

This conference will examine the material culture, epistemology, practice, and cultural and political history of data in the modern sciences. Since the late 20th century, huge databases have become ubiquitous, and the term “Big Data” has become a buzzword for describing an ostensibly new and distinctive mode of knowledge production. This conference examines the broader cultural preoccupation with Big Data in critical historical perspective. It brings together scholars studying data from a variety of different disciplinary, temporal, and methodological perspectives, in the hopes both of identifying the important central problems in a history of data and of generating new lines of inquiry for the future.

The set of themes for this conference—epistemology, practice, material culture, and political economy of data—are overlapping, interrelated categories. Data is immanent to the practices and technologies that support it: not only are epistemologies of data embodied in tools and machines, but in a concrete sense data itself cannot exist apart from them. Furthermore, while Big Data is often associated with the era of computer databases, we will also explore important continuities with data practices stretching back to the 18th century and earlier. We will historicize the material cultures and practices of data in a broad context, including the development of information processing technologies; the relationships between collections of physical objects and collections of data; and visualizations and representations of data, both as working tools and also as means of communication.

In the era following the Second World War, new technologies have emerged that allow new kinds of data analysis and ever larger data production. The term “Big Data” ostensibly refers to the enormous amount of information collected, stored, and processed in fields as varied as genomics, climate science, paleontology, anthropology, and economics. But it also implicates a Cold War political economy, and these political and cultural ramifications of data cannot be separated from the broader historical consideration of data-driven science.

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Illustrations:

cover: U.S. Census Bureau machines and operators, 1908. Library of Congress Prints and Photographs Collections Division Washington, D.C. ; „Spindle Diagram“, H.G. Bronn, Untersuchungen über die Entwicklungsgesetze der Organischen Welt (Stuttgart: E. Schweizerbart. 1858), p. 312.  
inside: „Universal Tree of Life“, David M. Hillis, Derrick Zwickl, and Robin Gutell, University of Texas. <http://www.zo.utexas.edu/faculty/antisense/downloadfilestol.html>.

flyer design: Mala Shah

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## Historicizing Big Data



Conference

October 31 - November 2, 2013

Organization:  
David Sepkoski  
Elena Aronova  
Christine von Oertzen

# HISTORICIZING BIG DATA

a Conference at the

Max Planck Institute  
for the History of Science

October 31- November 2, 2013

Thursday, October 31

15.00 Welcome and Organizational Information

15.15-17.30 **Biographies of Data**

**Dan Bouk** „Writing Biographies of Data“

**Christine von Oertzen** „Punch Card Transformations: The Dawn of European Data Power, 1890-1920“

**Mirjam Brusius** „Data and Material Culture. Finds and Specimens as ‚Raw Archival Data‘“

**Dan Rosenberg** „Personal Data“

Animals

You are here

Fungi

Friday, November 1

09.00-10.30 **Data Motion and Translation**

**Cathy Gere** „Big Data and Racial Science“

**Joanna Radin** „Off the Rez: How Indigenous Bodies Became Big Data“

**Elena Aronova** „Do (Big) Data Have Politics? Cold War and the Political Economy of Data Exchange“

**Coffee Break**

11.00-12.30 **Data Visualization and Modeling**

**David Sepkoski** „Simulations, Databases, and Models“

**Caitlin Wylie** „Fossils as Gigabytes“

**Susanne Bauer** „Data Recombination and the Performativity of Modeling“

12.30 **Catered Lunch at MPIWG**

14.00-16.00 **Data Cultures and Infrastructure**

**Hallam Stevens** „The Infrastructures of Sequence Data in Biology“

**Judy Kaplan** „The Global Lexicostatistical Database: Integrating Traditions in Long-Range Historical Linguistics“

**Sharon Traweek** „Changing Data Infrastructures and Practices in 20th Century Astronomy“

**Markus Krajewski** „Big Data in Bibliometrics and the Introduction of the OPAC“

19.00 **Dinner at Restaurant Weyers (invitation only)**

Saturday, November 2

09.30-12.30 **Data Collections and Accumulation**

**James Delbourgo** „Listmania, Label-Madness and Containerization in the Early Modern Era“

**Staffan Müller-Wille** „Counting Species in Classical Natural History“

10.45 **Coffee Break**

**Rebecca Lemov** „The Dream of Data and the Data of Dreams: How to Make the Invisible Visible“

**Bruno Strasser** „Data Not Good Enough to See the Light of Day: Shifting Boundaries Between Private and Public Experimental Data“

12.30 **Catered Lunch at MPIWG**

13.30-15.30 **Final Commentary and Discussion**

**Soraya de Chadarevian**  
**Lorraine Daston**  
**Sabina Leonelli**  
**John Pickstone**  
**Ted Porter**

Plants

Protists

Bacteria  
Archaea