# Data for power and power over data

Über die Macht der Informationssysteme in der Energiewende

Digitale Energiewelt

Berlin

5. Dezember, 2019

# Two simple definitions of fossil vs. renewable energy systems

# Balancing supply and demand in the non-intermittent fossil energy system

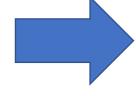
generation



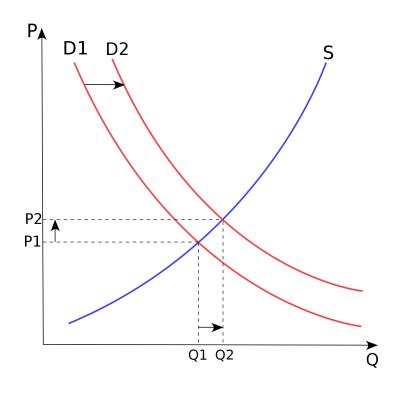
storage



used to manage



supply and demand

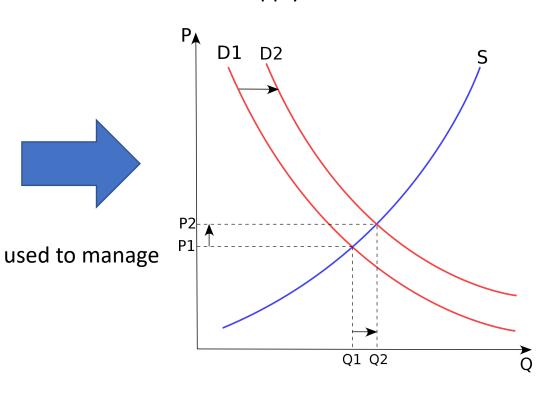


# Balancing supply and demand in the intermittent renewable energy system

generation



supply and demand



storage

# Renewable energy systems as co-constituted by information and energy systems

 The ability to store energy physically in the fossil energy system is replaced by information systems that manage the fluctuating nature of variable renewable energies

• Therefore, control exerted over information takes a similar role as control over storage in the fossil energy system...

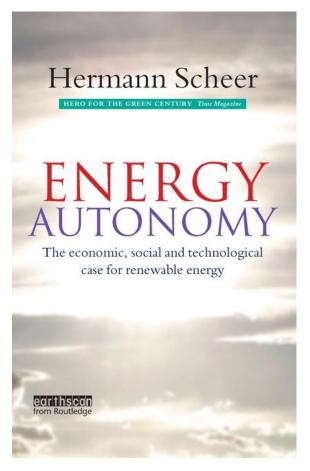
### From data for power to power over data

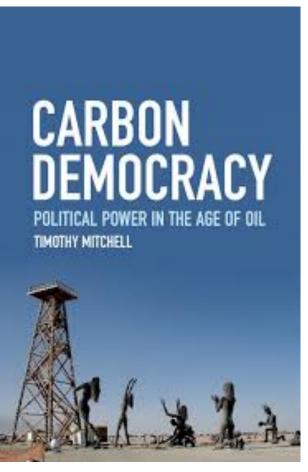
... this expands our understanding of data to be

- more than a mere service provider for the energy sector (data for power)
- more than a new source of energy consumption (power for data)
- → but rather a novel source of control in the energy sector: Power over data

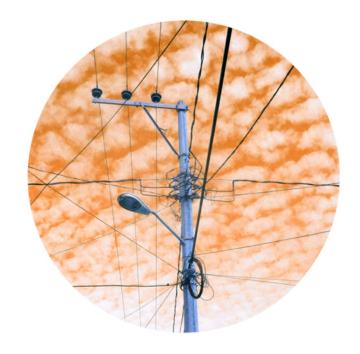
### Power in the fossil energy system: Energopower

#### Power is exerted as control over storage





### Energopolitics

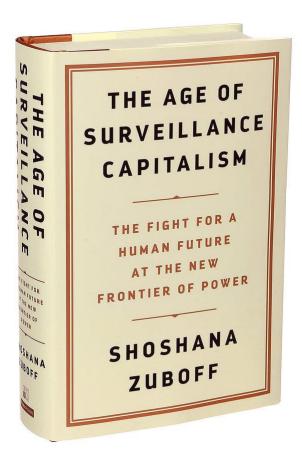


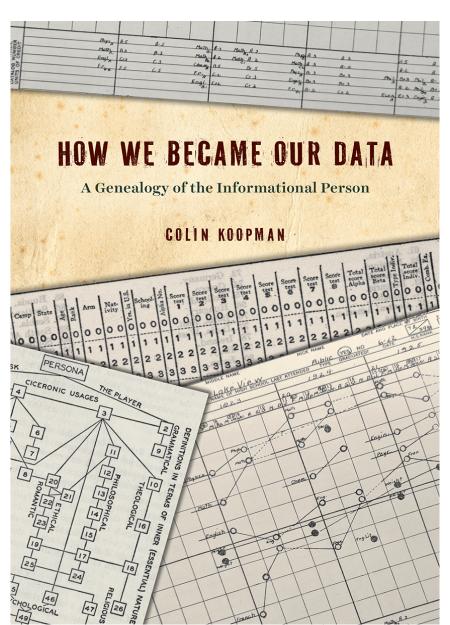
Wind and Power in the Anthropocene Dominic Boyer

### Power in the renewable energy system: Infopower

Infopower: Power is exerted as control over data formats

Similar issues are addressed by Zuboff:





## Examples of the workings of infopower: The birth certificate

"[...] birth certificates have functioned for over a century to render gender into formatted data [...]. Only some gender identities are allowable, and [...] it was long obligatory that one choose (or rather have chosen for one at birth) one specific gender from among those allowable on the form." Koopman, p. 11 in "Information before Information Theory"

## Examples of the workings of infopower: Racialized credit

"[...] redlining, a euphemism that refers to the practice of denying home loan applications based on the racial characteristics of a property's neighborhood. [...] Those red lines on paper maps soon became high walls in America's cities." (Koopman, p. 108)

### Un-fastening the infopower of formats

### Jenaer Erklärung

Das Konzept der Rasse ist das Ergebnis von Rassismus und nicht dessen Voraussetzung

PRESSEMITTEILUNG · 14.12.2018

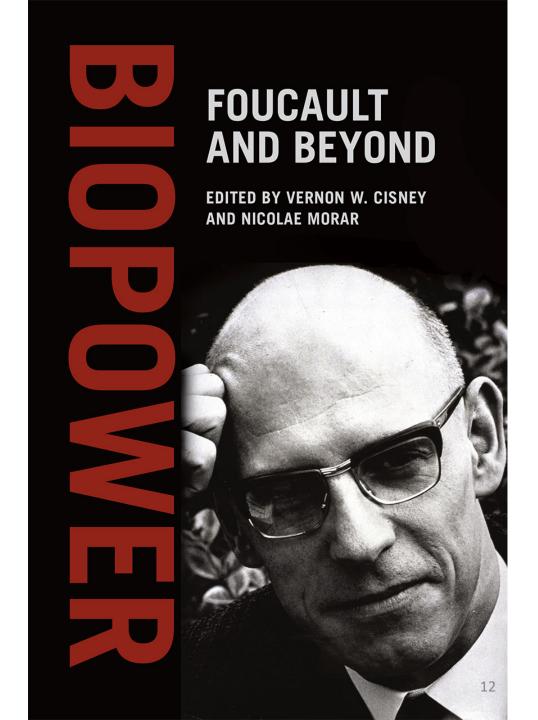
## Zusätzliche Geschlechtsbezeichnung "divers" für Intersexuelle eingeführt

Gesetz zur Änderung der in das Geburtenregister einzutragenden Angaben

What does this transition mean for the nature of power structures in the energy sector?

It is no longer sufficient to understand the power inherent to energy systems, energopower

When analyzing renewable energy systems; we must also understand the fundamental power dynamics of information systems, **infopower** 



### Who owns and controls data?



24. august 2018 - 4:00 Af Helene Olesen Peter Keiding



### Dyneløfteri:

# Regeringen vil overvåge lediges elforbrug

Kontrol af hvor tit danskerne tænder lyset, opvaskemaskinen eller fjernsynet skal stoppe snyd med kontanthjælp. En alvorlig glidebane og i strid med loven, advarer eksperter.

#### BIG BROTHER AWARD DK

WHO WATCHES THE WATCHMEN?

### Danke!

#### Weiterlesen:

Hasberg, K. S. (2019). From Foucauldian Biopower to Infopower and Energopower: A Review of Colin Koopman's and Dominic Boyer's Novel Conceptualizations of Power. *Le Foucaldien*, 5(1), 7. DOI: <a href="http://doi.org/10.16995/lefou.70">http://doi.org/10.16995/lefou.70</a>

Interviews mit den Autoren auf Foucaultblog: <a href="https://www.fsw.uzh.ch/foucaultblog/blog/247/new-in-le-foucaldien-from-foucauldian-biopower-to-infopower-and-energopower">https://www.fsw.uzh.ch/foucaultblog/blog/247/new-in-le-foucaldien-from-foucauldian-biopower-to-infopower-and-energopower</a>

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