Call for Papers

Data as a new resource?

Similarities and differences of data vs. material resources

Tensions of Europe Digital Workshop Festival

30 June 2021

Online meeting via WEBEX, 10h-18h CET

We welcome proposals for participation in the workshop **Data as a new resource? Similarities and differences of data vs. material resources**, which will take place online via a Webex meeting on June 30th, 2021 between 10h-18h CET.

The workshop is part of the Tensions of Europe Digital Workshop Festival. Tensions of Europe is an international scholarly network and hub for international research, education and outreach initiatives on Technology in European history.

This exploratory workshop is dedicated to scholars interested in technological developments related to digital technologies and resource developments. It aims at bringing together scholars with interests in digital data and material resources development and at creating a broad dialogue on data as a resource. More specifically, we intent to discuss three topics : (1) historical parallels of digital data with the development of other key material resources, (2) data as a commodity and its infrastructure, and (3) sustainability issues and (big) data.

Topic 1: Historical parallels with other key resources

Parallels can be drawn between the development of data as a resource and the development of other key resources in history, such as oil, minerals, and metals. To start, many of these resources are not useful as such: they become useful after processing. What are the communalities and differences in the socio-technical construction of material and digital resources? Second, once a valuable use for the material resource was discovered, landgrabs ensued: many people tried to acquire as much of the resource as possible. In the case of data, it is not literally land, but rather digital space companies try to acquire vast amount of data and harvest it. The purpose of this discussion is to discover other parallels and differences between the development of digital data and the (historical) development of key resources. We aim at understanding if the conceptual framework related to the historical development of material resources can be applied to the development of data and vice versa. We expect to see some similarities, but also some differences, due to the specific characteristics of IT data. For

example, the notion of commons and digital commons may be discussed as well as the fact that data is not tangible and can be reused without diminishing in value, raising the question: how will its value be measured?

Topic 2: Data and resource economy

This question leads us to the second topic of the discussion panel, namely the data economy. In their book, Mayer-Schönberger and Cukier[1] state: "although data has long been valuable, it was either seen as ancillary to the core operations of running a business or limited to relatively narrow categories such as intellectual property or personal information. In contrast, in the age of big data, all data will be regarded as valuable, in and of itself". A new economy is forming, with data as its base commodity. This raises questions about the differences and communalities in the commodification process of material resources and data. Another avenue would be to explore the development of resource driven business models and economics. It raises questions about developments of standards and infrastructures. Second, how can we perceive the monopolization (capacity) corporations? Third, issues about governance and the introduction of rules and regulations are also of interest for this topic. How would material resource based concepts such as resource security, resource nationalism, resources spaces, techno-politics translate and/or highlight some of the economic development practices?[2] Discussing these questions is the aim of this second round of discussions.

Topic 3: Sustainability

Sustainability is our last topic. Although switching from a fossil fuel-based economy to an economy based on virtual data might seem like a positive step for sustainability, one has to look beyond the data to analyze the actual sustainability of this system. Resources are necessary to gather, save and analyze data. These resources include minerals which have to be mined, or energy. One of the most well-known examples is the mining of cobalt for digital devices, which has grave consequences for both environment and humans[3]. Secondly human activities play a major role in data gathering and processing, touching on issues of human dignity, labor offshoring, etc. In this last topic, therefore, the aim is to understand the broader consequences of data as a resource: how ecological and socially sustainable is data as a resource?

Papers & discussion panels

We welcome papers concerning one or more elements of the three aforementioned topics. For our discussion, we intent to invite one expert per topic. Because of the exploratory nature of the workshop we will also allow (1) recently published or accepted papers and (2) short position papers of ca. 5 pages that address key issues in the debate.

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[1] Mayer-Schönberger, V. and K. Cukier. 2013. *Big data. A revolution that will transform how we live, work and think.* London: John Murray. p. 100.

[2] For an overview of material resource based concepts see Frank Veraart, Anna Åberg, Hanna Vikström. 2020. "Creating, capturing, and circulating commodities: the technology and politics of material resource flows, from the 19th century to the present", *The Extractive Industries and Society* Volume 7, Issue 1, p. 1-7. https://doi.org/10.1016/j.exis.2019.10.017

[3] Sovacool, B.K. 2021. "When subterranean slavery supports sustainability transitions? power, patriarchy, and child labor in artisanal Congolese cobalt mining", *The Extractive Industries and Society*, Volume 8, p. 271-293. https://doi.org/10.1016/j.exis.2020.11.018

To ensure a fruitful discussion, the papers will be circulated before the workshop. Every paper will receive a discussant (another participant or an expert). The appointments of discussants will be based on research topics. As the topics cover a wide range of research disciplines, we do not want to limit our academic audience to a precise discipline, but rather have an interdisciplinary dialogue. The size of the workshop is limited to approximately 30 people, in order to allow for the exchange of ideas and the development of concrete future directions of research and collaborations.

Upon acceptance, all participants will receive further instructions and be asked to provide their paper and/or an outline before June 10th. We will circulate the papers and outlines amongst the participants to enhance the conversation.

How to apply

Please send an abstract and motivation (max. 1 page) on your interest in the topics of the workshop and how it relates to your research and a short bio note (1 page) to

https://shotsecretariat.wufoo.com/forms/x1twe5v61tk4ddt/

before May 2nd, 2021. Applicants will be informed by May 21 of the result.

Organizers

The workshop is organized by Frank Veraart (Eindhoven History Lab) Irene Niet (Eindhoven University of Technology), Valérie Schafer (Centre for Contemporary and Digital History, University of Luxembourg).

The agenda and framing of the workshop reflect the three supporting research projects agendas:

GREASE - Global Resources and Sustainability of European Modernization, 1820-2020 The goal of this projects is to develop international networks for historical research on societal challenges related to natural resources, including contested issues such as global sustainability entanglements, security regimes, socioecological inequalities, governance, and so on.

HIVI – a history of online virality. This project related to digital history and digital humanities and which is supported by the Luxembourg National Research Fund (C20/SC/14758148), aims to reveal, historicise and communicate about the massive and heterogeneous born-digital heritage of viral content, but also has a strong interest in data as a (historical) resource, digital sustainability and digital hermeneutics.

Governance of artificial intelligence in the energy transition. The goal of this project is to understand, analyze and support the governance of artificial intelligence applications in the transitioning energy system. The project is funded by the Eindhoven University Fund (Stichting Universiteitsfonds Eindhoven).

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