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## INTRODUCTION TOWARDS A PHILOSOPHICAL COSMOLOGY

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### *1. Heaven and earth*

Globalisation is about the worldwide dimension and interconnectedness of phenomena. That is why we talk so much about the world today, essentially meaning the globe. When we want to understand extraterrestrial space, however, we prefer to speak of the universe. Cosmology is precisely the study of the physical structure and evolution of the universe. This study also presents several typically philosophical themes, for instance the nature of time, space, and basic entities; the relationship between ontology and epistemology, between large and small scales; why there is something instead of nothing; and why there was the “fine-tuning” of cosmic parameters that generated life [Chamcham *et al.*, 2017]. These issues derive from the particularity of the universe, which is the totality of everything that exists physically, and is given all at once; therefore, it is not possible to perform experiments on it, as if it could put us on the outside of it; it is something that lies on the borderline between empirical data and theoretical speculation [Castellani 2017]. Perhaps this is why when scholars popularise cosmology, they happily make references to mythical cosmographies or ancient philosophers.

Despite the distinction between globe and cosmos, common usage tends to overlap the two. Depending on the circumstances, by world we mean the astronomical universe or certain microspheres (the world of animals, the “world of Sophia”) or even the human sphere, i.e., the one most absorbed in the game of life, completely unconcerned with what is happening in the sky, in accordance with the sentence *quod supra nos*

*nihil ad nos*, attributed as much to Socrates as to Epicurus. So, what are we talking about when we talk about the world?

Some semantic indicators come in handy; they do not eliminate ambiguity, but rather confirm that it is constitutive, and as such must be addressed. First of all, it must be noted that in ancient and modern evidence ‘world’ has a dual matrix, temporal and spatial. In a temporal sense, it indicates something like age, duration, epoch (let us call it world A); in a spatial sense, it indicates something like the region of all regions, the universe or, again, the set of things that concern man, the earth (let us call it world B). «Since World A is something in time and World B something in space, it is not immediately easy to see the semantic trunk from which two such different branches have grown. But the very form of the word provides a probable clue. [...] Just as World B is the region that includes all other regions, so World A, in the sense we are considering, is the state of affairs that includes all other states of affairs; the overall human situation, hence the common lot, the way things go. Things or Life would often translate it» [Lewis 1959, 102; 105].

We now come to *kosmos*, the word that, together with *logos*, constitutes the privileged key to Greek thought [Kranz 1955, 7]. The word, derived perhaps from an Indo-European root *\*kes* that refers to the idea of order, indicates something balanced and beautifully shaped. Some texts from the pre-Socratic period mark the cosmological turn. For example: «Pythagoras was the first to call what surrounds all things ‘kosmos’ (i.e. a beautiful organised whole) because of the order (*taxis*) that is found there» [Laks & Most 2016, IV, 111; DK14 B 21]; «this world order (*kosmos*), the same for all, none of the gods or humans made it, but it always was and is and will be: fire ever-living, kindled in measures and extinguished in measures» [Laks & Most 2016, III, 179; DK22 B30]. Plato and Aristotle were to canonise, in an interweaving of speculative, ethical and astronomical values, this idea of an ordered totality, valid for all and self-consistent. The Latins usually translated *kosmos* with *mundus*, a term that perhaps has an autonomous derivation [Dognini 2002, 86-93] and indicated the celestial vault, with a definite aesthetic value. A possible Indo-European root of *\*mundus* has been hypothesised [Rossi 2002, 54] related to the Sanskrit *mandala*, i.e., circle indicating the covering disc of the sky and the sacred space in

which the necromancer performs his spells in contact with the world of the dead.

To this prevailing spatial semantic axis is added the temporal axis of the Greek *aion*, which indicates duration, fullness of life, age in the sense of growth and maximum development of something. Projected on a cosmic level, it indicates eternity, the infinite time in which the events of individual things and their definite time (*chronos*) unfold. This temporal side of the world is evidently preserved in the Germanic words *Welt* and *world* (compound of *\*veraz*, i.e., *vir*, man, and *alere*, to grow), which indicate humanity marked by ages and generations [Milani 2002, 169-170]. The Vulgate translates *aion* with *saeculum* and sometimes with *mundus*. This is attributable to a distancing, if not derogatory, attitude that is accentuated in the early Latin Church fathers, who tend to favour *saeculum* to translate the notion of the world, thereby emphasising its contingent and seductive aspect [Kranz 1955, 107-108]: he who loves the world too much turns away from God.

The semantic framework still records two terms, *oikoumene*, from *oikein* (to inhabit) since Homer meant the world inhabited by men, and as such the term has a distinct geographical significance linked to the physicality of the earth. The root of *oikoumene* is *oikos*, home, a space in which one lives. In many ancient Indo-European languages, this meaning of the world as man's dwelling, usually located in the middle of the universe, is well attested. *Oikoumene* translates the Hebrew *tebel* (inhabited world) or *erets* (earth), commonly used in the Old Testament. Latin generally uses *orbis terrarum* or *orbis terrae*, which soon also takes on a political sense often used to indicate the organised and administered world, perhaps to mark the difference with the barbarian peoples [Bearzot 1998, 97].

Not usually reported in lexicons, there is a further term that is an integral part of the concept of the world [Spitzer 1942]. *To periechon*, from the verb *periechein*, indicates what surrounds and envelopes us; it is used to mean the climate, the air, the sky, the atmosphere, the space in which one is immersed. Classical Latin does not have an equivalent term and uses a series of locutions constructed with the verb *ambire* (to turn, circulate, flow around; *ambitus* also indicates the orbit of the stars), and later with *amplectere*, *circumfundere*, *coercere*, *continere*.

This is how we arrive at the standard translation of “environment” in the various European languages.

Our brief semantic journey has shown the intertwining of sky and earth within the concept of world. The different terms emphasise particular aspects, but in a unified perspective. This is the cosmological perspective in the proper philosophical sense.

## 2. *Cosmonomy*

With the Presocratics, *kosmos* takes on a precise speculative value of the ordered totality of things, in which the destiny of each of them is inscribed. As a concept of totality, it is contiguous with other metaphysical terms concerning the fundamental determinations of reality and thought (being, nature, reality, reason). What distinguishes this concept is the reference to astronomy; the stars are physical realities requiring very long periods of observation and calculation, but they also seem to be solemn and remote entities that cast signs to be deciphered. Thus, philosophical speculation is connected to myth and prehistory. All archaic cultures have an intrinsic cosmological trait, which aims to give an overview of natural manifestations and their influence on living beings. The mythical narrative therefore presents a cosmography and a cosmogony. The myth starts from a physical-spatial correspondence between the universe and man, deriving from this the unity of origin and a network of analogies, whereby the universe is «the *form* of the whole» [Cassirer 1955, 88], a single structure qualitatively differentiated but interwoven with constant relations. The cyclical nature of astral movements provides the basic orientation in the flow of events. Feasts and rituals, the layout of streets, temples and dwellings follow this orientation. The overwhelming power of natural phenomena, sometimes destructive, sometimes beneficial, seems to have its key in the sky. Darkness and light, summer and winter, east and west, above and below: the astral rhythm ranges from biological cadences to the observation of planetary revolutions. It thus marks everyday life but also the genesis of rational thought, *theoria* as the activity of contemplating and evaluating what is far away in order to understand and assess what is near.

When we speak of the cosmos, we must consider this archaic

background; it reminds us not only of a millenary archive of experience, but also of an elementary experience that is always relevant. A common celestial quadrant highlights the most direct astronomical relationships in which the Earth is embedded; a set of circular intersections – that is, the four symmetrical points of equinoxes and solstices, the Earth’s equator, the hour circle and the ecliptic – visualise the rhythmic “banding” that transforms being into happening, in a non-random sequence that detaches itself from the indistinct and forms a pattern. The quadrant shows the chasm between heaven and earth, between elementary phenomena of life and *sublime* speculations, which push the limits of thought and the visible. The chasm of physics and meta-physics characterises the primitive experience of the universe, somewhere between corporeal imagination and rational contemplation. Thus, if the poet writes *denique caelesti sumus omnes semine oriundi / omnibus ille idem Pater est* (Lucretius, *De rer. nat.* II, 991-992), we see not only the evocative force of the mythical image (heaven is the father of all things and we are the children of the stars) but the nucleus of cosmological rationality, which asks how the world is made and where it comes from, to what extent it contains things; which invisible laws support its visible signs and what signs of human reasoning can reflect them; what is the relationship between its order and the disorder and destruction that besiege things and distress men, driving them to further destruction.

With Plato and Aristotle, the theoretical canon of this rationality is formed, in which we note the effort to delineate a cosmos consistent with a set of other fundamental knowledge concerning the various spheres of reality. The structure of the cosmos must find an intimate relationship with the physiognomy of nature (space, time, movement, matter), human forms of life (rules and purposes of coexistence, individual action, production) and with that which – in order to explain phenomena – seems to transcend them, namely the dimension of the divine, of pure being, of the original *logos*. With these connotations, astronomy will become part of the *quadrivium* (along with arithmetic, geometry, and music theory), that is, a fundamental part of the education of the learned. A passage from Plato captures the tone of the ancient canon when he writes that the demiurge generated «a single, unique universe, capable, thanks to its perfection, of keeping its own company,

of needing nothing and no one else, since it was enough for it that it had familiarity and affinity with itself. This, then, was how he created it to be a blessed god» [Plato 2008, 22; *Ti.* 34b].

The canon has found numerous variants, even subversive ones, as in the case of Gnosticism, which exaggerates Christian suspicions towards the value of the cosmos, or atomism, which admits infinity, emptiness and chance, to highlight the substantial indifference between man and divinity. Nevertheless, even here the relevance of cosmology remains a necessary term of comparison, particularly for ethics and anthropology. However understood, the cosmos is not an indifferent framework for man's self-understanding and for the definition of good and evil. Therefore, an authoritative scholar has called the Western cosmological canon «cosmonomy» [Brague 1999, 224]: «for ancient man 'the starry sky above me' and 'the moral law within me' are not essentially distinct» [Brague 1999, 225]. The cosmonomic model found an influential codification in the idea of cosmic correspondence between big and small, part and whole. A very rich network of symbols and theoretical constructions accompanied this model, in a dense overlap of myth, poetry, metaphysics, physics and astronomy. Always keeping an eye on what the «wisdom of the world» [Brague 1999] can teach mortals.

### 3. *The end of the cosmos*

The cosmonomic model came to an end with the Copernican revolution, the term used to denote the birth of the scientific method, which in turn was intimately connected with the establishment of a new cosmological paradigm. In Alexander Koyré's classic words, «this scientific and philosophical revolution – it is indeed impossible to separate the philosophical from the purely scientific aspects of this process: they are interdependent and closely linked together – can be described roughly as bringing forth the destruction of the Cosmos» [Koyré 1957, 2]. The closed, ordered, hierarchical world, ranging from terrestrial imperfection to celestial perfection, is replaced by an undefined or infinite world of identical components and laws. Perfection, harmony and purpose disappear; what remains is a homogeneous and mute extension,

which no longer throws up signs if not those described by the new mathematics. The world of facts separates from the world of values; the counterintuitive universe of mathematical physics separates drastically from that of the senses and mysterious cosmic correspondences.

This diagnosis captures an essential point even if it overlooks the extraordinary variety of effects produced by the Copernican paradigm. Apart from the intellectual challenges posed by the scientific method, the paradigm introduces a new cosmological sensibility linked to the themes of the infinite, the plurality of worlds, the relativisation of perspectives, and the propulsive force of the unfinished and the unknown. Thanks to the discovery of progress, of the creative power of time, even the *revolutio*, as a perennial cyclical movement, could acquire the unprecedented significance of radical transformation. The Copernican model «was destined, more than anything else, to provide a new formula for how humans perceived themselves and their place in the universe. [...] Geocentrism, heliocentrism, and acentrism were transformed into diagrams from which man's standing in the world was to be 'read off'. This bridling of our self-understanding by the cosmological metaphor has become a commonplace in contemporary critiques of our situation» [Blumenberg 2010, 100-101].

Let us briefly examine the effects of the new paradigm through Kant, who contributed with his authority to consolidate the topos of the Copernican revolution. The reform of metaphysics achieved through the Critical Project is largely based on the great Newtonian synthesis *de mundi systemate*, from which the foundation of knowledge and its strict constraints on space, time, matter and intellectual categories are reformulated. Cosmology is a form of knowledge that goes beyond these constraints. Kant first of all sees cosmology as a metaphysical science conducted by logical deduction from certain ontological principles. But his blows fall on every theoretical construction (even the scientific one) that assumes the existence of the world. Because the reference object of the world concept cannot be there. The world is «the sum total of all appearances, [...] the absolute totality of the sum total of existing things» [Kant 1998, 466; B 447]. This concept contradicts the cognitive procedure according to which an object of experience is constituted by means of an intellectual scheme of subordination and coordination of

sensible data; the resulting phenomenal series terminate neither in a simple element obtained by subdivision, nor in a conglobating element obtained by composition. If there are no first or last elements, there can be no totality. At the end of a long deconstruction of cosmology, where arguments and positions debated for centuries appear, comes the sentence: «your object is merely in your brain and cannot be given at all outside it» [Kant 1998, 507; B 512]. The whole, in an empirical signification, is always only comparative. The absolute whole of magnitude (the world-whole), division and descent of the conditions of existence in general, together with all the questions about whether these are to come about through a finite or an endlessly continuing synthesis, «has nothing to do with any possible experience» [Kant 1998, 507; B 511]. The world exists just as «the course of the world» [Kant 1998, 513; B 523]: it is experienceable «only in the empirical regress of the series of appearances, and by itself it is not to be met with at all» [Kant 1998, 518; B 533]. The unbridgeable distance from Plato's «blessed god» is evident.

However, for the Copernican Kant, the world remains a fundamental landmark. Precisely because it is by nature figureless, processual and indefinite, it becomes an indispensable regulative idea for the development of reason, and thus for human conduct. The «cosmological principle of totality» [Kant 1998, 529; B 536] makes it necessary to find the appropriate nomological framework to connect phenomena to their greatest possible extent; it is the indeterminate that now serves as the parameter of knowledge of the virtual whole of all things. On the moral side, the world is instead the configuration of a universal community that harmonises the freedom of each in a system of congruent ends. The realm of ends, the ideal community, is not a mere utopia, but the daily work of generations, which therefore includes nature as the material constraints in which action takes place. From this point of view, there is no natural world on one side and a practical world on the other side, but a single unifying work; if there is this unifying effort, then the conflict between the two worlds takes on meaning and value. A world without ethics is an unlimited series of facts; therefore, only from an ethical perspective is there a world.

Kantian cosmopolitanism confirms this perspective. Symbolised



by the Earth's sphericity, the planetary community is an idea to be realised ad infinitum through precise institutional steps (agreements, treaties, norms) and constant practical action, based on cultural and ethical training, i.e., on imperatives inspired by rational ends, which can therefore become universally shareable. Cosmological semantics (totality, infinity, universe, nature) takes on a decidedly worldly historical-political configuration without ever losing its cosmic horizon, which «extends the connection in which I stand into an unbounded magnitude with worlds upon worlds and systems of systems, and moreover into the unbounded times of their periodic motion, their beginning and their duration» [Kant 1996, 269]. Such an unbounded magnitude acts as a warning to terrestrial narcissism and as a solicitation to emerge from any state of minority, that is, from the innumerable variants of material and mental minority caused by individualistic and anthropocentric narcissism.

#### 4. *Global linear thinking*

Kantian cosmopolitanism is also a response to another front that emerged in the Copernican age: globalisation, the representation of the entire Earth as a single plane of action and conquest. The characteristic of modern age «is not the 'loss of the centre', but rather the loss of the periphery» [Sloterdijk 2013, 29]. With the discovery of the *novus mundus* in 1492, the season of voyages of exploration began, revealing every corner of the planet, making it an enormous surface to be disposed of for economic and political purposes. Not surprisingly, that was also the season of cartography; from heaven and earth, cosmography extended to every aspect of state organisation: geography, but also cities, roads, administrative domains, land, property, residences. Every place and time became the segment of an objective representation, which precisely as an object was available and modulable for the most diverse purposes. The “world as will and representation” begins here. More reliable than the real world, the world map became the basis of «global linear thinking» [Schmitt 2006, 87], a revolution in the conceptual foundations of politics, which is structurally spatial, linked to possession, borders, and the partition of material elements, starting with the geographical ones (soil, sea, air).

The global character of modern space influences political categories; geopolitics, imperialism, international law, human rights and capitalism are examples of this influence and are all marked by a planetary horizon. This leads to an emphasis on the relevance of the terrestrial dimension and human facts, generating a disregard for the celestial dimension. The global scale, due to its already considerable complexity, takes over the monopoly of interests, occupying the entire mental and practical field. In other words, global linear thinking is an emblem of radical mundanisation: the victory of *saeculum* over *kosmos*. Since geopolitics is the child of the Copernican revolution, we must see the paradox of a grandiose cosmological transformation, which discovers the infinite universe but leads to its oblivion, making it irrelevant to human affairs. Or as we see today with the space race, it makes it relevant again but only as an extension of the earth: a further space of geopolitical interests.

Hannah Arendt, to connote the modern era, spoke of «world alienation» and «worldlessness» [Arendt 1998, 248; 118]. The combination of technology, science, capitalism and secularisation has turned the world into an abstraction, not as the summit of contemplation but of a frenetic, self-referential activism. The world is transformed into a productive machine at the service of survival, efficiency and the accumulation of information, goods and desires. This is obviously a trend, which should not remove the wealth of philosophical and cultural ferment of the Copernican age. But it is a strong trend, which has led to a «worldless worldliness» [Bermes 2004, 70]. Indeed, on the philosophical level, we see the difficulty of re-proposing the world as a fundamental issue of practical life and speculative thought, continuing the cosmological tradition. And this, despite the notable attempts at reactivation by the phenomenological school in particular. More generally, we see the dramatic effects of a world experienced only as an earth without a cosmic background and reduced to a matter of exploitation and experimentation. The ecological crisis, which concerns the systematic alteration of natural balances and the disregard for the most elementary forms of justice in relations between people, animals, and things, is only the most conspicuous example of these effects.

### 5. *Philosophical cosmology today: this issue*

The historical-conceptual references I have made serve to sketch the framework of a contemporary philosophical cosmology. The chronological sequence, besides giving an expository order, suggests the vastness of the heritage of theories and images linked to the notion of the world. It is not just an inert deposit, but a fertile field upon which to exercise reflection, because many relevant aspects have been forgotten due to modern *worldlessness*. One can also simply say that to think about the world, one cannot ignore the history of the experience of the world. By reactivating this experience, we can reunite the two fundamental axes of earth and sky. This approach must combat the one-sided meaning of cosmology as a scientific investigation of the universe. Fighting this does not mean rejecting the great discoveries of contemporary science, which are also important for analysing basic theoretical concepts of physics (space, time, matter, becoming, cause ...). Instead, it means understanding the intertwining of those concepts with their anthropological counterparts, i.e., with epistemic practices, political uses of knowledge, rules of conduct, and the identification of collective ends. It is therefore a question of analysing the disagreements and overlaps between the world of life and the objective world, which ultimately lead back to the paradoxical connection between human finiteness and the infinite universe, from which everything seems to derive and return. The empirical fact of the world, constantly better known and yet already unknowable because of its immensity, restores immediacy to the system of fundamental philosophical questions (what can I know?, how should I act?, what can I hope for?), which help make that fact less obvious and its representations less blind.

From the twentieth century onwards, a number of authors have re-proposed a reflection on the world. Roughly speaking, we can distinguish a geophilosophy, a cosmosophy and a cosmopolitan philosophy. The preeminent themes of geophilosophy are corporeality, lived experiences of space, time and environmental media (landscapes, atmospheres, materials, techniques). The preeminent themes of cosmosophy are the different aspects of the universe understood as an openness that transcends individual things and understands them as events and relations, signs of a fluctuating ontological field. The preeminent themes

of cosmopolitan philosophy are the post-national state, the *communitas orbis* reread in the light of the pluralism and complexity of contemporary societies, against the backdrop of an extraterrestrial expansion of political space. The distinction of these three lines highlights different aims and approaches but allows us to glimpse the connections. A current project of cosmology should make these connections explicit, restoring effectiveness, breadth and dignity to the concept of the world.

The booklet I am presenting is a rough example of that project. It offers a small sampling of the philosophical *Weltfrage*. A first group of articles (Casella, Volpe, Wade, Del Prete, Gaston) shows the dense web of physical, metaphysical, religious and political arguments that characterised the cosmological tradition up to the modern age. A second group shows the variety of perspectives that characterises the contemporary age. In the second group, there is a side that looks more directly at the evolution of scientific thought (Schettino, Laino, Beaulieu), and another that looks at more directly philosophical reformulations, in a speculative or practical-political sense (Terzi, Novotný, Pazienti, Vegetti, Morawski, Nutini).

Within the limits of a sampling of a vast subject, the hope is that the reader will be able to recognise the common lines, the complex unity of the problem. Even when divergences seem to verge on incommunicability, as between a metaphysical speculation and an experimentally confirmed physical theory, we must deal with that divergence as something to be clarified and not as the sign of a clear separation between a mythological-metaphysical past and an enlightened present, despite being cluttered by inexperienced minds toying with that past. Because it concerns the whole, the world is a boundary-concept, standing on the frontier between verifiable and unverifiable. A “vision” of the world always has a non-rationalisable component, due to constitutive epistemic limitations and because it is formed on an intuitive background, on which experiences dating back to the origins of consciousness act.

A final note. The articles in this issue are biased towards the modern age. While the conspicuous lack of authors, epochs and currents is accidental, due to the type of proposals received, the imbalance is intentional. A philosophical cosmology project must necessarily look to the past, but to broaden the worldview of today. It is in fact our age that

shows a disconcerting poverty of the world, even more threatening when it seems to have the world in its grasp, as if it really coincided with the *world wide web* or the sum of the daily world news. Hans Blumenberg wrote: «what the world really is – this least decidable of all questions is at the same time the never undecidable, and therefore always already decided» [Blumenberg 2010, 15]. A philosophical cosmology has the task of helping to understand the undecidable part about what the world is, to give an adequate horizon and a minimum of wisdom to decisions about what it should be.

## References

- Arendt, H. [1998], *The Human Condition*, Chicago, The University of Chicago Press (original edition 1958).
- Bermes, C. [2004], *“Welt” als Thema der Philosophie. Vom metaphysischen zum natürlichen Weltbegriff*, Hamburg, Meiner.
- Blumenberg, H. [2010], *Paradigms for a Metaphorology*, transl. R. Savage, Ithaca/New York, Cornell University Press (original edition 1960).
- Bearzot, C. [1998], *L’ecumenismo politico nella coscienza dell’Occidente*, Milano, L’Erma di Bretschneider.
- Brague, R. [1999], *La sagesse du monde*, Paris, Fayard.
- Castellani, E. [2017], *Fin dove arrivano le teorie? Cosmologia scientifica e questioni filosofiche*, in: *Rivista di filosofia* 2 (3), 201-213.
- Cassirer, E. [1955], *The Philosophy of Symbolic Forms*, vol. II, transl. R. Manheim, London, Oxford University Press.
- Chamcham, K., Barrow, J., Saunders, S., Silk, S. [2017], *The Philosophy of Cosmology*, New York, Oxford University Press.
- Dognini, C. [2002], Kosmos e mundus. Due concezioni a confronto, in: C. Dognini, *Kosmos. La concezione del mondo nelle civiltà antiche*, Alessandria, Edizioni Dell’Orso, 81-98.
- Koyré, A. [1957], *From Closed World to the Infinite Universe*, Baltimora, Oxford University Press.

- Kranz, W. [1955], *Kosmos*, Bonn, Bouvier.
- Kant, I. [1996], *Critique of Practical Reason*, in: I. Kant, *Practical Philosophy*, ed. and transl. M.J. Gregor, New York, Cambridge University Press, 133-271.
- Kant, I. [1998], *Critique of Pure Reason*, ed. and transl. P. Guyer and A.W. Wood, New York, Cambridge University Press.
- Laks, A., Most, G.W. (ed. and transl.) [2016], *Early Greek Philosophy*, vol. III-IV, Cambridge/London, Harvard University Press.
- Lewis, C.S. [1959], *Studies in Words*, Harper Collins, New York.
- Milani, C. [2002], La nozione di mondo in alcune lingue indoeuropee, in: C. Dognini, *Kosmos. La concezione del mondo nelle civiltà antiche*, Alessandria, Edizioni Dell'Orso, 143-176.
- Plato [2008], *Timaeus and Critias*, transl. R. Waterfield, Oxford/New York, Oxford University Press.
- Rossi, M.P. [2002], Il mandala nella cosmografia rituale vedica, in: C. Dognini, *Kosmos. La concezione del mondo nelle civiltà antiche*, Alessandria, Edizioni Dell'Orso, 51-80.
- Schmitt, C. [2006], *The Nomos of the Earth*, transl. G.L. Ulmen, New York, Telos Press Publishing (second original edition 1974).
- Sloterdijk, P. [2013], *In the World Interior of Capital. For a Philosophical Theory of Globalization*, transl. W. Hoban, Cambridge, Polity Press (original edition 2005).
- Spitzer, L. [1942], Milieu and ambiance. An essay in historical semantics, in: *Philosophy and Phenomenological Research* 3 (1), 1-42, and 3 (2), 169-218.