Data as Representation

Framing Critical Data Studies

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https://ontoligent.github.io/talk-data-as-representation

What is Critical Data Studies?

> Critical Data Studies is an emerging, interdisciplinary field that addresses the ethical, legal, social, cultural, epistemological and political aspects of data science, **big data** and digital infrastructures.

Purdue University

> Critical Data Studies (CDS) explore the unique cultural, ethical, and critical challenges posed by **Big Data**.

Iliadis, A., and Russo, F. 2016. "Critical Data studies: An Introduction". *Big Data & Society*, 3(2).

Big Data

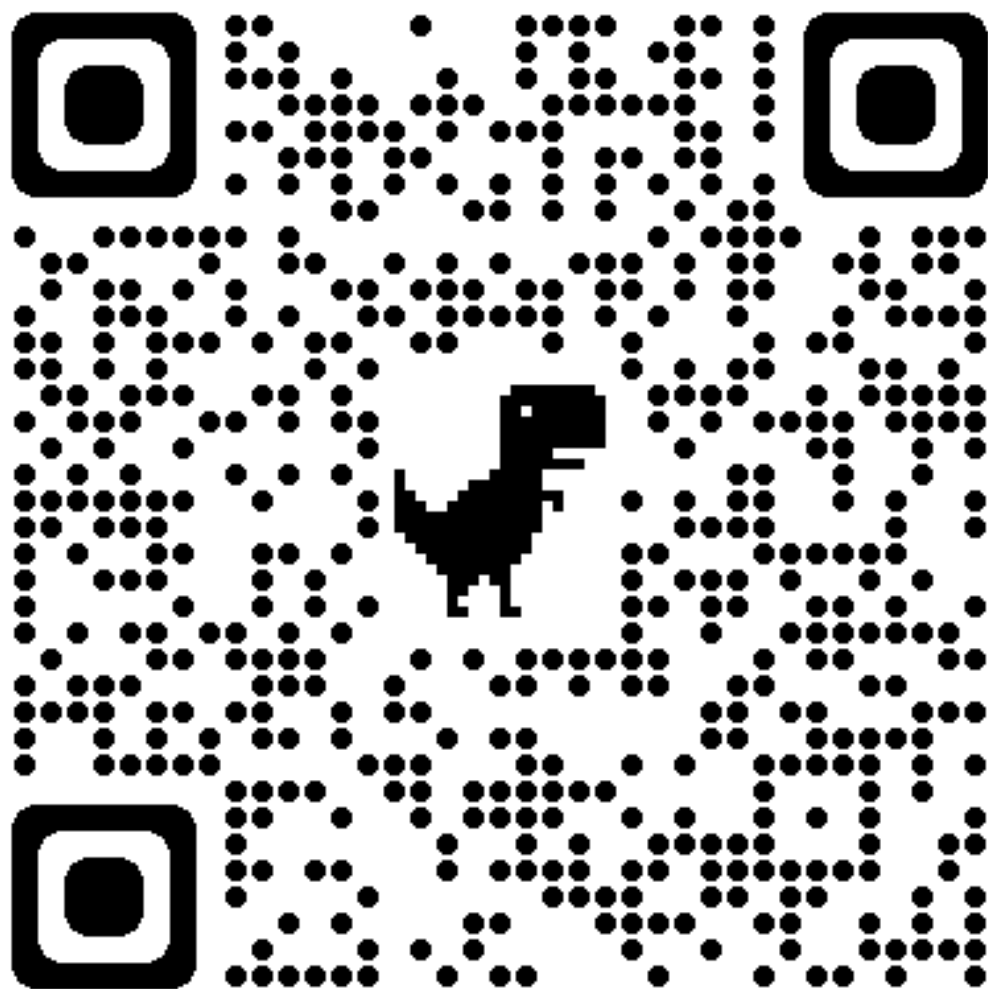That we live in the era of "big data" is a **commonplace**

- In fact, it has become a tired **meme**

Commonly understood as a purely **technical** idea

- 3D data, etc.
- 4$^{\text{th}}$ Paradigm of Science

But: It also means something like Big Science or Big Pharma

- i.e. **Big Data-Science** …

Big Data Science

For example, this usage is typical in the media:

It seems that the markets are as much in love with "Big Data"—the ability to acquire, process and sort vast quantities of data in real time—as the technology industry.

The first Big Data initial public offering hit the market last week to roaring approval. Splunk Inc., which helps businesses organize and make sense of all the information they gather, soared 109% on its first day of trading. Big Data, big price.

Big Data's Big Problem: Little Talent (*WSJ*, April 29, 2012)

Here Big Data is a **synonym for Data Science**

Big Data and CDS

CDC focuses on Big Data from this dual perspective

- As a kind of **data** — 3D (Volume, Velocity, Variety)

- As a kind of **institution** — built around data

CDS focuses on how the **levels** of technology and society **related**

Society is Relational

So, the basic unit of society is the **relationship**, not the individual

- The view from **anthropology** (Marylin Strathern, Roy Wagner)

Consider male/female, parent/child, consumer/producer, labor/capital, etc.

- Each dyad defines a relationship, not an individual identity
- Each dyad contains a collection of **complementarities** of normative **traits and behaviors**

———————————————

Society as a whole is constructed from of these relationships

If you want to change society, you change these relationships [1]

Relations are Mediated

Social relations are **mediated** forms of **representation**

- Language, writing, ritual, money, etc.
- These literally are **social media** (a term coined in the 19th c.)

Relationships are **constituted** by social media

- Both there forms and their contents
- E.g. orality and specific myths

Media Enables Scale

Different media forms are associated with different **social forms**

- **Large-scale societies** (states) require **writing**
- The liberal democratic nation state emerged with the **newspaper** (~18th c.)
- Not a causal relationship, but systemic

Democracy runs on **public opinion**, which is represented by the **media**

Data is a Social Medium

Now, Big Data means that data has become a **dominant social medium**

- Finance, commerce, labor, education, romance, etc.
- **Web3** is the idea that government itself will be replaced by data (Blockchain)

Nearly every significant social relationship is now mediated by data

- This is **historically singular** — and recent

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[1]Easier said than done :-)

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Signifance

This is more than saying we are dependent on the Big Data economy

- Or that Big Data is **disruptive**
- Or that Big Data is **biased**
- Or that Big Data is **spying on us**

It is saying that the structure of our society and the content of our culture are changing

- *What are these new forms of life?*

So what?