LIVING IN THE NEW ERA (时代·新生)

TECHNOLOGIES, CREATIVITY, AND SCIENCE-FICTION

VIVENDO A NOVA ERA (时代·新生)

Tecnologias, criatividade e ficção científica

VIVIR EN LA NUEVA ERA (时代·新生)

Tecnologías, creatividad y ciencia ficción

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We live in a digitally embedded world where digital technologies touch every aspect of our lives. China is introducing the idea of entering a new era as tightly related to the implementations of such inventive technologies. It is possible to see this phenomenon pervasively breaking into different societal levels there. It is present in official government websites[2] and the actual development of digital technologies and the economy in order to refer to the unprecedented growth of the country where digital technologies take part in the constitution of the society's structure, social identity, and social relations (Xiao and Men 2021; Bonfiglioli 2021). Thus, it seems pretty clear we need to approach such a change by dealing with the effects of digital technologies while keeping China at the center of the research.

Too often, the development of new technologies has not been followed and anticipated by the work in humanities like philosophy, history, and literature. Sometimes we think of humanities as an analysis of something that has already happened. It is time to turn our gaze and show how humanities can also look to the future. For this reason, this special issue aims to merge the academic analysis of researchers in humanities with the visionary imaginaries provided by science-fiction novelists to discuss societal change and anticipate the possible effects of these technologies (Vint 2021).

Many authors in philosophy have already tackled the effects of the introduction of digital technologies in society. Postphenomenology examined the implications of emerging technologies from a phenomenological background showing how the perceptions, values, and meanings are shaped by the use of technologies. Such studies aimed to explore intentionality (Mykhailov and Liberati 2022), augmented reality (Liberati 2016; Wellner 2022), health care (Shaw et al. 2020; de Boer, Molder, and Verbeek 2021), and intimacy (Liberati 2022; Liberati and Chen 2022). Ethics is well-related to the

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[2] https://english.www.gov.cn/archive/whitepaper/202204/21/content_WS6260cdc3c6d02e5335329bb1.html

implications of new technologies on society, such as bioethics (Balistreri 2020, 2022) and, generally speaking, the empirical turn in the philosophy of technology (Verbeek 2021). However, there are no outstanding issues linking these fields to science fiction in particular. Primarily, science fiction has not been used to scrutinize technological development within philosophy and humanities, even if there is an explicit trend in making science fiction part of the design of the world we want to live in from different perspectives like design (Zaidi 2019; Michaud 2017).

This special issue aims to explore such a groundbreaking connection between science fiction and humanities with a particular interest in philosophy. There are contributions from researchers and science fiction novelists from China and Italy for several reasons. Firstly, this intertwinement has not been largely pursued in general, even if there are apparent overlapping and shared interests in understanding the societal challenges we face. Secondly, there are not many works on the interactions between Italy and China on this theme, even if many collaborations bind the two countries for historical reasons and research purposes. Thirdly, China plays a central role since it is an exceptional environment to embed the analysis since it is the cradle for using new digital technologies in society, its science fiction genre is growing fast, and it is perceived as a valuable asset to look at the future.

Thus, articles in this issue mix different approaches to science fiction. They have been presented at *LINE2021 "Living in the New Era (时代 · 新生)*," which was an international conference held in November 2021 at *Shanghai Jiao Tong University*[3]. Researchers in the humanities and sci-fi novelists from Italy and China gathered to present their ideas and discuss the possible implications of using and developing innovative digital technologies. We decided to collect the articles and publish a selection of them in *Prometeica* Journal in order to interweave the works of the researchers better and show how this cross-fertilization can be successful and fruitful in considering the questions related to the implementations of future technologies and highlight the close relations tying these two countries.

This special issue includes six articles, a debate, two interviews, and a book review. The articles express the intertwinement between science fiction and humanities with a particular interest in philosophy. This special issue proposes papers from Chinese and Italian researchers without creating two unrelated blocks but by alternating the authors to show the dialogue existing among them.

In the paper "Becoming Others: Playing Virtual Identity and Intimacy," Jiaying Chen analyzes the development of virtual reality, and she examines what this technology means for our identity and intimacy. By revisiting Gilles Deleuze's notion of the virtual, Chen distinguishes three effects on our life in virtual reality: the dissolution of public/private boundaries, the emerging performativity of virtual reality (for example, many players adopt gender roles different from their own to participate and perform them throughout the game), and the crisis and destabilization of our ontology. Moreover, Chen delves into how the digital network has changed our lifeworld comprehensively by creating an entirely different environment that allows a new form of intimate relationships. According to Chen, digital technologies can provide a means of improving our relationships by promoting the need for flexible identity, encouraging the construction of self-narratives, and embracing indeterminacy as a possible paradigm for 'identity' and affinity with the other. While for many users, the online self remains a natural extension of the offline self, other players can reinvent their identity and use the virtual world as a chance to live a polymorphic intimacy. They can practice the possibilities of virtual identities as genuine and not just unreal or fantastic. We tend to dismiss these scenarios, but Deleuze's conception of the virtual can allow us to understand these phenomena and clarify why virtual reality might not be opposed to our world. However, we should be aware of the Janus-face of the virtual. With our confidential data and behavior moving into cyberspace, the risk of totalitarian information network abuse could become true.

In the paper "Embodied artificial intelligence in science fiction: Philosophical presuppositions and implications," Andrea Pace Giannotta explores the fruitful relationship between science fiction and philosophy regarding the topic of artificial intelligence. The paper establishes a connection between

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[3]*LINE2021 - Living in the New Era (时代 · 新生): Technologies, Creativity, and Science-Fiction* https://shss.sjtu.edu.cn/En/List/345

certain paradigms in the philosophy of mind and consciousness and the imagination of possible future scenarios in sci-fi, especially in relation to the different ways of conceiving the role of corporeality in constituting consciousness and cognition. The work focuses mainly on the body conception developed in philosophy (disembodiment, weak embodiment, and strong embodiment) and the imaginaries related to the body we can find in science fiction. According to him, these two elements are well-connected because the depiction of embodied AIs in sci-fi often foresees significant philosophical debates concerning the status of AI and the ethical questions we can find in the implementations of these technologies in society. For this reason, he thinks it is valuable and essential to stimulate an exchange of ideas between sci-fi and philosophy regarding scenarios of high ethical relevance that involve embodied and conscious AIs. Moreover, he shows how science-fiction can be helpful for philosophy since it enables one to address specific problems with a different and more accessible framework. Thanks to the fact that science fiction can go about the topic in an unbounded way, it is able to uncover specific angles which are hidden from philosophy.

In "Virtuality, simulation and fake: The technical development and philosophical criticism of virtual anchors," Feng Tao and Yunyu Dang analyze the application of virtual reality technology in communication hosting through virtual images that simulate human anchors. According to Tao and Dang, the virtual reality anchor-based technology is doomed to a trust crisis because artificial intelligence can simulate human behavior, and virtual humans (VHs) can imitate a human image super-realistically. In a world where virtual reality technology is becoming a reality gradually, human anchors are replaced by VAs, human bodies are digitized, and people become VHs, the risk is to fall into an uncontrollable and unidimensional flat world detached from the historical-social dimension and lacking the growth and diversity of the living world. Moreover, the virtual reality-based reconstruction of reality risks making falsehood more and more realistic and becoming a new cultural industry. The characteristic of this industry is commercial interest: the fundamental goal of technology developers and capitalists is profit. It means the abandonment in the art of any form of negativity in favor of scientific accuracy and conformism with general aesthetics. According to Tao and Dang, virtual anchors (VAs) are not intrinsically evil or wrong, but the capital control behind them is worthy of caution. In the end, developing an autonomous, physical, and mechanized form of anchors are other critical aspects of the new technologies. The human being could become used to being taken over gradually by intelligent and autonomous machines or not human entities. Moreover, robots could increasingly become full members of our society. An ideal type of human-machine harmony is possible, but machines could slowly replace humans and eliminate them.

In the paper "On Hope Resistance," Caterina del Sordo analyzes the concept of resistance. The author adopts the application of case studies from TV series as a methodology that enlightens philosophical concepts. The research puts into question the idea of resistance that is spent and developed by José Medina's epistemology. The paper argues that the philosophically meaningful idea of resistance can be articulated in two different layers. The author refers to them as resistance tout court and hope resistance. Resistance appears as a matter of counter-acting physical or mental forces. Instead of opening the view to the latter, resistance reveals an inner multi-faceted structure involving complex cognitive phenomena like existential tenets, utopic militancy, and anticipatory practices. The distinction between tout court and hope resistance is outlined drawing on the philosophical toolkit of the Future Studies foundations provided by Ernst Bloch's theory of hope. The paper invokes the concepts of possible futures and utopic function, commending their introduction to the explanatory power of the resistance's real and fictitious heroes. Latin American feminists, characters from the science-fiction of Nosedive and Utopia, and the crime plot of Money Heist are called into play. Along this line, the paper finally argues that phenomena of hope resistance are not embedded in those of resistance tout court. The argument unfolds around the ambivalent behavior of the audience of sci-fi and crime TV series, which appear to support resistant actions only in fictitious and not in the real world. The absence of behaviors of resistance tout court does not yield the lack of eventually hidden hope resistance nurturing processes.

In "Postphenomenological variation of instrumental realism on the problem of representation: fMRI imaging technology and visual representations of the human brain," Dmytro Mykhailov aims to provide

an alternative answer to the 'problem of representation' from the perspective of instrumental realism. The 'problem of representation' frames a significant part of the debates in the contemporary philosophy of science. Two extreme answers to this problem are from realist and constructivist accounts. Realists insist that any scientific representation relies on (and refers to) independent reality. Constructivists, on the contrary, insist that through representational devices, scientists 'construct' what is real. In his paper, Mykhailov shows that there is another possible perspective on the 'problem of representation.' This perspective has been brought into play by instrumental realism. Mykhailov takes findings from the postphenomenological variation of instrumental realism and develops an 'environmental framework' to give a philosophical answer to the problem of representation through the use of imaginaries taken into consideration by science fiction. The framework focuses on three elements of the representational environment? image-making technology, image as a representational device, and scientific hermeneutic strategies occurring within the image interpretation process in the laboratory set-up. The central idea is that scientific images do not produce meanings without their instrumental environment. To fulfill this idea with empirical consistency, Mykhailov applies the 'environmental framework' to contemporary debates on fMRI imaging technology. Within the last decade, fMRI technology has attracted the attention of scholars from different fields. Such an increasing interest was called forth by the revolutionary impact that fMRI had on almost every part of neuroscientific research. However, fMRI technology images have a peculiar nature. On the one hand, fMRI technology images are not 'mere' representations because they are not just a 'copy' of the human brain, while on the other hand, these images are often used as representational devices within medical diagnostics. Mykhailov shows that the 'environmental framework' can help better understand the problematic nature of the fMRI by explaining how fMRI visuals receive their meaning through the interplay between different elements of the instrumental environment.

In the paper "Valuing abiotic nature. Perspectives on terraforming in K.S. Robinson Mars trilogy", Pierfrancesco Biasetti considers whether the original abiotic nature has a value of some kind regardless of its capacity to contribute to ecosystems and life. In our everyday experience, we tend to consider living beings, the complex system that supports their existence and naturalness, part of the same experience because life, the environment, and nature are intimately connected. Things are different on Mars, so the red Planet allows us to analyze the value per se of abiotic nature and reflect on which kind of value it could have and how much it would weigh when compared to other kinds of value. Through the lens of K.S. Robinson's Mars Trilogy, Biasetti presents a map of the possible answers to these questions that can help discuss the moral issues of the Mars terraforming project. According to Biasetti, terraforming can be a vital thought experiment to investigate the difference between various kinds of environmental value. We can assign intrinsic value to nature and value it independently from its specific quality (beauty, history, capacity to become a home for our species), or we can consider nature as a source of significant experiences: scientific curiosity and knowledge, aesthetic beauty, reverence for otherness, and diversity. In the end, nature can be critical because it supports life in all its form or intelligent life. Biasetti thinks that the plot of Robinson's trilogy indicates the necessity of a synthesis of some sort between these different values. However, given the divergences at stake, the solution is not simple or even noticeable.

The paper "Entrelaçando design e ficção científica" written by Eduardo Harry Luersen published under debates is the only paper not presented at the conference which has been added to this special issue in order to show how much the theme analyzed by it can be easily connected to other research and territories. It has been published under debates to highlight its difference from the other papers. In this paper, Luersen discusses how speculative design is related to science fiction through the use of potential scenarios and prototypes. Mainly, he focuses on the project Daleko (2020) and its relations to terraforming, showing how science fiction can stimulate designers and researchers from other fields to think of the human race's impact on our world.

As previously stated, this special issue has two interviews with the science fiction novelists who presented at the conference as keynote speakers: Prof. Wu Yan and Francesco Verso. These interviews show how science fiction can be embedded within academia and research to give attention to societal

challenges and to better aprehend the role of new technologies in our society. The two novelist shows their perspective on how science fiction is indispensable for society and how to achieve such an intertwinement among different fields. The two novelists are also significant since they work between China and Italy, and they are both well related and involved in developing science fiction within the universities in the two countries.

In her book review, Jue Wang reviewed a science fiction novel that focuses on robots and the tight bounds they might have with users following a philosophical perspective. She clearly shows how science fiction is paramount as an element to generate critical thinking and develop original ideas.

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