

## ABSTRACTS

BRUNO BACHIMONT, *Traces, Calculation and Interpretation. From the Measure to Data*

Data sciences are not only a new scientific trend, but also a new paradigm. While suggesting collecting heterogeneous data, separated from their origin, in order to apply calculus and mathematical treatments to them in a uniform way, those new sciences call for a new epistemology of data that should take over from the classical epistemology of measure, this latter being in use in modern sciences. It is of the utmost importance to take into account this shift, in order to understand what becomes possible thanks to those sciences, as well as to determine the new issues and new problems. Data sciences are not only new answers to old questions, answers that could be used without any questioning of their legitimacy, but also ask new questions that should first be defined and understood.

CLÉO COLLOMB, *For a Technological Concept of Digital Trace*

This article aims at proposing a concept that is technological – in other words, not anthropocentric – of digital traces. The point is that since computational processes require objects and actions to take the form of inscriptions as a condition of their existence, computational machines are fundamentally involved in the process of producing digital traces. What is at stake in the concept we propose is to put into circulation a narration which avoids the theme of “the end of the world” described by Danowski & Viveiros de Castro. These “end of the world” stories evoke the life of human beings who are reduced to living in an environment that is ontologically devitalized and purely artificial, as seems to be the case when the technical and economic valorization of digital traces has the end result of “delegating our human relations to machines” (Merzeau) or yet again of leading to “algorithmic governmentality” (Rouvroy & Berns). When the theme of “the end of the world” raises its head, it means that an attempt is being made: an attempt

to invent a mythology appropriate to our present situation, a narration which tries to say something about the end of a certain anthropological adventure. And it is in order to participate in this venture, but seeking to avoid contributing to the theme of “the end of the world”, that we propose a technological approach to digital traces, enabling us to take into account computational agents as a part of the contemporary world.

ENRICO TERRONE, *Causal Routes to Nowhere. On Digital Photographs as Traces*

By relying on Nelson Goodman's distinction between autographic and allographic symbols, one can construct an argument that denies that digital photographs are traces: 1) traces are autographic symbols; 2) digital pictures are allographic symbols; 3) digital photographs are digital pictures; hence; 4) digital photographs cannot be traces. I will challenge this argument by focusing on 1). I will argue that what matters for autography is only the causal history of *an instance* of a symbol. Instead, what matters for a trace is the causal history of *the symbol itself*. Thus, we can keep treating digital photographs as traces, provided that we find a way to preserve the relevant information about their causal history regardless of the causal history of their instances. For this purpose, I will provide an account of traces that makes room for allographic symbols such as digital photographs.

ALBERTO ROMELE – SIMONE GUIDI, *Deforming the Subject. Digital Traces and the Post- of Humanism*

This article is the result of a collaboration between two authors having different perspectives, converging in underlining the constitutive role of digital technologies, and technologies of digital tracking in particular, for contemporary subjects. In the first part we discuss a radical posthumanist notion of a technological hetero-constitution of the subject, underlining the impossibility of considering, faced with digital third-order technologies, any subjectivity as an autonomous self-determination. We will argue that subjects live in a subjectivated-subjectivating environment in which technologies continuously not only repeat but first and foremost transform (this is the difference between ‘classic’ and ‘intelligent’ technologies) their subjectivity. Digital technologies are not ‘silent’, ‘neutral’ or ‘passive’ *media*; they rather have an active role both in the understanding and the constitution of our (self)world. In the second paragraph, we will deal with the specific case of the digital emplotments, i.e. the combinations of databases (i.e. collections of traces that have been ‘domesticated’ in order to become sources of knowledge, action, and eventually control) and specific algorithms, which are capable, with an increasing efficiency, to ‘tell’ stories about ourselves or what we really care about. Against a widespread tendency in philosophy of the new media to shelter behind humanism to protect individuals from the increasing softwarization of their lives, we argue that posthumanism is an

unavoidable option, as it may offer a tool box for opportunely thinking about the main anthropological, ethical, and political challenges of our era.

MARCELLO VITALI-ROSATI, *Digital Architectures: the Web, Editorialization, and Metaontology*

This paper presents and tries to demonstrate three main theses: 1) digital space is actual space, the space in which we live. A space is a set of relationships between objects; in our contemporary society, space is a hybridization of connected and non-connected objects that are structured by writing. 2) In digital space, writing occupies a fundamental position. Writing is the essential material of digital space. The web, which is an important part of digital space, is comprised of writing: everything on the web is written; even images and videos are code. Writing is the actual material of digital space. 3) Digital space is best interpreted and understood using a performative paradigm. Digital space is not a representation of reality; it is, however, a particular way of producing and organizing reality. Two main notions will be proposed to illustrate these theses: the notion of editorialization and the notion of metaontology.

ALBERTO ROMELE – MARTA SEVERO, *From Philosopher to Network. Using Digital Traces for Understanding Paul Ricoeur's Legacy*

What is the difference between a researcher in philosophy and a philosopher? There are two kinds of answer that we can give to this question. We can say that the difference lies in a sort of internal quality; or, as the authors of this paper do, we can argue that a philosopher would not be a philosopher without the intervention of an ensemble of social actors such as universities, departments, funding, colleagues, editors, journals, media, and so on. In the first section, referring to actor-network theory (ANT), the authors define the philosopher as a Leviathan, i.e. a macro-actor that became macro- not thanks to his/her essence, but because he/she succeeded in translating the interests of other actors. The second section introduces the notion of digital traces, and the homology between ANT and the image of the social reality we can obtain from a process of extraction, treatment, and (visual) restitution of digital traces. In particular, the authors stress the potential of a digital traces-based scientometric for studying actor-networks related to the academic world, but also its limit. In the third section, the specific case of the actor-networks related to philosopher Paul Ricoeur is considered. First, on the basis of a scientometric analysis of the digital traces contained in the bibliographic database Scopus, and secondly by extending the exploration to digital traces available on the Web via web mapping. In the conclusion, the authors affirm that the merit of their digital hermeneutics consists in bringing forward a «world of the text» which is probably less romantic, but certainly more authentic than the «world of the text» to which Ricoeur has often referred.

PIERRE LÉVY, *The Data-Centric Society*

This paper outlines some salient features of contemporary data-centric society and ventures into its probable future, with a particular emphasis on the positive aspects. I begin by reminding the reader of the role of communication systems in cultural evolution and the shaping of subjectivities. Then I examine recent techno-social phenomena that represent the avant garde of the data-centric society (open science, digital humanities, data driven journalism, etc.) and I generalize these trends to mainstream institutions and to the structure of political or military conflicts. After these remarks, I expound my main thesis: social communication and the making of individual and collective subjectivities will increasingly be mediated by algorithms and data, and not necessarily for the worst. I evoke in my conclusion the new kind of 'algorithmic intelligence' that will emerge from recursive social processes in the digital medium.

MAURIZIO FERRARIS, *From the Total Mobilization to the Exemplar Action*

This article is based on the hypothesis that the fundamental human instinct is mobilization, which is not liberation, but rather a form of submission. This is particularly true in the age of the Web, which is both a specific technology and, first and foremost, a representation of our social reality, in which we are increasingly responsabilized and accounted for. Submission is not an historical contingency, but an anthropological constant. In fact, the way human beings relate to social reality is less that of the legislator than that of someone who is subject to the norms. The thesis of the author is that from such a condition of submission a possibility of liberation emerges. Freedom is not a natural condition, but a conquest. In particular, emancipation can be the result of exemplary actions of common people like Dimitar Josifov Pešev, the Deputy Speaker of the National Assembly of Bulgaria who took a stand against the deportation of Jewish people from his country during World War II. Freedom concerns the collectivity but it cannot come from it. An individual exemplary action is needed, and then collective emancipation might arise according to a principle of imitation. Could this all be applied to the total mobilization of the Web?

*Cyber-Surveillance, War and Religion. A One-Dimensional World.* A Conversation between FRANCESCO MONICO and DERRICK DE KERCKHOVE

Media theorists Derrick De Kerckhove and Francesco Monico have a conversation about the relationship that links cyber-surveillance, religion and war in the contemporary age. From Monico's perspective, the nowadays total-surveillance allowed by digital tracking is the starting point for a new techno-theology, deeply-rooted on the (supposed) possibility to predict happenings, continuously generating 'prophecies'. Thus, digital hyper-surveillance has the paradoxical effect of

producing a new 'irrationalism', based on the fact that we can process digital data only through the same technologies with which we gather them. For De Kerckhove, instead, the irrationalist result of cyber-surveillance is to be found in the transformation, caused by a new form of terrorism, of a mediological relationship that, during the Cold War, has connected surveillance and atomic threat. While for centuries armies have represented the true subject of the history, able to produce a military mediological surveillance, nowadays digital hyper-monitoring seems deeply connected with the irrational prophecy of a terrorism able to use digital media (of which the Islamic State is a meaningful example). According to De Kerckhove Internet is no longer, as we enthusiastically believed in the beginning, an instrument of freeing but rather a 'non-opticon' in which the subject never knows if it is spied or not.

*Philosophy of Information and Digital Traces.* ALBERTO ROMELE interviews  
LUCIANO FLORIDI

In this interview, professor Luciano Floridi clarifies some aspects of his thought on digital technologies. He stresses some risks related to the use of the notion of traces, and he argues that information is preferable. He underlines the overcoming of the distinction between online and offline that he tried to resume in the word 'onlife'. In order to explain this term, Floridi introduces the image of a river delta, in which the seawater meets the fresh water, a delta that is increasingly expanding today. The interviewee also criticizes all the rhetoric of deterritorialization and reterritorialization of the Web. He clarifies the emergent character of his reflections. He also specifies his position on infrastructures, and the digital divide by introducing the notion of mature information societies. Finally, Floridi answers questions on two ethical issues related to our information and registration age: distributed responsibility, and the so-called right to be forgotten.

