

Varieties of Science: Patterns of Knowledge

Käte Hamburger Kolleg: Cultures of Research
RWTH University, Aachen
5th - 6th December 2022

Mon. 5th Dec., 10:00 - 10:30

Welcome and Introduction

Mon. 5th Dec., 10:30–11:00

Varieties of Scientism: Perspectives on epistemic cosmopolitanism

Stefan Böschen - Käte Hamburger Kolleg Aachen: Cultures of Research (c:o/re)

Abstract

Currently, there are a variety of intertwined trends, be it globalization, postcolonialism, the emergence of the Anthropocene, or the emergence of a multipolar world order, that give new urgency to the question of the role and form of science in such a changing world order. The starting point of this paper is to analyze, in terms of the theory of reflexive modernization, global world ordering as a process of cosmopolitisation (Beck 2011). With this perspective, otherness and its recognition are brought into focus.

In the field of capitalist development, the theory of a Varieties of Capitalism already 20 years ago expressed the insight that despite all homogenization through globalization, there are different paths of development. The thesis of this paper is that we



Tecnologías
Filosóficas
Seminario



Käte Hamburger Kolleg
Cultures of Research



can observe analogous developments in the field of science as well (Böschchen et al. 2020). Varieties of scientism can be studied as a process of epistemic cosmopolitisation.

The presentation not only shows a first sketch on a concept of Varieties of Scientism, but also substantiates them in the form of an outline of an empirical research program.

Mon. 5th Dec., 11:00–11:50

Discussion

Mon. 5th Dec., 11:50–12:00

Break

Mon. 5th Dec., 12:00–12:30

Conditions of publicity of the philosophical discourse produced in the Faculty of Philosophy and Letters, UNAM. Publication of #tesisfilosunam

Francisco Barrón - Seminario de Tecnologías Filosóficas, Facultad de Filosofía y Letras, UNAM

Abstract

The project PIFFyL 01_004_2019 Digital Genealogy of the production of discourse in the receptional works of philosophy at UNAM (#TesisFilosUNAM) of the #SeminarioTF, of the Faculty of Philosophy and Letters, UNAM, seeks to begin a genealogy of the production of discourse in the receptional works of philosophy

produced at UNAM from 1928 to 2017, with data from the General Directorate of Libraries. The project aims to generate tools to learn about the recent history of the practice of philosophy at UNAM, to generate theoretical discussions about the type of discourse used by UNAM philosophers, and to open a line of research on the history of philosophy in Mexico using digital technology. The motivation of this project has been to experiment with the relationship between the powers of digital technologies and the conceptual exercise of philosophy in order to discuss the forms of transmission of the exercise of the philosophical in Mexico. The presentation will focus on the problem of the publication of theses from the 1920s to the 1990s. The talk will revolve around the relationship between theses and their editorial publication, investigating the conditions in which this publication was made, its meanings and effects. The problem that I will try to address is that of the publicity of the Mexican philosophical exercise, the relationship between academic works in the UNAM and outside the academy.

Mon. 5th Dec., 12:30–13:20

Discussion

Mon. 5th Dec., 13:20–15:00

Lunch Break

Mon. 5th Dec., 15:00–15:30

Towards a Plurality of Scientific Communication

Working out Media, Infrastructure and Research Life

Phillip H. Roth - Käte Hamburger Kolleg Aachen: Cultures of Research (c:o/re)

Abstract

The scientific paper is generally considered the standard format of formal scientific communication. It is seen as the key item to constitute scientific communities and disciplines; a vital means for the self-reproduction of the scientific system; and central institutions of scientific publishing, like peer-review, are regarded to account for the objectivity of scientific knowledge. However, recent historical and sociological research has begun to “denaturalize the scientific paper as the dominant genre of scientific life” (Alex Cziszar). A plurality of media exists through which scientists constitute their communities, communicate their knowledge and create an image of their professional self. With the rise of digital media and the Internet, scientists have even more modes of scientific communication at their disposal, such as mailing lists for the discussion of technical aspects of research or preprint servers for depositing manuscript prior to peer-review. However, these various media and technologies come with their own affordances and constraints. How does their use reflect in the images that society has of science and scientific work? In my contribution, I want to explore ways to reflect on the plurality of scientific communication from a science studies and media

studies perspective, paying particular attention to the materiality of media and infrastructure.

Mon. 5th Dec., 15:30–16:20

Discussion

Mon. 5th Dec., 16:20–16:30

Break

Mon. 5th Dec., 16:30–17:00

Local Technologies. The ontological Problem of the Plurality of Technology

Ana Maria Guzmán Olmos - Käte Hamburger Kolleg Aachen: Cultures of Research (c:o/re)

Abstract

Technologies are always developed within a particular context. The context is defined by the specific needs they attend to, but also by the social, institutional, and geographical context in which they are developed. This fact can be described from the anthropological, historical, or sociological perspective. In this presentation, I would like to focus on the ontological problem of how to deal with the relations between the plurality of contexts of technology.

In *The Question Concerning Technology in China* (2016) Yuk Hui has recently brought the concept of 'cosmotronics' to speak of a technodiversity that is rooted in the different relations that technical developments have not only with particular

geographies but also within cosmologies and their corresponding mythologies. In this sense, resonating with Simondon's concept of technical thought, Hui proposes to think of a plurality of technical thinking that is dependent on particular cosmologies. If this is so, are we committed to some form of techno-ethno-philosophy?

In my talk, I would like to first analyze and discuss the epistemic advantages and consequences of Hui's cosmotronics concept. I'll then propose to go back to Simondon and his idea of invention as individuation of technical concepts (Simondon, G. *L'individuation à la lumière des notions de forme et d'information*; 2021). Invention is a space of negotiation between technical and social normativity, and the opening of new possibilities for a community. Invention is the space for the creation of concrete technical individuals. I'll then propose to think of technical locality in terms of technical concretion.

Mon. 5th Dec., 17:00 - 17:50

Discussion

Mon. 5th Dec., 18:00 - 19:00

Another AI: exploring the imaginaries of AI through the DARC Library

Pablo Velasco - Critical Data Studies and Digital Methods), Associate Professor, Aarhus University

Christian Ulrik-Andersen (Digital Aesthetics) - Associate Professor, Aarhus University

Kasper Schiølin (STS) - Assistant Professor, Aarhus University

Nina Frahm (STS) - Postdoctoral researcher, Aarhus University

Abstract

In this workshop we present the 'DARC library', a collection of collective readings. The library relates to numerous other 'shadow libraries', but specifically addresses what it means to render research, to give research 'format', and the limitations of thought and action induced by conventional research infrastructures. Moving our workshop to the Philosophy department at UNAM (Mexico City), we invite you to explore our way of working. We are asking participants to collectively read and discuss a selected text by South African scholar Rachel Adams, addressing questions of artificial intelligence in relation to decolonial(ity). The text belongs to a series of reading sessions on the topic "another AI", and in particular into questioning the universality of AI. Here, we identify a need to describe AI in alternative ways and to explore information-theoretic concepts through the ways that they are interpreted in other cultural contexts. We know, for instance, very little of AI's role among technologists, policy-makers and commentators who live in the Global South; and what might this imply for our own research? Open questions for the workshop are, for example, is there a Mexican or Latin-American AI? How does it differ from other regional or global readings? What are the politics associated with these situated AIs?

Discussion

19:00 - 19:30

End of first day

Tue. 6th Dec., 10:30–11:00

Digital Humanities from the Periphery

Miriam Peña - IIB & Colegio de Bibliotecología Facultad de Filosofía y Letras, UNAM

Abstract

Knowledge production has been one of the strands of human creation that has taken most advantage of technological "novelties", particularly those related to digital technologies. It is interesting to see how, for some years now, there has been talk of the digitization of the humanities, but not of the digitization of the sciences; suggesting that the latter are invulnerable and immutable, while the former are conceived as more influential and adaptable to the changing times.

This change, this adaptation, has been so substantial that a whole field has emerged for its study; the Digital Humanities. This field of study has gained strength globally and, as with almost everything, its origins followed the baton of the structure it assumes in the global north. It is from the emergence of organizations, associations and working groups from the "periphery" that, finally, we can speak of a production of knowledge in the Digital Humanities from this periphery, with its own models and resources and from decolonial perspectives.

Tue. 6th Dec., 11:00 - 11:50

Discussion

Tue. 6th Dec., 11:50 - 12:00

Break

Tue. 6th Dec., 12:00 - 12:30

Education for the Third Industrial Revolution: An embodied and medial notion of learning

Alin Olteanu - **Käte Hamburger Kolleg Aachen: Cultures of Research (c:o/re)**

Abstract

For education to meet the requirements of contemporary infrastructures, learning must be construed as medial, not exclusively linguistic. Exaggerated epistemological relativism, supposing that different scientific paradigms cannot properly dialogue, is supported by linguistic relativism and language-centered notions of modeling (such *worldview*). I propose eschewing language-centrism through a notion of literacy adequate for digital infrastructures by adopting Rifkin's (2011) notion of industrial revolution and the biosemiotic concept of model. For this, I explain how Rifkin's (2009) notion of biosphere consciousness finds support in Charles S. Peirce's view on evolution as agapic (EP1, 362), that is, driven by self-sacrificial love.

Stemming from the Enlightenment, philosophy of education and pedagogy inculcated a construal of learning as linguistic. In

light of the modern notion of Reason and in infrastructures fostered by printing press media, learning was equated with language acquisition and, consequently, literacy with language competences. Designed in this way, education does not address the variety of media through which learning unfolds. Educational practices still inherit this modern notion of *literacy*.

According to Rifkin, industrial revolutions consist in the merging of new communication technologies with energy resources. From this perspective, I explain, media channels and energy grids together shape affordances for learning. Modern education has been built in the conditions of, first, an industry of coal and print and, later, one of oil and mass media. The ongoing industrial revolution, consisting in merging renewable resources with digital media, requires a labor force equipped with corresponding digital literacies. I propose such a notion by following the biosemiotic criticism of language-centrism. Here, the language-bound notion of 'text' is replaced by the encompassing notion of 'model'. In this view, literacy consists in skills of operating with a multitude of representations, not only alphanumeric symbols. This leads to an exploration of the learning affordances of digital networks.

Tue. 6th Dec., 12:30 - 13:20

Discussion

Tue. 6th Dec., 13:20 - 15:00

Lunch Break

Tue. 6th Dec., 15:00 - 15:30

Heuristics, habitus and social fields: towards a notion of rationality socially bounded

Josafat Hernández - Graduate Program in Philosophy of Science, UNAM

Abstract

Herbert Simon's project known as bounded rationality has contributed to demystifying the neoclassical notion of the rational agent because Simon showed that homo economicus assumes some cognitive capacities to make optimal decisions that are impossible to satisfy by real human agents. Simon first, then Kahenman, Tversky, and Gigerenzer have emphasized that heuristics are used to make decisions in contexts of risk and uncertainty, where time is limited. However, these authors do not explain how heuristics are formed and how they are modified. In this paper, we will develop a proposal of integration between the notions of heuristic reasoning, habitus, and the theory of social fields to explain how the reasoning and behavior of agents are structured, considering that they are located in a social space of social differences. In these social spaces, labeled by Bourdieu as social fields, agents acquire different dispositions to act in their socialization process that structure attitudes, aptitudes, ways of thinking, and ways of solving problems embodied in a social practice shared by a community of agents. In such social practices, we can place the heuristics that acquired some specificities. To illustrate this point, I will use some examples of food practices in CDMX to show how the use of heuristics in food choice reveals the social condition of the agents.

Tue. 6th Dec., 15:30 - 16:20

Discussion

Tue. 6th Dec., 16:20 - 16:30

Break

Tue. 6th Dec., 16:30 - 17:00

Traces of bodies, patterns of discovery: Enactivism and Philosophy of Science

Dawid Kasprowicz - Käte Hamburger Kolleg Aachen: Cultures of Research (c:o/re)

Abstract

Enactivism, or the enactive theory of mind, has raised a lot of attention in the cognitive sciences as well as in the philosophy of mind. Enactivists argue for the importance of body-environment-couplings to explain the interrelation of sensomotoric capabilities and cognitive functions. To overcome mechanistic mind-models, they emphasize the practical dimension of being coupled to an environment. This results in an open and operative concept of intentionality instead of one that relates to our mind as an information-processor. In this sense, an operative concept of intentionality enables both to look at the mind as enacted by the environment but also to analyze the ways in which the mind becomes an enactor without falling back to a representational model.

The enactive theory of mind has been applied in various ways and disciplines, but so far it has rarely been used in the philosophy of science. Although in the first theoretical program of

enactivism written by Francisco Varela, Evan Thompson and Eleanor Rosch, called “The embodied mind” (1991), the question of the scientist as an embodied agent in the process of knowledge production is invoked multiple times, an enactive theory of science is still missing. Thus, the question has to be raised why there is still not an enactive theory of science?

I will not give a complete answer to this question but propose three criteria that are necessary to develop an enactive approach in philosophy of science: First, the making explicit of the tacit dimension in scientific practices and routines. Second, the meaning of a “non-derived intentionality” (Gallagher 2017) for scientists as epistemic agents and third, the creation of a tension-space between experience and cognitive variations in an enactive theory of science.

Tue. 6th Dec., 17:00 - 17:50

Discussion

Tue. 6th Dec., 18:00 - 18:30

Closing Remarks

Tue. 6th Dec., 19:30

Dinner