Introduction

Discourse is a kind of code with the help of which reality is codified, structured, understood, and interpreted. Discourse performs not only descriptive and interpretive functions but also generative, creative, and structural ones.

The style of discourse is a way of describing a cultural text, that is, any piece of human-created reality. The depth and perspective of the semiotic interpretation of a cultural text, as well as the vision of the entire architecture of the cultural space (semiosphere), to which the text belongs, depends on the style of discourse. Thanks to a particular style of discourse, things are approached by a researcher (subject) in a certain way, allowing them to be seen from a certain point of view or even to be seen in general. Thus, discourse performs both cognitive and ontological functions, and the variety of styles of discourse allows one to create a panoramic, multi-layered picture of reality.

This issue focuse on the diversity of styles of discourse across a wide range of topics, including exposition, debate, narrative analysis, philosophical essay and history, mathematical proof, logical argumentation, historical text, myth, metaphor, literature, art, architectural styles, and others. The study is not be restricted only to the humanities and the arts. Thomas Kuhn's concept of "paradigm" as a variation of the concept of style of thought functions as a group style, a shared (by a community) style of understanding and thinking about what is considered to happen in nature. Styles of scientific thinking, and other relevant concepts, have social and cultural determinations and serve as media of communication among scientists who share a particular worldview. A transition from one style of thinking to another marks a radical change.

The authors of this issue submitted articles that fall under the general theme "Styles of Discourse" from the points of view of philosophy, aesthetics, semiotics, logic, history of science, and natural science, as broadly understood, including studies on:

.....

- Styles of discourse in the form of creativity in various fields of the sciences, humanities, and arts manifested in the outcomes of the work of both historical and contemporary creators.
- Styles of discourse in science versus discourse styles in the humanities and the arts.
- The significance of intuition, insight, and guessing in communication, understanding and interpretive processes. How rational discourse eventually leads to intuitive insights that, in turn, can be used as building blocks for further reasoning.
- Discourse analysis concerning the style of argumentation and focusing on epistemological and discursive practices.
- The relationship between the change in the type of rationality and the style of discourse.
- Historical variations of scientific language and changes of thinking styles.
- Personal vs collective styles of discourse.
- Monologic vs dialogic styles of discourse. Monological ultimate worlds, created by a single consciousness, vs dialogical discourse styles between a multiplicity of agents that have their word and voice.
- Cultural and social aspects of styles of discourse.
- The poetic function of discourse styles in the sciences, humanities, and arts.

The volume starts with the paper of Lynn Maurice Ferguson Arnold, former Premier of South Australia and former Minister of Education of Australia, concerning the Exposition Internationale des Arts et Techniques dans la Vie Moderne (International Exposition of Art and Technology in Modern Life) that was held from 25 May to 25 November 1937 in Paris, France. The organization of the world exhibition had placed the Nazi German and the Soviet pavilions directly across from each other. Many papers are devoted to the interpretation of this opposition. Arnold's paper considers the differences in the two totalitarian states' architectural and design discourse styles. Although each of them communicated a totalitarian language of purposes, permissions, and boundaries, they essentially differed in the styles of discourse represented by the architecture and design of their respective pavilions. They were opposites of each other and the liberal ideals they contested. The internationalist viewpoint reflecting the multi-ethnic mix of the USSR is contrasted to the *ein Volk* homogeneity represented in the German pavilion. The Soviet pavilion opted for a utopian future to be arrived at by "benign"

11

leadership, whereas the German pavilion anchored itself in the myth of Teutonic history with the nostalgic pride protected by the swastika-bearing eagle.

Jean-Yves Béziau is best known as a logician and founder of Universal Logic. However, in this paper, he poses a new philosophical question: why philosophical discourse does not use images? The paper begins with a general analysis of different types of philosophical discourses. Then, he focuses on why images have been and are still rejected in philosophical discourse? He explains various ways to use images in a fruitful way to develop philosophical thinking and discourse and illustrates his view by providing several examples. He concludes with a promising programmatic declaration about founding a new journal entitled World Journal of Pictorial Philosophy to stimulate the usage of images for developing philosophical thinking.

Although complaints about the obscurity of many philosophers' discourse are widespread, Tatiana Denisova, ex-professor of the Surgut University and a research associate of the University of the Aegean undertakes a positive attitude to this problem. She explains that the reasons for the obscurity of philosophical texts, the subsequent complexity in communicating philosophers' meanings and their eventual incomplete understanding is not a sign of their inferiority. On the contrary, it is a sign of the fruitfulness of philosophical discourse, which can generate new meanings. Thus, the darkness of philosophical discourse is like the life-giving chaos, and the obscurity that it inevitably contains can be the keeper of implicit meanings and even their generator.

Katarzyna Gan-Krzywoszyńska and Piotr Leśniewski, authors of a monograph on Polish philosopher Kazimierz Ajdukiewicz (1890–1963), make a comparative analysis of his educational style with that of Paulo Reglus Neves Freire (1921–1997). The authors highlight that these scholars have distinctly different backgrounds. The former was an educator, philosopher and a leading advocate of critical pedagogy, connected with the dialogical Latin-American tradition. The latter was a philosopher and logician, notable representative of the Lwów-Warsaw school of logic with significant contributions to semantics, model theory and the philosophy of science. Despite their apparent difference, the authors identify some striking similarities regarding their attitudes towards education; notably, their approaches are essentially dialogical.

Gilah Yelin Hirsch is a multidisciplinary artist who works as a painter, writer, curator, educator, and filmmaker. In her experiential paper, he explains how and why she uses four channels of communication in her creative expression: writing, painting, filmmaking, and teaching as dialogic inquiry.

She considers that these channels compose a continuum of discourse styles, each reaching a different facet of kaleidoscopic consciousness. She claims that her choice of medium is prompted by a need to communicate her insights profoundly. Thus, for instance, she created painted allegories to express narratives based on dreams and visions emerging from her subconscious. Art and healing is another Tibetan-rooted type of discourse practised by the author. Creating and observing a healing image produces a positive psychophysiological change in both the artist and the viewer. The discourse here is tripartite between creator, image, and viewer. Filmmaking is another type of discourse she practices between the filmmaker/artist as shaman or healer and the viewer as respondent or participant. These films are meant to be experienced frame by frame, physically and emotionally in both the body and mind.

Jocelyn Ireson-Paine is a cartoonist and programmer. His paper offers an original attempt to use category theory in cartooning. Category theory is a branch of mathematics that provides concepts and methods to describe general abstract structures in terms of a labelled directed graph called *category*, whose nodes are called *objects*, and whose labelled directed edges are called *arrows* (or *morphisms* or *transformations* or *mappings*). The author explores different ways to define "style" in art using category theory and a relational view of art. Moreover, he examines how "translation" (transformation) between styles could be defined and reveals the difficulties of how it could be implemented in a computer using special software.

Jens Lemanski is a philosopher who has revived research in Arthur Schopenhauer's legacy by exploring his work on mathematical evidence, logic diagrams, and problems of semantics. In this paper, he advances a new approach to eristic as an art of protecting oneself from the one who deliberately violates norms of discourse ethics to win an argument. The author attributes the origins of this view to Schopenhauer, suggesting a new reading of his work. According to the author, eristic is a prohibitive technique that takes effect when the norms of discourse ethics are transgressed and violated. Thus, eristic is viewed as a discipline of Enlightenment philosophy and a correlate of discourse ethics.

Roshdi Rashed is an authority on the history of Arabic mathematical sciences. Proceeding from Gilles-Gaston Granger's definition of mathematical style, he studies the question of whether a mathematical work can be characterized by a single style or by a multitude of styles? This question is explored within the style of a single work, namely Menelaus's *Sphaerica*, and through the study of the development of a single problem over time, namely the isoperimetric problem. He indicates Menelaus's divergence from the

Introduction 13

Euclidean style of (plane and stereometric) geometry caused by the drop of the Parallel Postulate, which associated it with hyperbolic geometry. Hence, the author concludes that Menelaus's *Sphaerica* incorporates the well-known Euclidean style with a variation of the non-Euclidean one. On the other hand, examining the isoperimetric problem reveals another interesting historical picture. A succession of different styles (cosmological, geometric, infinitesimalistic, style of the calculus of variations, of synthetic geometry) can be observed due to the transformation of the research object over time.

Boris Shalyutin, a Russian social philosopher, Ombudsman for Human Rights in the Kurgan Region, explores the origins of discourse in combination with the birth of society and law. He claims that legal discourse marks the historical emergence of discourse in general. *Homo Juridicus* generated *Homo Sapiens*, which have created new spheres of discourse, notably moral discourse and further philosophical, political, and scientific discourse.

Petros Stefaneas, a logician, computer scientist and novelist, suggests an alternative to the traditional narratology approach for studying (interactive) social media discourse. He claims that style describes how the parts of a narrative are blended into a whole. The author relies upon Goguen's and Harrel's concept of style as a choice of blending principles and transfers to the study of the social media narratives elements from the methodology of studying Web-based collaborative search for mathematical proofs like those implemented within the Polymath project.

The last paper belongs to Ghil'ad Zuckermann, a linguist, language revivalist, proponent of a model of the emergence of Israeli Hebrew, according to which Hebrew and Yiddish were the primary sources of Modern Hebrew. This paper explores the fascinating and multifaceted Yiddish language and its survival in Israeli. Yiddish is characterized by a unique style that embeds psycho-ostensive expressions throughout its discourse. The author highlights the cross-fertilization between Hebrew and Yiddish, as it manifests itself in any aspect within the Israeli language. He claims that Yiddish survives beneath Israeli phonetics, phonology, discourse, syntax, semantics, lexis, and even morphology, although traditional and institutional linguists have been most reluctant to admit it.

Tatiana Denisova Ex-professor of the Surgut University, Russia, and Research Associate of the University of the Aegean, Greece

> Ioannis Vandoulakis The Hellenic Open University, Greece