

## ABSTRACTS

GEORGIOS TSAGDIS, *Dispositions: The Technophysical Apparatus*

This essay offers a groundwork for thinking space through the relation of nature and technics after Heidegger, Derrida and Stiegler. It departs from historical theoretical constructions of space to explore trace-topologies and the effects produced by different articulations of the relation of the *who* (subject, Dasein, human) and the *how* (nature, technics). All tropes of *technē*, from industrial production to literature assume a direct relevance to the future of the apparatus as the latter is traced back to the heart of nature. The essay closes with an examination of the implications of the technophysical *always already* for places of dwelling, travelling and production, at a moment when an unprecedented transformation announces itself.

SUSANNA LINDBERG, *Technics of Space, Place, and Displace*

What is the role of technics in the constitution of world? In this article, I will first show in what sense, from a philosophical point of view, not only the human lifeworld but also the abstract physical space that is often projected 'behind' it, is a technological construct. Then I will present the role of technology in the constitution of anthropological-existential places. Finally I will introduce the notion of 'displace' in order to distinguish between the anthropological place and the contemporary technological space: I claim the latter to be the most characteristic dimension of contemporary globalized existence, a dimension that does not consist in a centralized common place anymore but in a multiplicity of crossings and intersections. Finally I will suggest that in order to understand the spatial dimensions of existence, it is necessary to think the relation between physical space and existential place as a mimetic relation between technics of space and technologies of place.

ANNA LONGO & BEN WOODARD, *Infinitely Generative Structure: Fichte, Schelling, and Modern Geometry*

In the following we argue that a proper notion of abstract space was articulated, in parallel, by J. G. Fichte and F. W. J. Schelling at the beginning of the 19th century. Two obvious remarks could be made which we wish to deflect – that any notion of space in the post-Kantian tradition was merely a form of apperception, and secondly, that such a statement is unsurprising given the influence of Kant on Fichte, and Fichte on Schelling. However, we wish to argue that both Fichte and Schelling sought to more deeply ground abstract space, albeit in different means, than Kant would allow. Focusing on Schelling's *Universal Deduction of the Dynamic Process* (1800) and Fichte's *Erlangen Logic* (1805), we wish to argue that abstract space is the space of an original activity (natural or rational) which produces or establishes the conditions of representation of objective space. Thus, they both anticipate the structural approach that allows for the development of modern mathematics and geometry in terms of determination of a virtual determinable continuum.

NATHAN BROWN, *Hegel's Kilogram: On the Measure of Metrical Units*

This paper considers the current metrological project to redefine the kilogram unit, and the International System of Units (SI) more broadly, through Hegel's theory of measure and the distinction between measurement and measure it makes available. Hegel's discussion of measure in the *Science of Logic* closely followed the inception of the metric system in the late 18th century, and the use of physical reference standards for metrical units (the meter and the kilogram) exemplifies his definition of measure as the unity of quality and quantity. I theorize the redefinition of the SI as a moment which returns to the practice of measurement to the problem of measure – to the question of how metrical units are grounded in relationships between quantity and quality. I argue that the redefinition of the kilogram through correlation with the Planck constant, rather than a physical reference object, exemplifies a dialectic of formalization and experiment constitutive of scientific practice, which displaces the immediacy of objects in order to approach 'the concrete truth of being' (Hegel's characterization of measure) with adequate complexity.

GERMAN A. DUARTE, *Analysis Situs. A Survey of Spaces en devenir*

This paper aims at highlighting the relationship between the models developed within the Analysis Situs and the contemporary media condition. Taking as starting point Bergson's understanding of external reality as movement and using theories elaborated by Poincaré and Whitehead, this paper will investigate in which way both the Analysis Situs and topology have contributed to displace the egological conception of experience. In particular, the paper will analyze some existing analogies between the topological spaces and the relational space generated by digital media.

ANDREA PAVONI – ANDREA MUBI BRIGHENTI, *Airspacing the City. Where Technophysics meets Atmoculture*

In this paper, we seek to show how the notion of technophysics can be applied to better understand the experience of contemporary urbanism. We argue that technophysics exists in dynamic relation to an atmoculture of urban space, whereby the technological and the cultural meet on a deeply affective-atmospheric terrain. The concept of comfort appears as the point of intersection between the ontological process of urbanisation and the new phenomenological aesthetic that encompasses it. Contemporary technophysics and atmoculture collaborate in the quest for comfort and the flight from its antonyms (stress, unease, and fear), but they are also riddled with tensions and contradictory outcomes.

BART ZANTVOORT, *Space-time Dialectics: Acceleration and the Politics of Space*

Modernity has often been interpreted as a process of the progressive elimination of space through movement and acceleration or, as Marx put it, the ‘annihilation of space through time’. Paul Virilio and Hartmut Rosa have argued this process of acceleration leads to a state of ‘polar inertia’ where progressive social change is no longer possible. As David Harvey and Rosa show, the process of acceleration is not linear and continuous; instead, space continues to reassert itself, even if it is continuously transformed. There is in fact a dialectical relation between time and space or acceleration and inertia. So in what way and to what degree is society subject to a logic of speed, acceleration and mobilization? What role do space, inertia, immobility continue to play, as counter-movements to this acceleration? And what are the political consequences?

JONATHAN LASKOVSKY, *Simultaneous Plurality: Mapping and Concealment in Space and Fiction*

The rise of the technical ability of mapping (Google earth, Google Maps and GIS software in the social sciences for example) is giving rise to a new kind of assumption about the ‘truth’ or veracity of the information contained within it. The risk of this development is that the continued reliance on this kind of technology to derive purportedly accurate representations of the world creates a kind of technological concealment in the Heideggerian sense of that word. I suggest that a return to an older technology – literary fiction – can actually enable us to ‘read’ the world in a way that is more complex than the singular or fixed way that is suggested by this kind of technological-focused mapping. I explore this idea through my concept of *simultaneous plurality* in fiction; the idea that fictional space has an inherent quality of plurality that is also simultaneous – that is, multiple spaces held together at the same time – which disrupts this idea of technological or techno-teleological notion of space, what Lefebvre might call ‘conceived’ space. Through an examination of

this concept and the way it manifests itself, I will show that fiction can disrupt this concealment and reveal a more complex understanding of space.

MICHAEL R. DOYLE, *The Informational Motor of Michel Serres: An Architectonics of Algorithmic Reasoning and Abstraction*

Humans have throughout history developed various strategies of making sense of the incomprehensible. From ritual and custom to geometry and algebra, models of religion and science have attempted to bring a world of heterogeneous entities into a common space and time. Such models, however, risk excluding that which is external to their model. The creation of a communicational space founded upon inclusion rather than exclusion requires a new sort of instrument of cognition – an informational motor – which would be able to decipher order in an otherwise noisy contingency. Looking at the work of Michel Serres, Roman Architect Vitruvius and others, I argue that, just as the atomist physics of Ancient Greece challenged the model of a pantheistic world, quantum physics continues to challenge the model of classical physics. With both algorithmic and abstract reasoning, however, we can build informational motors fueled by contingency and powered by the very heterogeneity most models seek to exclude.

VERA BÜHLMANN, *The Digital, a Continent? Within the Object-Space of Cunning Reason*

This paper considers the intersection between past and future, where we encounter now, in what the editors of this issue have called the *technophysics of space*, a peculiar “crisis” with regard to remembering the Enlightenment legacy of critical thinking in relation to civic subjectivity – a political status of subjectivity that grants rights to citizens insofar as they subject to a manner of service to the public, accept their duties in order to be granted rights – and among those duties is the famous *Dare to know!* Have the courage to use your own understanding (*Sapere aude*). I will explore how the perspective of relating reason to the mechanic’s cunning and to the intellectual’s *criticality*, as a triangular relation, can open up, in its active and restless interplay, a “Discrete Space of Cunning Reason”. Such a notion of space will be projected upon the digital, in order to render apparent a kind of “continentality” (rather than “territoriality”) within the oceans of data, and the rising mass of contingencies and possible correlations this information flood is confronting us with.



