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Three Visions of Humanity in Extraterrestrial Ecosystems: Klein, Kosik, Skåden

Invasions, battles, exploding spaceships, burning land, genocide, slavery, ruthless exploitation—science fiction narrations on the first contact with aliens delight in these motifs. What was portrayed already by Herbert George Wells in The War of the Worlds (1898) as a conquest of land, developed in Ridley Scott's film *Alien* (1979) as a colonisation of the human body, found what was probably its most conventional realization in James Cameron's film Avatar (2009), with one general difference: now it is the humans who bring doom on an alien planet and not the opposite. The discursive turn dividing the beginnings of speculative fiction and contemporary literature has shifted many accents in depicting the first contact, some of them radically. Extraterrestrial civilizations that were usually considered a threat to humanity in the first decades of modern science fiction, no longer seem dangerous; they can even help humans understand themselves better (like in Ted Chiang's novella Story of Your Life [1998] and its adaptation Arrival [2016], directed by Denis Villeneuve). This critical turn, resulting mainly from a thorough revision of humanism after World War II, brought a change in the image of the human and nature, majority and minority, exploitation and symbiosis, as well as new questions concerning the place of humans in the universe. Generally speaking, it seems that the fear of a possible invasion and its consequences arose mainly from a traditional conviction of the uniqueness of the human species and its status in the project of nature (Crowe

519), whereas the change in the twentieth century has ushered in a new paradigm where this anthropocentric, utopian view of the evolution of life is questioned.

The survival of human communities in outer space or extraterrestrial worlds has sparked the imagination of whole generations of writers, especially in the classic age of science fiction in the mid-twentieth century and in contemporary speculative fiction. One of the most significant visions in such narrations is humankind surrounded by alien ecosystems, whether it be a story of cooperation and development or misunderstanding and extinction. Contemporary science fiction presents innumerable variations on human failure in interplanetary exploration, while contemplating the actual failure on planet Earth and revealing its own ecological and political background. Interestingly, scientific reflections on human expansion draw sometimes from fictional concepts, discussing various problems of future space colonisation, e.g. on the basis of novels by Olaf Stapledon, Isaac Asimov, Andy Weir, or such films as Star Wars, and arrive at different predictions: either the colonisation would bring few advantages and endanger hypothetical lifeforms on other planets (Morton ch. 2)1 or humans would expand in the universe and encounter presumably peaceful alien civilizations (Kaku ch. 12).

What is only seldom addressed in such analyses is the question of the possible coexistence with alien species. Colonising dead and frozen Mars would be completely different from colonising a planet with some lifeforms. There are no known ecosystems on Mars, Europa, Enceladus, and other potentially habitable celestial bodies in the Solar System. However, the presence of species, even less intelligent compared to human beings, would change everything. New ecosystems would arise immediately after the arrival of humans (human organisms and their microbes) and would need to respond to local conditions in some way, either by adapting themselves to these conditions or by changing them. The first way is evolutionary and requires thousands of years and/or genetic modifications. The second is known as terraforming, and even if it were faster than evolutionary transformation, it requires technologies which are barely imaginable nowadays. And still, there is the question of how the alien organisms would behave and react to human interference. The possible interweaving action-reaction patterns are numerous; yet it seems that they could be grasped in three large patterns: adaptation, imitation, and indifference.

Following the strategy of looking for answers in science fiction narrations (Milner 482), this study aims to compare three contemporary novels as possi-

Since the page numbers can vary across reading devices, references to e-books are given in chapters. ble scenarios of human existence in extraterrestrial ecosystems. This choice is motivated by their original approach and ecological reflection; they also serve as illustrations for the abovementioned patterns of coexistence. In the following parts, the novels are summarised, discussed, and put in the context of other narrations on human life outside of Earth.

## 1. Adaptation: Georg Klein, Die Zukunft des Mars (2013)

Georg Klein's novel Die Zukunft des Mars (The Future of Mars) tells a story of Earth after a catastrophic explosion of a supervolcano and a human colony on Mars after having severed every connection to their home planet. Thus, the action of the novel develops in two loosely connected threads. On Earth, there is a new political order and a dystopian reality of poverty and shortage that organises the everyday life of the survivors. Due to technological regression, it is impossible to resume contact with the former Russian expedition on Mars, which also fell behind after a partial terraforming of the planet and a mysterious catastrophe. While the civilization on Earth strives for scarce resources after a long winter, the Martians form a primitive culture of labour and strict hierarchy. They have learned to use local resources, colourful minerals and organic substances. Houses are built with the remains left over from when the planet was colonized. People unable to work are abandoned, since the only possible merit is work for the community. It is a culture of the spoken word, which preserves the memory of its terrestrial ancestry and worships the mysterious half-plant, half-animal being called Mockmock.

The function of Mockmock is crucial for the ecological concept of the novel. Crawling through underground tunnels and caves, it moves slowly to the surface where opportune conditions for life have been created by the colonists. Afterwards, it is harvested and used as food and building material. A myth says it is necessary "to observe friend Mockmock, to honour friend Mockmock, to harvest friend Mockmock only when he rests,"2 (Klein 327) only then would Earth send help one day. The cult of Mockmock resembles the religious devotion of primitive cultures to their basic resources, first of all water and the Sun. As a source of life, Mockmock constitutes the key link of the planet's ecosystem, connecting organic life with the domain of useful minerals. The mutual adaptation of humans and the planet, depicted as a kind of living organism, seems complete. The whole culture and morality are subordinated to the

harsh conditions, which is why they do not share compassion and empathy, as understood in the terms of contemporary ethics and liberal lifestyle on earth.

Georg Klein is obviously not the first to invent such environments. Frank Herbert's Dune (1965), celebrated as one of the first complex reflections on the ecology of a planet, introduces the world of Arrakis, where the giant sandworms, desert organisms and minerals (first of all the mysterious spice), and the people called Fremen create a unique ecosystem of mutual interdependence. It says: "We must use man as a constructive ecological force—inserting adapted terraform life: a plant here, an animal there, a man in that place—to transform the water cycle, to build a new kind of landscape," (Herbert 293-294) which could be a motto of every science fiction story of adaptation and symbiosis.

With the growing popularity of climate fiction and ecological science fiction in the recent decades, the genre of extraterrestrial visions has diversified. Ways of non-aggressive interaction with alien ecosystems are discussed in Joan Slonczewski's A Door into Ocean (1986). Interbreeding with aliens in order to save a dying Earth is the theme of Octavia E. Butler's trilogy Lilith's Brood (1987-1989). Kim Stanley Robinson reflects on terraforming of Mars and its ecological consequences in Mars Trilogy (1992-1996). This utopian vision is continued in his later novel 2312 (2012), relating a story of various human communities in the Solar System who try to save Earth from environmental disaster (e.g. by breeding species on asteroids). Sue Burke tells a story of human coexistence with an exoplanet's sentient flora (Semiosis, 2018). Colonisation of new worlds is also a subject of the novels by Stephen Baxter, dealing with encounters with lifeforms on exoplanets (*Proxima*, 2013) or life in the most extreme conditions, like inside of neutron stars (Flux, 1993). In German science fiction, there are many other visions of successful adaptation as well. Dietmar Dath's novel Die Abschaffung der Arten (The Abolition of Species, 2008) deals with the topic of intelligent animals defeating humans, colonising Venus and Mars, and returning to Earth where a sort of biotechnological paradise is created. Referring in many respects to Herbert's Dune, Wolfgang Jeschke tells a story of human colonies and a rich ecosystem on a desert planet in Dschiheads (2013). Leif Randt's Planet Magnon (2015) presents a utopian planetary system and its various communities. The storyline of Andreas Brandhorst's novel *Das Schiff* (The Ship, 2015) spans across the entire galaxy and depicts species endangered by a hostile technology of war. Yet, Klein's Die Zukunft des Mars finds its probably best counterpart in the novel Lumen (2015) by French author Laurent Genefort, telling a story of a conscious planet, its ecology, symbiosis with non-organic lifeforms, and human greed.

Among many exceedingly imaginative (if rather absurd) visions of friendly planets with standard gravitation, full of life, food and air (as presented in Star Trek or Star Wars) on the one hand, and very matter-of-fact scenarios of technological exploitation of the Moon and Mars (such as in Andy Weir's novels The Martian [2011] and Artemis [2017] or Frank Schätzing's Limit [2009]) on the other hand, Georg Klein provides a standalone work in the landscape of speculative fiction of the recent years. The almost complete lack of scientific reflection situates this vision on a "romantic-fantastic" (Werlitz 243) pole of literature. While numerous contemporary narrations on colonising Mars focus on scientific details and the necessity of rapid technological development, Klein suggests that it should be a rather primitive, self-sustaining civilization, able to survive in the rough environment directly after the terraforming. This unconventional, old-fashioned speculation stresses the role of other species as well—without them human survival would be impossible.

## 2. Imitation: Rafał Kosik, Kameleon (2008)

Ruthar Larcke, the exoplanet in Kosik's novel Kameleon (Chameleon), seems to be inhabited by intelligent species. However, a rescue mission from Earth, looking for traces of the first, long lost expedition, makes a shocking discovery—a complete human civilization on the level of the early Middle Ages is thriving there. The appearance of a spaceship in orbit seems to accelerate the planet's development even more: a war escalates, belligerent powers outbid each other in scientific discoveries; the radio, telescope and weaponry are designed within weeks. Eventually, it turns out that the real goal of the mission is not salvage or research, but the total destruction of the planet. In the epilogue, its mystery is solved: the life forms are not humans but an organism called Chameleon that initially looks like a plant and imitates people encountered and killed years ago, when the first mission reached Ruthar Larcke. As a threat to every other life form in the universe, the being must be destroyed.

The Chameleon copies organisms and builds ecosystems through imitation and accelerated evolution. It does not adapt itself to existing conditions, but mutates rapidly into a life form already adapted. The molecular aspect of these mutations remains unexplained, since the plot focuses mainly on the technical development of the civilization. Kosik's novel is a laboratory of human progress; it examines its conditions and turning points, providing also a reflection on human history on Earth. Still, its framework constitutes the encounter with aliens and the following threat of invasion, pollution, death, or—last but not least—self-alienation (Rose 179). The human response is explicit: "We can settle

this planet only in one way—sterilise it and come back here in several decades. We could colonise it then, but with no guarantee that in a couple hundreds of years something lethal won't crawl out of some depths" (Kosik ch. 41). The prospect offers little comfort, since there is no such guarantee on Earth either: "After all, the DNA molecule is continually terraforming the Earth" (Kaku ch. 5).

In this regard, a tale of scientific research and expanding the limits of knowledge reveals its gloomy background—the anxiety of conquest and the wish to conquer. This not very surprising conclusion is disguised as a moral dilemma. The Chameleon is not "evil," it does not crave power to rule, it only follows its survival strategy, and the "humans" created by imitation are unaware of the danger they present. And yet they are "disgusting," (Kosik ch. 38), the likeness between them and humans is offensive, arouses hatred and aggression. Their fundamental strangeness stems from not being born by humans and from not being socialized in a conventional process (they are taught by the last survivor of the first mission). Thus, Kosik's novel touches on the philosophical discourse of the Other and its rights. In the dystopian context, there is first of all the question of androids who provoke aggression with their very existence, as presented, e.g. in Philip K. Dick's Do Androids Dream of Electric Sheep? (1968) and its adaptation Blade Runner (1982, directed by Ridley Scott) or in the series Westworld (2016-2020). Fictive aliens are often imagined as humanoids, too, and the slightest difference in their facial expression or way of speaking can be seen as disturbing or hostile, according to the psychological principle of the "uncanny valley." Consistently, the most emotional response is directed towards portrayals of aliens which colonise human bodies (Ridley Scott's film *Alien*, 1979), change into humanlike creatures (John Carpenter's film The Thing, 1982), look like humans (Rick Yancey's The 5th Wave, 2013–2016) or create their doppelgangers (Jeff VanderMeer's Southern Reach Trilogy, 2014). Beings that perfectly mimic the human body and psyche introduce new (and risky) interpretations of such stories, presenting them as philosophical studies on abjection or reading them in terms of postcolonial allegory (Gomel 117–121).

In Kameleon, traces of Stanisław Lem are clearly visible. As one of the most prominent authors who wrote about unsuccessful attempts to communicate with aliens (*Głos Pana/His Master's Voice* [1968], *Fiasko/Fiasco* [1986]), he also reshaped the common imagination of the alien as anthropoid or animal-like creature. His intelligent ocean which imitates forms and movements (*Solaris*, 1961) and the "necrosphere," a swarm of conscious micromachines (*Niezwyciężony/The Invincible*, 1964), broke the conventions, stimulating many contemporary visions of first contact. However, some of his grotesque and philosophical novels and stories containing original thoughts on humankind

and evolution (i.a. Dzienniki gwiazdowe/The Star Diaries, 1954-1999) remain standalone works in the landscape of the genre.

# 3. Indifference: Sigbjørn Skåden, Fugl (2019)

The conquest of other planets does not have to be a tale of victory and progress. The Sámi-Norwegian writer Sigbjørn Skåden relates in his novel Fugl (Bird) a story of constant struggle for survival, spanning over many generations of colonists. A planet called Sedes or Heim (Home) harbours a small group of settlers that reached it by the middle of the twenty-first century. The planet is exceptional: its rotation is irregular, due to storms days can last shorter or longer, animals die quickly in a mysterious way, every larger machine stops working after some time, the only audible sound is the sound of light, people here lose the ability to speak and have to communicate by writing on screens. There is a river, and earth-like soil for growing plants. The number of settlers is restricted in accordance with food resources, hence with every new-born, the eldest member must leave the community and die. The progress of the first colonists ceases shortly after their arrival; from then on, there is only slow, constant decline. Although fascinating, the planet does not respond to human needs in any way; it obviously does not "want" to be terraformed, remaining unfathomable and indifferent.

The question of how a whole planet could be conscious and respond to external impulses provided by new organisms on its surface is not as extravagant as it might first appear. Some scientific concepts, like the Gaia hypothesis proposed by James Lovelock and Lynn Margulis, or the actor-network theory by Bruno Latour, outline all-embracing natural and social systems reacting to every change in the structure between species and the non-material world. Self-regulating and conscious planets as we know them from fantastic utopias (e.g. series Earth 2 [1994–1995] or James Cameron's film Avatar, 2009) may not exist and terraforming of planets without ecosystems, such as Mars, may seem a hopeless case, but the very idea of mutually profitable coexistence encourages a new responsible ecology. On the one hand, economic regression and moral crudeness of the human colony on Heim could be considered superior in comparison to consumer societies on Earth (a similar conclusion could be drawn from Georg Klein's novel). On the other hand, humans on Heim do not see their existence as a victory of any kind: "Heim is a place that doesn't give, it takes. Everything we do is repetitions, a spiral that turns and turns, but leads to nowhere" (Skåden ch. 4). In the latest discussions on extraterrestrial colonisation, there also appears the question of altering moral principles for

the good of the community, e.g. concerning reproduction, but the planned instrumentalization of humans only seldom raises doubts at this early stage. Yet, the people of Heim feel deeply disappointed, for they set forth into space with the somewhat naïve ambition of creating a new home, not for conquest or exploration (cf. this motif in another Norwegian novel *Lysår* [Light-year, 2017] by Didrik Morits Hallstrøm).

Solaris still shines in the background. Here, the planet's steady sound is a symbol of environmental indifference; there, the movements of the living ocean reflect human perplexity in the face of mystery. Following the example of Lem, who used to depict dull and claustrophobic planets, a large part of science fiction novels that attach some importance to the term "science" tells stories of indifference. In Andy Weir's *The Martian*, life on Mars is a constant struggle to survive on a sterilised and cold celestial body full of radiation, even if growing potatoes in a tent is humorously referred to as colonisation. The Moon and Mars in the novel *Nichts von euch auf Erden* (Nothing of Yours on Earth, 2013) by Reinhard Jirgl are places of misery taken over by a totalitarian system. The planets envisioned as future homes for humanity in *Interstellar* (2014, directed by Christopher Nolan) prove to be dangerous wastelands. The despair expressed in this film and many of the demystifying narrations of human failure in space is utterly realistic.

## 4. Conclusion

There is no universal way of narrating stories of extraterrestrial colonisation and coexistence with alien species. Most of the narrative models are biased by the dominant discourses of human superiority or, on the contrary, inferiority towards the surrounding environment. Due to the changing notions of colonisation, ecosystem, environment, symbiosis, adaptation, and even life, many of the speculative narrations seem only temporarily valid. Scientific discoveries devalue some of them as antiquated (like Ray Bradbury's classic The Martian Chronicles, 1950), even if their cultural influence remains unquestioned. The popularity of the "hard scientific sci-fi" after the success of Weir's The Martian (2011) opens a new, albeit not very revolutionary, chapter in the cultural reflection on colonisation, accompanied by daring plans of NASA or SpaceX and respective political debates. The genre is evolving again, even if instead of the archetypal "hero's journey" (as depicted in Joseph Campbell's The Hero with a Thousand Faces, 1949), the focus is on technological detail, money behind the projects, and rationalistic view of the world. An equally complex and philosophical (or, according to many critics, overintellectualized)

work as Stanley Kubrick's and Arthur C. Clarke's 2001: A Space Odyssey (1968) does not seem needed. A new disenchantment of the world? At least until the moment when a new tale of (post)human fate in space is in demand again.

### Works cited

Crowe, Michael J., ed. The Extraterrestrial Life Debate: Antiquity to 1915: A Source Book. Notre Dame: University of Notre Dame Press, 2008.

Gomel, Elana. Science Fiction, Alien Encounters, and the Ethics of Posthumanism: Beyond the Golden Rule. London: Palgrave Macmillan, 2014.

Herbert, Frank. Dune. London: Hodder, 2015.

Kaku, Michio. The Future of Humanity: Terraforming Mars, Interstellar Travel, Immortality, and Our Destiny Beyond Earth. E-book. New York: Doubleday, 2018.

Klein, Georg. Die Zukunft des Mars. Reinbek bei Hamburg: Rowohlt, 2015.

Kosik, Rafał. Kameleon. E-book. Warszawa: Powergraph, 2013.

Milner, Andrew. Again, Dangerous Visions: Essays in Cultural Materialism. Ed. J.R. Burgman. Leiden: Brill, 2018.

Morton, Adam. Should We Colonize Other Planets? E-book. Cambridge: Polity Press, 2018.

Rose, Mark. Alien Encounters: Anatomy of Science Fiction. Cambridge: Harvard UP, 1981.

Skåden, Sigbjørn. Fugl. E-book. Oslo: Cappelen Damm, 2019.

Werlitz, Julian. "Was wir gewesen sein werden. Historizität der Gegenwart im Science-Fiction-Roman: Georg Kleins Die Zukunft des Mars und Reinhard Jirgls Nichts von Euch auf Erden." Germanica 55 (2014): 229-247. DOI: https:// doi.org/10.4000/germanica.2759.

### Abstract

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Three Visions of Humanity in Extraterrestrial Ecosystems: Klein, Kosik, Skåden

In the paper, three contemporary science fiction novels are compared: *Die Zukunft* des Mars (2013) by Georg Klein, Kameleon (2008) by Rafał Kosik, and Fugl (2019) by Sigbjørn Skåden. As possible scenarios of a future colonisation of other planets, the novels represent three different patterns of human existence in extraterrestrial ecosystems: adaptation, imitation, and indifference. They are discussed in the context of contemporary speculative narrations on human life outside of Earth.

**Keywords:** science fiction, future, ecology, planets, colonisation

## Abstrakt

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Trzy wizje ludzkości w ekosystemach pozaziemskich: Klein, Kosik, Skåden

W artykule porównane są trzy współczesne powieści science fiction: *Die Zukunft des Mars* (2013) Georga Kleina, *Kameleon* (2008) Rafała Kosika oraz *Fugl* (2019) Sigbjørna Skådena. Jako możliwe scenariusze przyszłej kolonizacji innych planet powieści reprezentują trzy różne wzorce egzystencji człowieka w pozaziemskich ekosystemach: adaptację, imitację i obojętność. Artykuł omawia je w kontekście współczesnych narracji spekulatywnych o życiu ludzi poza Ziemią.

Słowa kluczowe: science fiction, przyszłość, ekologia, planety, kolonizacja

#### Bio

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