

Benjamin Bratton's "*The Stack: on Software and Sovereignty*" (MIT, 2015)

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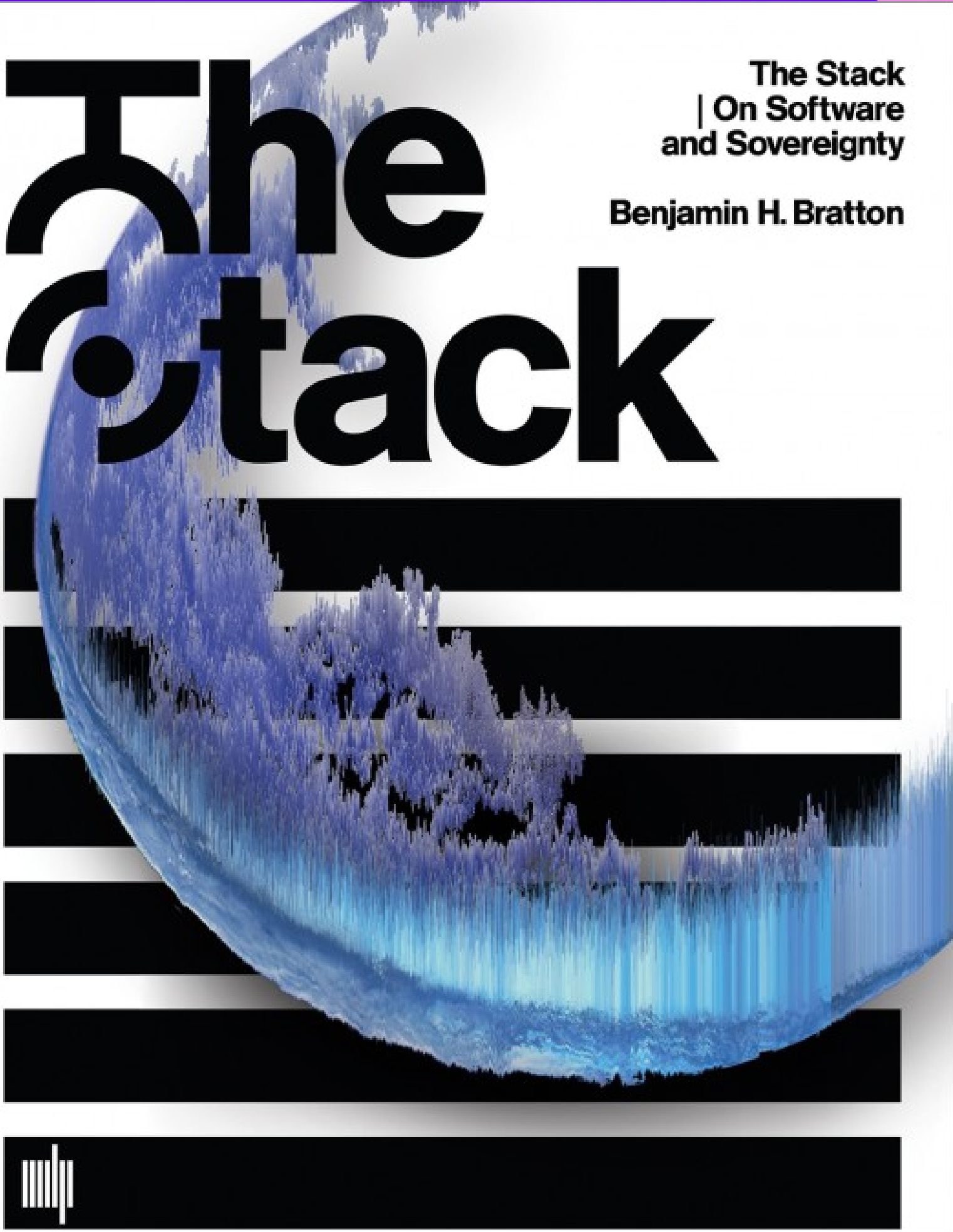
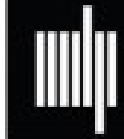
18.06.2021

- 1. General Overview of The Stack
(focus: Interface);**
- 2. Platforms (focus: Institutions);**
- 3. The *nomos* of the Cloud;**
- 4. Infrastructure and
sovereignty.**

The Stack

The Stack
| On Software
and Sovereignty

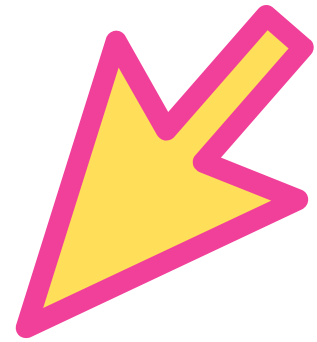
Benjamin H. Bratton



Who is Benjamin Bratton?

- **Californian Designer**
- **Phd in sociology of technology**
- **Former Director of the Advanced Strategies Group at Yahoo!**

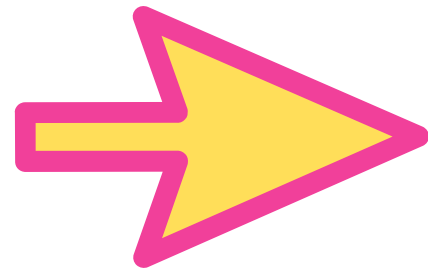
What is this book about?



Continental philosophy




Software studies



Design and Architecture

- **Geography and Ecology**
- **Media Studies**
- **Cybernetics and Complexity theory**

Why is it hard to read?

- **Final glossary**
 - **Refers to technical features of several fields of literature**
 - **Intentionally obscure and blurred style**
- 

**"The whole age of computer
has made it where nobody
knows exactly what's going on"**

[Donald Trump, Interview at CNN]

"The book does two things..."

(Bratton, An update to the Stack)

"Planetary scale computation has both distorted and deformed traditional Westphalian logics of political geography, and in doing so it has also created new territories in its own image"

"The book does two things..."

(Bratton, An update to the Stack)

"The various genres of planetary scale computation can be seen not as different species of computation spinning out on their own but actually forming a coherent whole, The stack, an accidental megastructure that it is both a 1) computational apparatus ; 2) a new governing architecture"

1. Introduction: Rhizome

7 voci NOTE

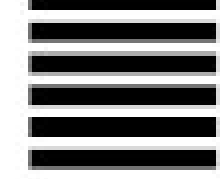
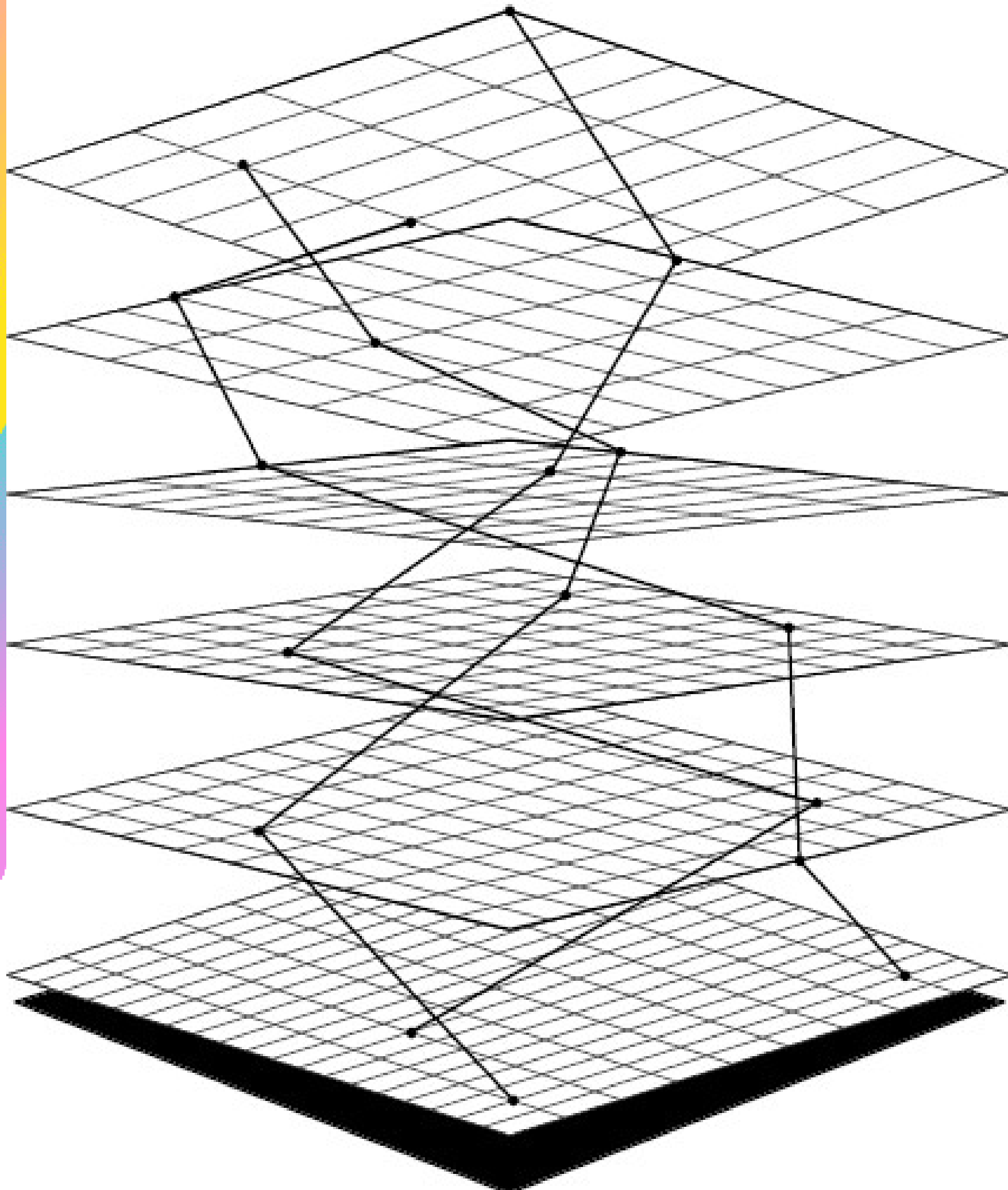
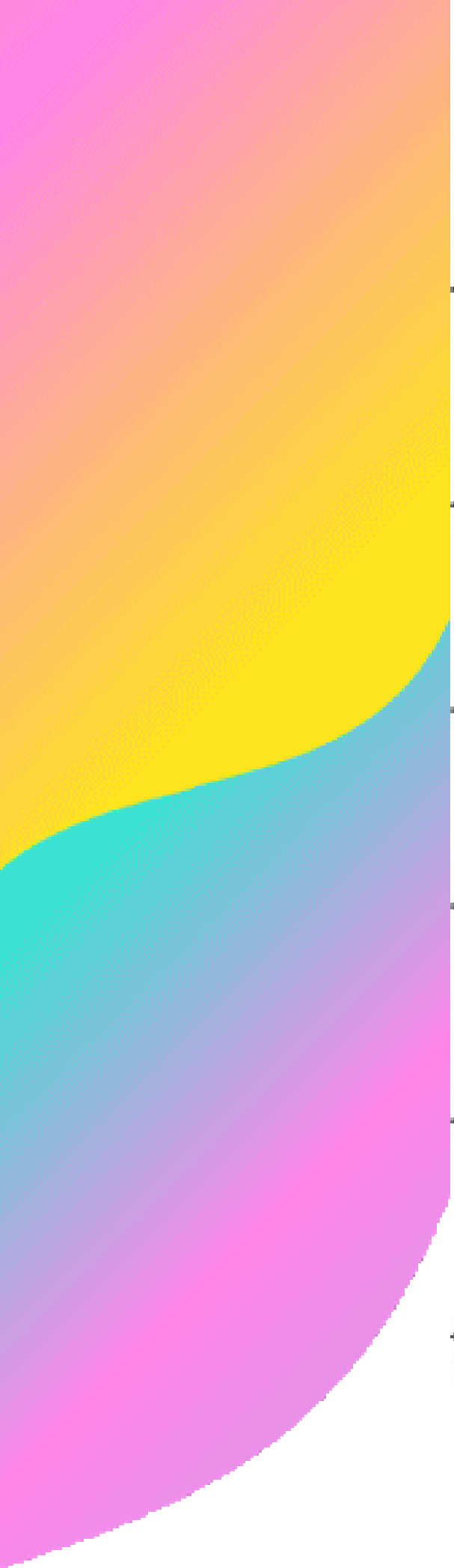
XIV piano piece for David Tudor 4

disegno del 1949
adeguate pianistica: 27.3.1959

SYLVANO BUSSOTI

- **A theoretical model to think about the complexity of digital practices**
- **Metanarrative for the Digital**
- **To think *in terms of* Stacks**

The Stack



**User
Interface
Address
City
Cloud
Earth**

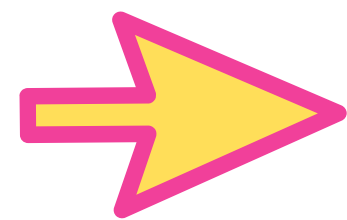
Interface

- A point of contact between two complex systems that governs the conditions of exchange between them
- Link and delink Users and the Addressed entities up and down columns
- "The projective, perceptual cinematic, semiotic layer on a given instrumental landscape, including the frames, subtitles, navigable maps, pixelated hallucinations, and augmented realities through which local signification and significance are programmed"
- REVERSIBILITY oscillation open/closed
- GUI, Virtual reality and the collapse of the metaphoriacal space between perceive object and its interpretation

Platforms

Suggested reading: pg. 41-70

"Platform not only as a technical model but also as a new institutional form of the 21st century besides states and markets but reducible to neither of them"



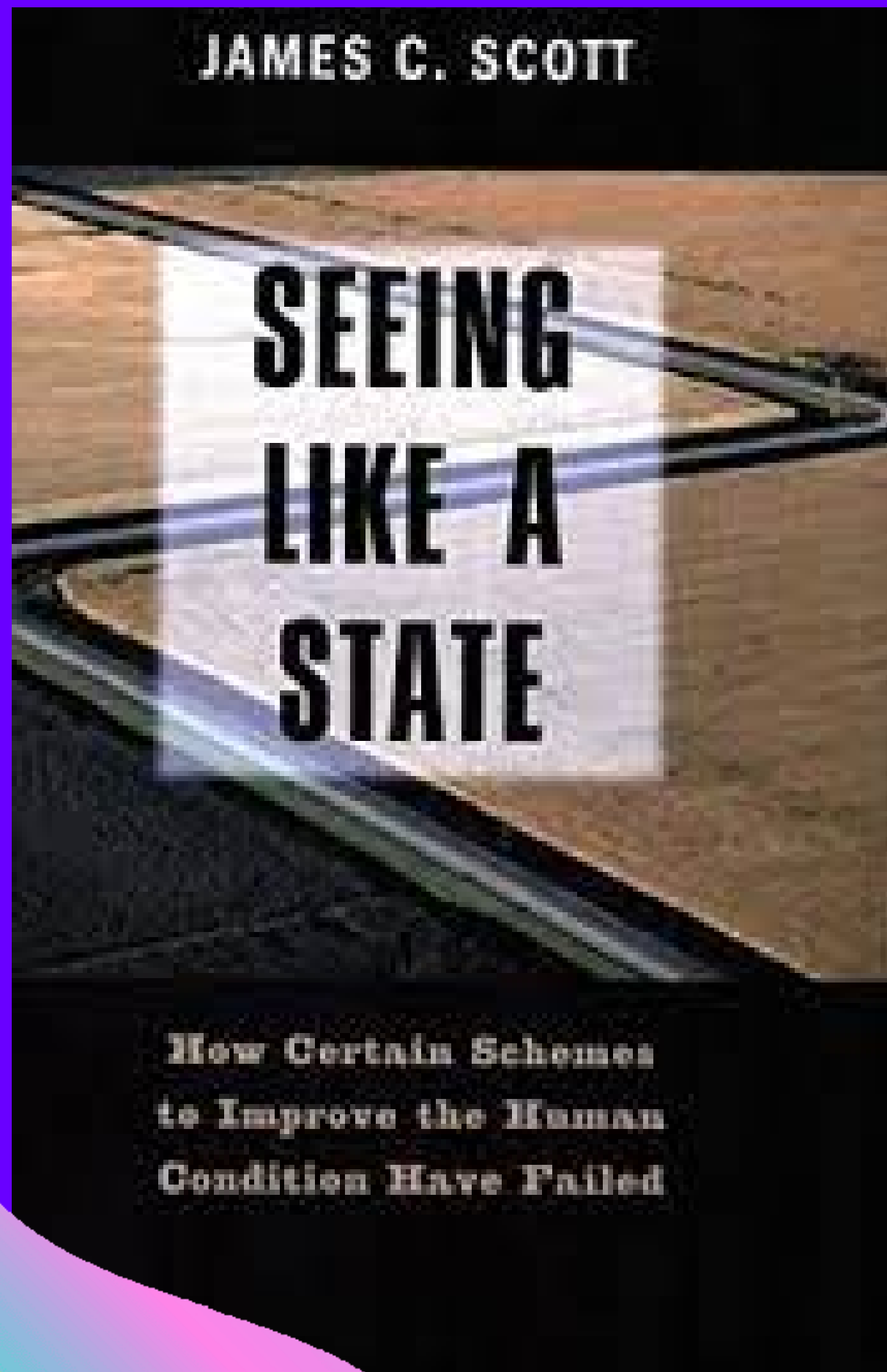
To think about platforms only as companies means to accept platforms' performative reductionism

Platforms

(Suggested) reading: pg. 41-70

"A standards-based technical-economic system that may simultaneously distribute interfaces into that system through their remote coordination and centralizes their integrated control through that same coordination"[374]

"A platform [...] is basically a framing and drawing machine"



"The utopian, immanent, and continually frustrated goal of the modern state is to reduce the chaotic, disorderly, constantly changing social reality beneath it to something more closely resembling the administrative grid of its observations." [Scott, 82]

- **Scotts reviews historical examples of radically simplified design of social organisation and natural environment imposed by the centralized State as the attempt to make society *legible*, to arrange the population in ways that simplified the classic state functions of taxation, conscription and prevention of rebellion;**
- **State simplification that creates abridged maps to intervene in exceptionally complex local contexts: they were maps that allied with State power would enable much of the reality to be remade;**
- **"Designed or planned social order is necessarily schematic; it always ignores essential features of any real, functioning social order";**
- **Examples: creation of permanent last names, cadastral surveys and population registers, designs of cities, organisation of transportation, design of scientific forestry and agriculture, soviet collectivization, compulsory villagisation in Tanzania**

Platforms

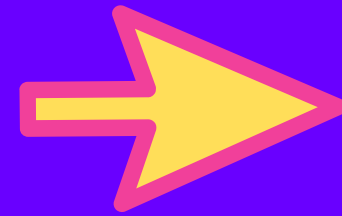
- **Centralization and decentralization**
- **Setting the stage for emergence as opposed to bureaucratic desired outcomes**
- **Platform as Theseus' ship**
- **Platforms treats errors and anomalies as signal of emergent patterns**

- Hayek: Central planners could never know or process the real information exchange within an economy in such a way to properly set prices
- Capitalist pricing problem: "Markets models can confuse the emergent effects of transaction liquidity with system planning and do so at the expense of artificially segregating and suppressing the real cost of near and long-term externalities"

"Platforms radically complicate any strong distinction between planned and markets economies" [375]

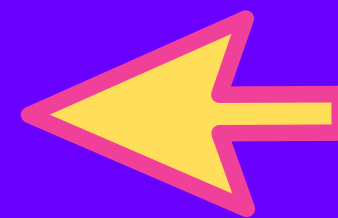
Synthetic catastrophe

**Platforms
absorbing
functions of States**



**States becoming
platforms**

**States move in the
Cloud**



**Cloud becomes de
facto States**

**Cashback? Privacy, digital labour,
fake news-infoglut, antitrust. Can we
think of them as separated
problems?**



"Like Foucault technologies, its mechanism are not representative of governance, they are governance. But unlike Foucault's archeology, its primary means and interest are not human discourse and human bodies but the calculation of all the world's information and the world as information"[8]

Machine as a State

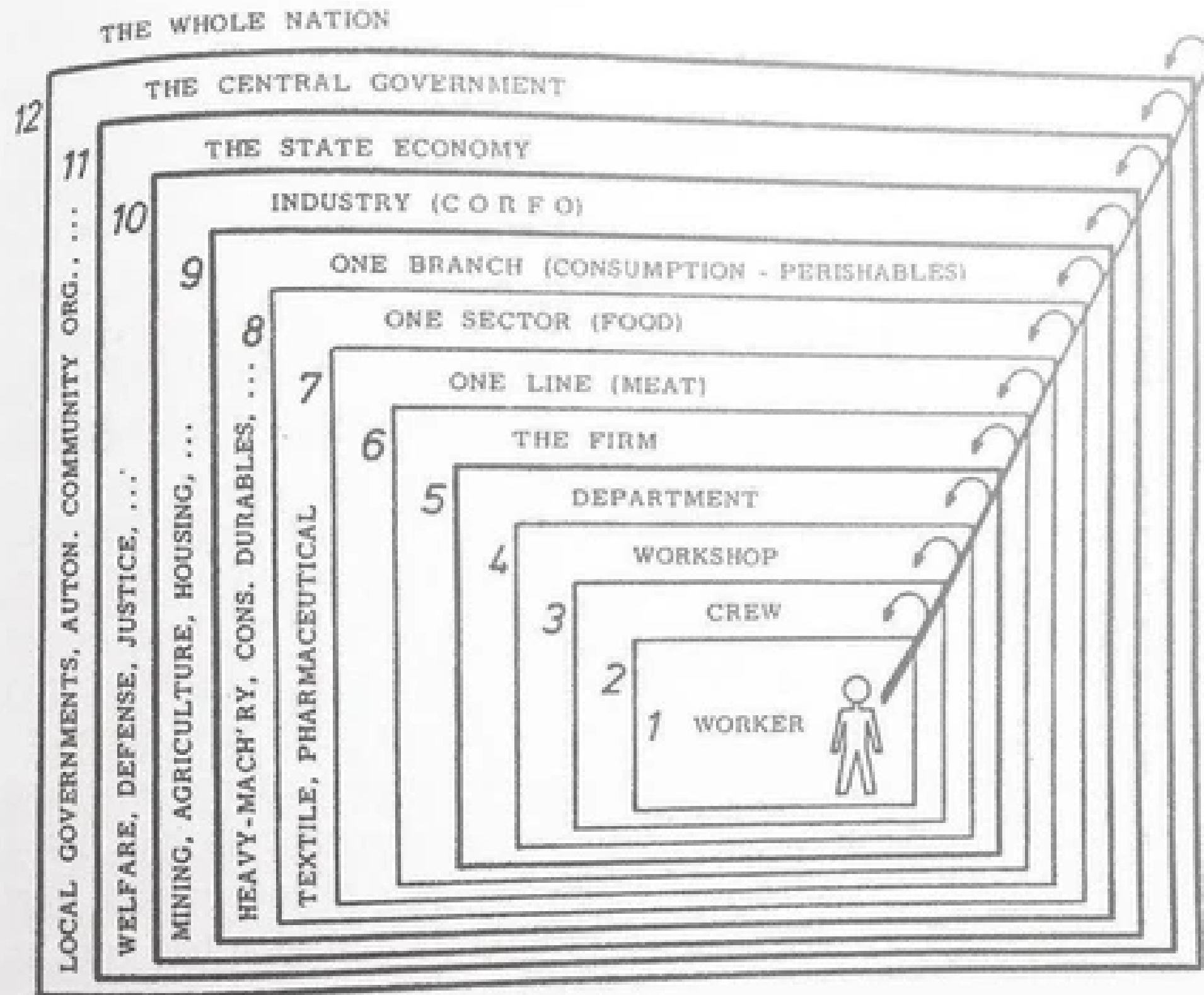


Figure 8.2

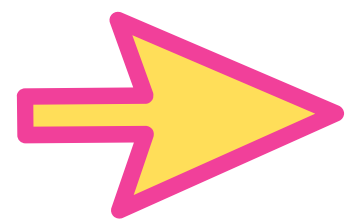
The worker is at the heart of all viable systems. Image taken from Herman Schwember, "Concepts and Tools of Computer-Assisted Policy Analysis" (Basel: Birkhäuser Verlag, 1973). Image used with kind permission of Springer Science+Business Media, Birkhäuser Verlag.

- **State of emergency: two meanings**
- "In western democracies there are still manuals solving the problems of the XX century with peculiar framings of Talleyrand or Louis Philippe" - [Introduction by Schmitt, *Le categorie del politico*, 23]
- "The modern opinions on law and legality adjust on the rapidity of the techno-scientific-industrial progress" [24]
- Schmitt was concerned with the new subjects of politics (not only States)
- Automating the decision on the emergency/exception

Nomos of the Cloud

- "Globalization has delinked sovereignty for geography" (A delamination of sovereignty)
- Genealogy of modern politics:

Land - Sea - Air



Cloud

Nomos of the Cloud

"The model provided and enacted by global Cloud platforms to cohere Users into proto-state entities. These entities may operate at the scale of a true state and may come into political geographic conflict with states accordingly"

Google
Grossraum,
Cloud
Polis

Designing software infrastructure

- **Software as architecture of politics**
- **Conflicts of normativity: Infrastructural vs Legal**
- **From the design for the User to the design of the User**
- **The real subject of the book: Design - Speculative design - Geodesign**

**Software
infrastructure:
an 'arcana
matematica
imperii'
[Pasquinelli]**

**Thanks for your
attention!**

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