Jana Tomašovičová (ed.)

The Blurring of Boundaries in Bioscientific Discourse

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The scientific articles in this collection titled "The Blurring of Boundaries in Bioscientific Discourse", edited by Jana Tomašovičová, reflect on the bioscientific challenges of permanently dynamic structures of society and human reality. At the forefront of these changes is technology, which discovers new unexplored territories within the ones we already know, thus delineating new boundaries of human action and understanding.

Philosopher Jana Tomašovičová invites thinkers to reflect more deeply on the new circumstances. Various contemporary bioscientific topics are presented in the seven chapters in which *tectonic earthquakes* occurred, "in terms of the gradual blurring of the validity of established concepts, interpretive frameworks, and standards of judgement, which are analysed from ontological, gnoseological, ethical, and social perspectives" (*Introduction*, p. 1). Let us briefly present the chapters.

Juraj Odorčák considers the concept of "robogenesis" in order to familiarize readers with the technological mastery of the field of human reproduction, which is "associated with a whole series of very serious ethical, social, legal, and practical issues". After the introduction of the basic conceptual and ontological aspects of robogenesis, as well as the analysis of the theoretical, technological, and narrative assumptions about robogenesis, Odorčák considers arguments that favour practising robogenesis. The author concludes "that the application of robogenesis could, under certain circumstances, cocreate an ontological status for humans that is both more artificial (in the sense of technical intervention) and natural (in the sense of no

human intervention)" (p. 30), and which could be acceptable for various theories of humanism, posthumanism and transhumanism to a certain extent.

In the second chapter, Andrej Rozemberg reflects on the concept of the self, which has also become a fluctuating concept thanks to scientific and technological progress. Rozemberg considers the idea that the permanent self is an illusion, and believes that the reductionist position is unjustified. Also, reflecting on knowledge about memory and amnesia, Rozemberg believes that it is justified to consider the self as the source of identity over time, especially considering all the difficulties that arise if that step is not taken.

"The Origin of Rules", written by Tomáš Čana, is the title of the third chapter. The author deals with Ludwig Wittgenstein's ideas regarding the issue of the origin of the rules in our everyday life. Čana recognizes four motives on this topic in Wittgenstein's opus and highlights his opinion that a theory cannot be established, in this holding an anti-theoretical approach to the question of the origin of the criteria that govern our decision-making. Čana disagrees with his conclusion and offers a different perspective on understanding boundaries as an overall concept and of boundaries of the theoretical.

Martin Zielina, Jaromír Škoda, Adam Doležal, Barbora Beňová, Kateřina Ivanová, and Adéla Lemrová are authors of the fourth chapter titled "The Application and Understanding of Default Autonomy in Ethically Dilemmatic Cases Presented by Czech Medical Doctors: An Empirical Study". The article elaborates on the theory of autonomous action, which is currently considered the default concept of autonomy in bioethics. Three criteria need to be met for autonomy to occur – that the agent acts intentionally, with understanding, and without controlling influences. The authors have conducted a study among Czech medical doctors, who reported ethically dilemmatic cases with their patients. Out of 52 cases, 21% met all the criteria for autonomy, while 60% were cases with one criterion missing, and 19% were cases where authors could not determine whether all criteria had been met or not. Authors point to the technological advances in medicine that offer more treatment options for the patient, and as a result, put more pressure on the importance of satisfying all criteria for autonomy in the decision-making process.

Jana Tomašovičová is the author of the article titled "Human Cognitive Enhancement and the Problem of Equality", in which she offers a closer look at the threat of the deepening of social inequalities because of new possibilities of human cognitive enhancement. Juxtaposing two theories, John Rawls's theory of justice and Amartya Sen and Martha Nussbaum's capability approach, Tomašovičová believes that a more appropriate framework for contemplating equality issues in the context of cognitive enhancement appears to be the capability approach. Reasons for this are the

consideration of the diversity of human existence and for enabling the recognition of new forms of equality that will become present in the near future.

"Prometheus the Biohacker? Mythical Grammar in the Discourse of Bioscience After the CRISPR Revolution" is the title of the chapter authored by Mariusz Pisarski, who notes that borders regarding the ethics of gene editing are still unclear, while the progress of biotechnology is enormous. In order to describe the field and bring it closer to those interested in it, authors often use fiction. Inspired by this, Pisarski uses science fiction and Greek mythology (the myth of Prometheus and Deadulus and Icarus) to offer a refresher in the language of representation. The author states that "the comparative study of mythical motifs in fictional and non-fictional visions of the future of human gene editing aims to deliver a cultural context to the issue of the growing gap between science and antiscience, knowledge and conspiracy theories, and scientific progress and corporate interests".

The last chapter, "Expanding the Boundaries of Literature as an Interdisciplinary Plot in Art-Science" by Bogumiła Suwara, analyzes the phenomenon of interdisciplinarity with the help of digital literature and literary work "as an interface between the two autonomous systems and disciplines of literary science and artificial language". Suwara shows how the once-solid structures of literature and art have gained new extensions thanks to the new digital forms of expression, thus drawing some new boundaries.

In conclusion, we can say that the collection presents the reader with scientific articles from various scientific and artistic fields, often developed in an interdisciplinary perspective, strongly proving the new, unclear bioscientific borders in our turbulent circumstances of existence. What is particularly commendable is that every ambiguity expressed in the articles invites readers to join the discussion. In addition to the professional scholar circle, the collection is recommended to laymen and students interested in this topic.

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