some others.³⁵ These future advisors had positions in the media and academic power structures as heads of institutes: Aleksandr Iakovlev at the Institute of World Economics and Foreign Affairs; Georgii Shakhnazarov at the Association of Political Sciences; Georgii Arbatov at Institute of the USA and Canada (he was its founder); finally, Timur Timofeev, who founded the Institute of the International Labor Movement of the Academy of Sciences of the USSR.

The circle of the *WMR* was known before Perestroika for its publications of Zinoviev's satirical novel, *Yawning Heights* (*Ziiaishchie vystoty*, 1976), Roi Medvedev's memoirs (*Iz Vospominanii*, 2010),³⁶ and, after Perestroika, the memoirs of the *WMR* circle.³⁷ The ideological influencers of the group were Rumiantsev, Burlatsky, Shakhnazarov, Iakovlev, and Cherniaev, who were picked as superior ideologists by the KGB and the Party apparatus (Burlatskii 1990, 28; Shakhnazarov 2001, 3-27). The Moscow State University is the hosting institutions for the professors who have shown consistent support to Putin's regime, for that it is who can be called

³⁵ See the memoirs of Fyodor Burlatsky, *Leaders and Their Advisors* [Burlatskii 1990]; and Georgii Shakhnazarov's *With the Leaders and without Them* [Shakhnazarov 2001]; see also: Iakovlev 2001, Cherniaev 2020.

³⁶ See: Martin 2019.

³⁷ I refer here not only to Shakhnazarov's memoirs; Iakovlev, Burlatskii, and others produced substantive accounts on their circle.

the MGU conservatives, who pointed to the philosophical and political connection between the *WMR* and the West Germany's Party (e.g. Tsygankov 2003).

In the 1960s-70s, the word "pluralism" appeared with neutral value in Soviet press only in a few instances, for instance, in political studies in 1975-76 in publications of Progress press, also one of Lem's publishers. Bulgarian political theorist Arsen Kozharov published there his *Monism and pluralism in ideology and politics* (1976). The idea of pluralism, i.e., non-violent competition of ideas and theories, was rooted in the declarations of the 20th Communist Party Congress, which defied Stalinism in 1956. However, by 1964-1965, this liberalization effort was lapsing. Aleksei Rumiantsev (1905 – 1993), the editor-in-chief of *Pravda* was fired for arguing for pluralism ("svobodnoe vyrazhenie i stolknovenie mnenii," free expression and confrontation of opinions) in science, literature, and art in his article "The Party and the intelligentsia" (Rumiantsev 1965). This article decided Rumiantsev's destiny, and he became the chief editor of the *World of Marxist Review* in 1964 but lost all political power in the Politburo.

The *WMR* entered the debate on pluralism and monism from the position of empowered ideologists. The *WMR*'s theory of modernization and social development appeared as the product of their studies of foreign societies, and as the result of collaboration with East European communist parties. The *WMR* studied ideological pluralism in the West, including a positive assessment of pluralism by the *WMR* affiliate from the Bulgarian Communist Party (Kozharov 1976). The concept of ideological pluralism and an ensuing non-teleological model of society were already present in the rhetoric of political autonomy in Czechoslovakia and Bulgaria. Iakovlev, in his memoirs, wrote: "We had to write about the West because we couldn't write about the USSR. This helped us to strengthen our methodology." These privileged ideologists

living in Prague, became “silent” dissidents – the fact they revealed only in their memoirs in the 1990s (Iakovlev 2001, 44; Shakhnazarov 2002, 67).

Gorbachev aide Anatolii Cherniaev opened his memoirs on the reasons behind Perestroika with Lem’s quotation. The future of civilization is in danger and its decisions could lead to self-annihilation:

Stanisław Lem, a science fiction [he used an English term] writer, explains in a letter to the readers why it has become impossible to write about the future in the same way as it was possible before: “We feel that civilization in its gradual movement [*postupatel’noie dvizheniie*] separates from us, that is being ‘ripped off’ [*otryvaiut*] from traditional historical roots, therefore it needs to test [*zondirovat’*] its future; the civilization must take decisions today, and the consequences of these decisions would be consequences that either save or kill our children and grandchildren.” (Cherniaev 2010).³⁸

Cherniaev references Lem to explain the epistemological shift in the political science(s) associated with Perestroika. He claims that the intellectual change happened a few years before Perestroika officially started. At the same time, it may be a mystification – the analysis of whether Perestroika was planned or improvised as a response to communist power losing its grip on the country, yet still using tanks to suppress rebellions. There is truth to the claim that Cherniaev creates an open view of the future, which is both troubling and scary. Lem’s name evokes these visions for Cherniaev, obviously, since he was a powerful influence within a rather small circle of people, who were also the official writers for the Politburo.

³⁸ Available online: https://www.ng.ru/ideas/2010-02-10/5_perestroika.html

Among all the authors who drew on Stanisław Lem, the one who did so most prolifically was Georgy Shakhnazarov (1924—2001). He was born in Baku, Azerbaijan, in the family of a lawyer, and received a substantive education in law. He also had combat experience during WWII. During his graduate years, he became close with Fedor Burlatskii, one of his colleagues and later also Gorbachev's advisor. His dissertation was titled "The forms of a bourgeois state in the era of imperialism" (1952). After that, he worked in the publishing house, Politizdat, where his career started. The three most important facts about his role in preparing the discourse of Perestroika were: his work at the *World Marxism Review* magazine; the foundation of the Institute of Political Sciences – in plural – in contrast to the "sole method" of Marxism-Leninism; and Shakhnazarov's contribution to Perestroika's discourse by his own interest in science fiction, Western science fiction, and, especially, Stanisław Lem.

As mentioned in the previous chapter, Shakhnazarov's colleague at the *WMR*, Arab-Ogly, helped with the publication of Lem in 1986 in the publishing house Progress, under the rubric "political SF." Even before Perestroika, these ideologists (acting as literary critics) were referencing Lem's manifest *SF and Futurology*, and Shakhnazarov could be seen as the leader in appropriating Lem's conceptual approach to science in political scholarship. In *Fiasco of Futurology* (1979), Shakhnazarov ends his book with a pastiche on Western and non-Western SF in the style of *SF and Futurology*, and in 1986, he publishes an article setting the goals similar to Lem's: to create SF that would deal with political problems "critically." In his article, Shakhnazarov explains how the genre of SF is the arena for political expression, and that it is the place where futurology starts:

There are a few literary works that impacted **all** [emphasis mine - ST] Western futurological thought. Among those are the novel of Aldous Huxley's *Brave New World* and George Orwell's *1984*. The latter deserves special attention because 1984 already passed in the calendars and it's possible to see to what extent gloomy predictions by English science-fiction writer [*fantast*] have become real. Although the authors come from same social circles of wealthy English intelligentsia with education from Oxford, Cambridge, and Eton colleges, they differ significantly. Huxley represented liberal democratic rule. Orwell can be considered a right-wing socialist. (*Fiasco of Futurology*, 3)

Science fiction that criticizes technocracy can emerge from different political ideologies, and it is crucial that Orwell is defined here simultaneously as a "right-wing" and socialist, which sounds like an oxymoron, but it is correct from the perspective of the contemporary USSR, where most the most conservative, i.e., right-wing, position was socialism. It was not revolutionary, and Orwell's view of socialism is not seen as a revolutionary force, but socialist state conservatism.

Lem's and Savchenko's fiction share some concepts formative for the discourse of Perestroika: cybernetics, prognostics, futurology, and more. This is "the language of convergence" in Sakharov and the "language of integration" in Turchin. The framework accounts for the redefinition of political terms, so new hybrids appear like socialist pluralism. Science fiction was one of many ways to create such a language " –the language of Contact," as Shakhnazarov called it in *Fiasco of Futurology*. This language is what Romanian politician thinker Silviu Brucan defines as the new feature of power discourse during Perestroika. (Brucan

1990) Its rhetoric is a step forward toward pluralism, but also a criticism of “bourgeois” society, which is about to collapse. There is a similar redefinition of political concepts: unity can be only pluralistic, so diversity exists within any unity. The language of contact can bring about this unity from different voices. Equality is opposite to freedom, and externally directed equality is not freedom but the barrack:

In such society, democracy is reduced to “equality,” which is a primitive type of equality.

Since such equality implies the criteria for the equality coming from the outside, one can't help associating it with the barrack-room. Such type of equality is (...) opposite to freedom. (*Fiasco of Futurology*, 168)

Shakhnazarov uses the symbol of a barrack as a metaphor for mechanical power. It is accompanied by the trope of machine rebellion, the techno-idyll that turns into a catastrophe because it dismisses human agency.

Shakhnazarov's own science fiction (published under the pen-name Georgii Shakh) may help understand why convergence happens. His novel *Net povesti pechal'nee na svete* (*For never was a story of more woe*, 1984) depicts a society on the planet Hermes that is divided by the clan system based upon professional lines, which exists despite all odds and appears to be an alternative, de-modernized type of civilization. However, the unity of this society is determined by the will of the majority, and when the youths – driven by love – break with tradition, the majority chooses as a ruler Benito Cheis, a fascist with a name that refers to Mussolini. The society in the novel eventually arrives to a democratic regime, governed by Deliz from Sorbonne (maybe this is a reference to a French philosopher Gilles Deleuze?), a philosopher of a new

universalist language that can unite the society that had long been split into clans and is speaking different languages.

Is this a story about the omnipotence of language that transcends political structures and institutions? Partially, it is, but the language of the ideology on Hermes is limited and fractured, and the premise is that different, dissident groups do not know whether they can actually communicate with each other, due to their clan-based differences (mathematicians communicate in mathematical formulas, which are incomprehensible without a translating device).

The alterity inside government is represented by the Great Mathematician, Hanns Eiler, which sounds nearly identical to the name of Hanns Eisler, a communist activist from 1950 through the 1980s. Eisler was also the author of the anthem of the German Democratic Republic. It is not duty, but *care* that structures the self-narration of this character. There is also a new human among youth who feels what is true to nature rather than to the society's regulations. The human is a lover, and the desire to "sacrifice" everything for his feeling of love is the magical spell that Shakhnazarov projects onto his vision of reformism. Basically, he means a sexual revolution. Desire is the unknown. The characters are constantly performing different roles beyond their stable identities. There is a fluidity of one's self that allows bipartisanship. These ideas might otherwise have been hard to grasp all at once, but they were rooted in Soviet science fiction, and Shakhnazarov spoke its language.

Thus, the science-fiction tropes of alterity discussed in this dissertation, helped the dissidents and the circle of Gorbachev's advisors to shape their perspectives on the necessary reforms. Certainly, it would be silly to claim that SF discourse was solely responsible for this transformative moment; rather the epistemological shift that Soviet SF had been reflecting and

contributing to since the mid-1950s, along with other discourses, eventually produced Perestroika. Yet political thinkers discussed here used SF tropes in their analysis of the political situation, and its key component was the expectation of the alterity, present in human actions and plans. The apocalyptic aesthetics created urgency and thrill in their works.

The epistemological shift that the SF writers manifested in their works, led, among other multiple factors, to the shared societal sensation that the planned future and the eternity of the USSR suddenly stopped being “constitutive” truths. With the failed coup d'état attempt of 1991, that truth became an old performance. Afterward, the USSR was truly gone. The non-human with its roots in GULAG died.

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