

ouees-202106 topic 10: Social implication of cloud computing

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On the internet

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Lecture notes and reporting

- <https://github.com/jj1bdx/oueees-202106-public/>
- Check out the README.md file and the issues!
- Keyword at the end of the talk
- URL for submitting the report at the end of the talk

Topic of this video:

Social implication of cloud computing

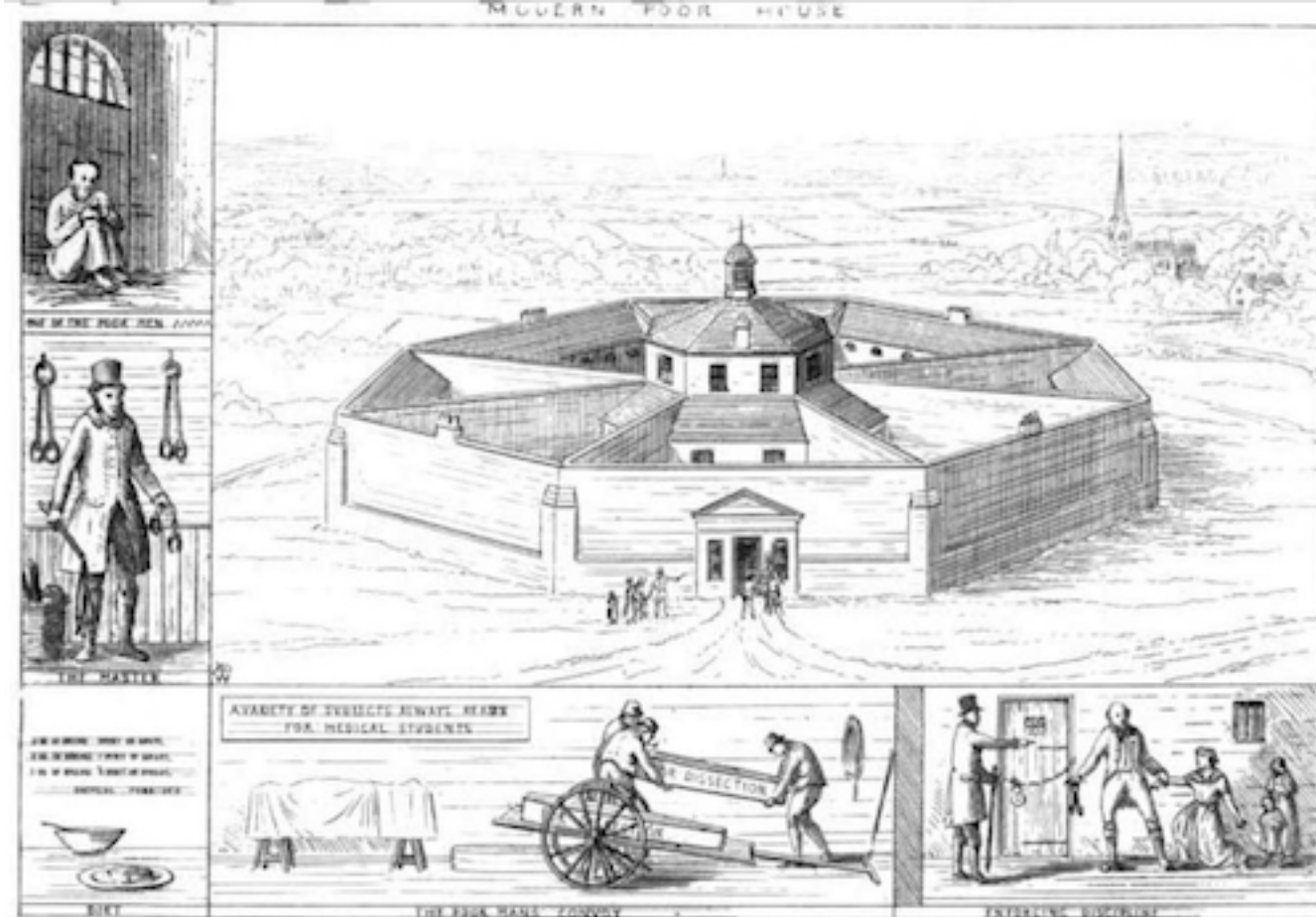
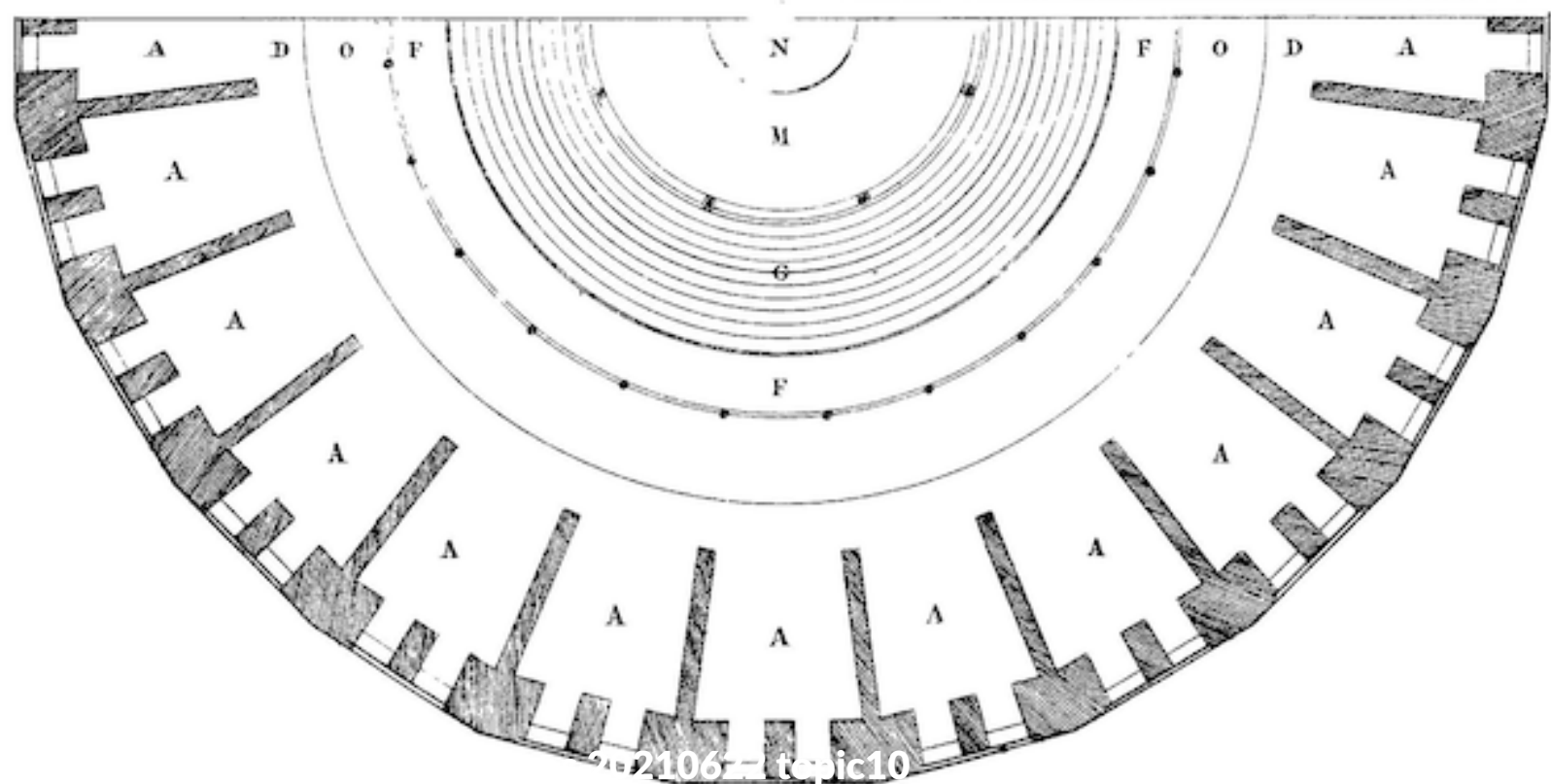
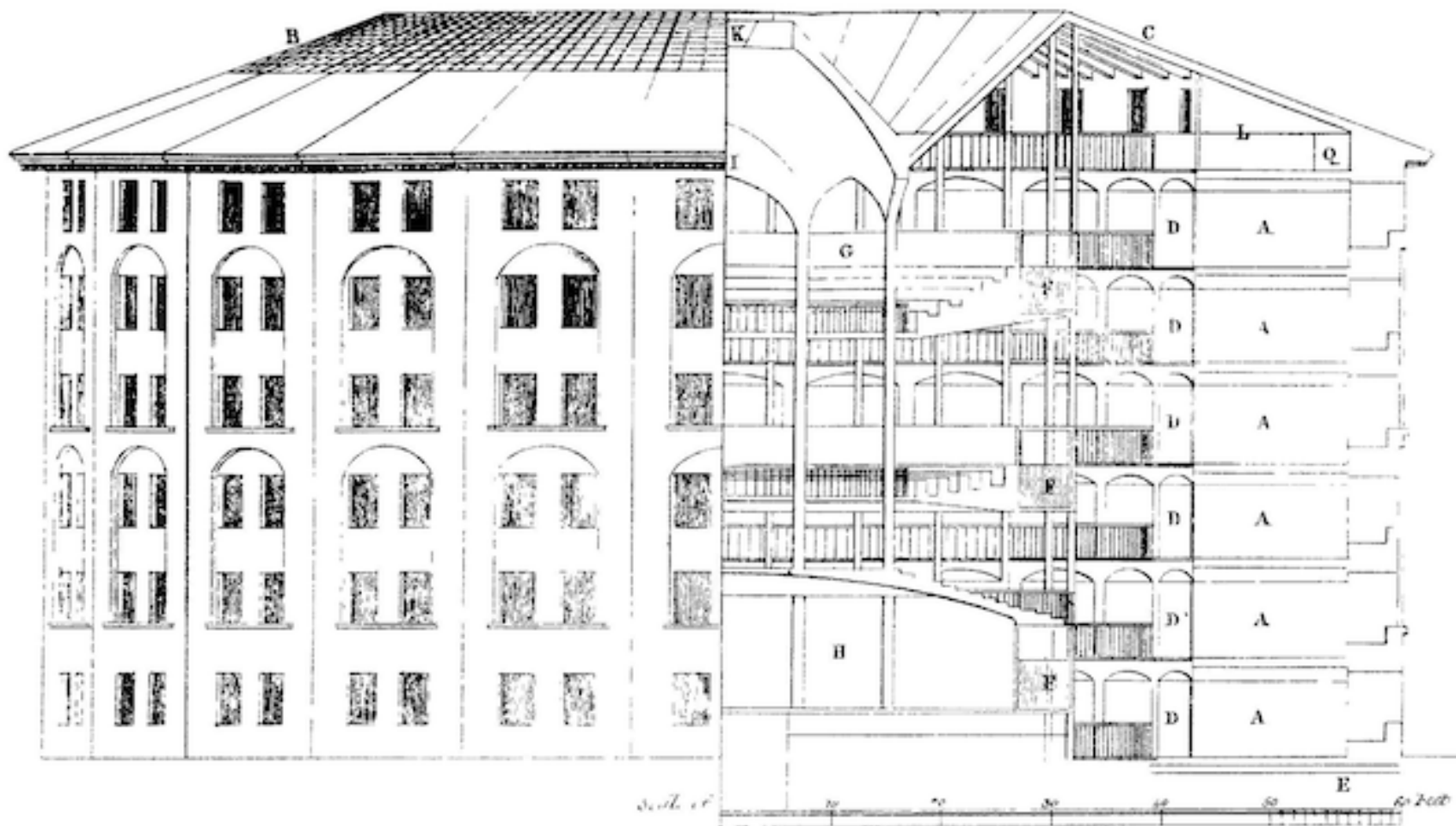
Centralized social behavior accelerated by cloud computing

- Sharing *everything* - no privacy
- *Panopticon* ¹ style of governance, filtering, *censorship*, or *autocracy*
- Complete *externalization* of resources, leading to *no personal control*

¹ n. a circular prison with cells arranged around a central well, from which prisoners could at all times be observed.
(New Oxford American Dictionary, Apple macOS 10.13.6)

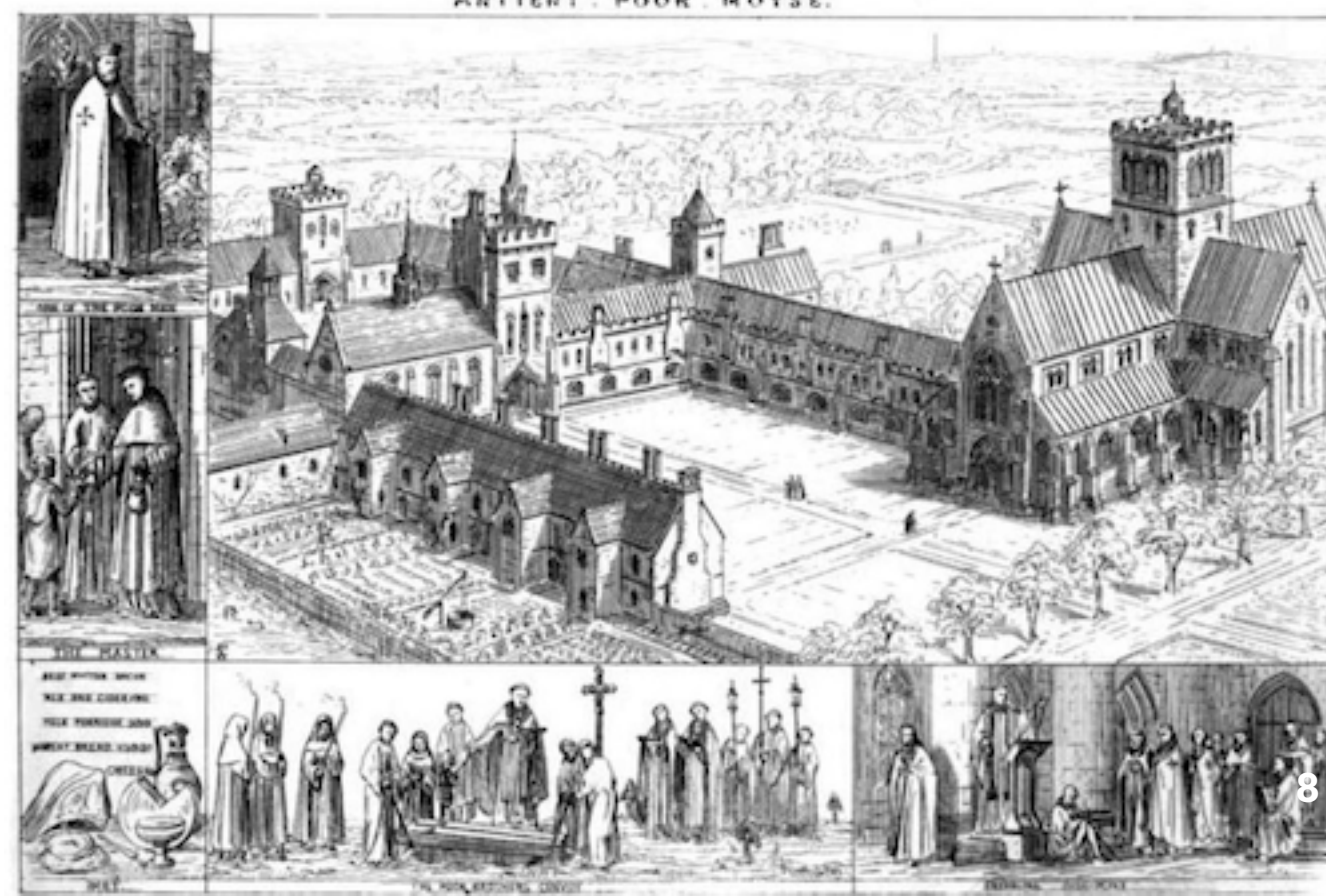
Presidio Modelo: a panopticon prison





CONTRASTED RESIDENCES FOR THE POOR

ANTIENT POOR HOUSE



INGSOC: the slogans ²

- War is peace
- Freedom is slavery
- Ignorance is strength
- Independent thinking = *thoughtcrime*

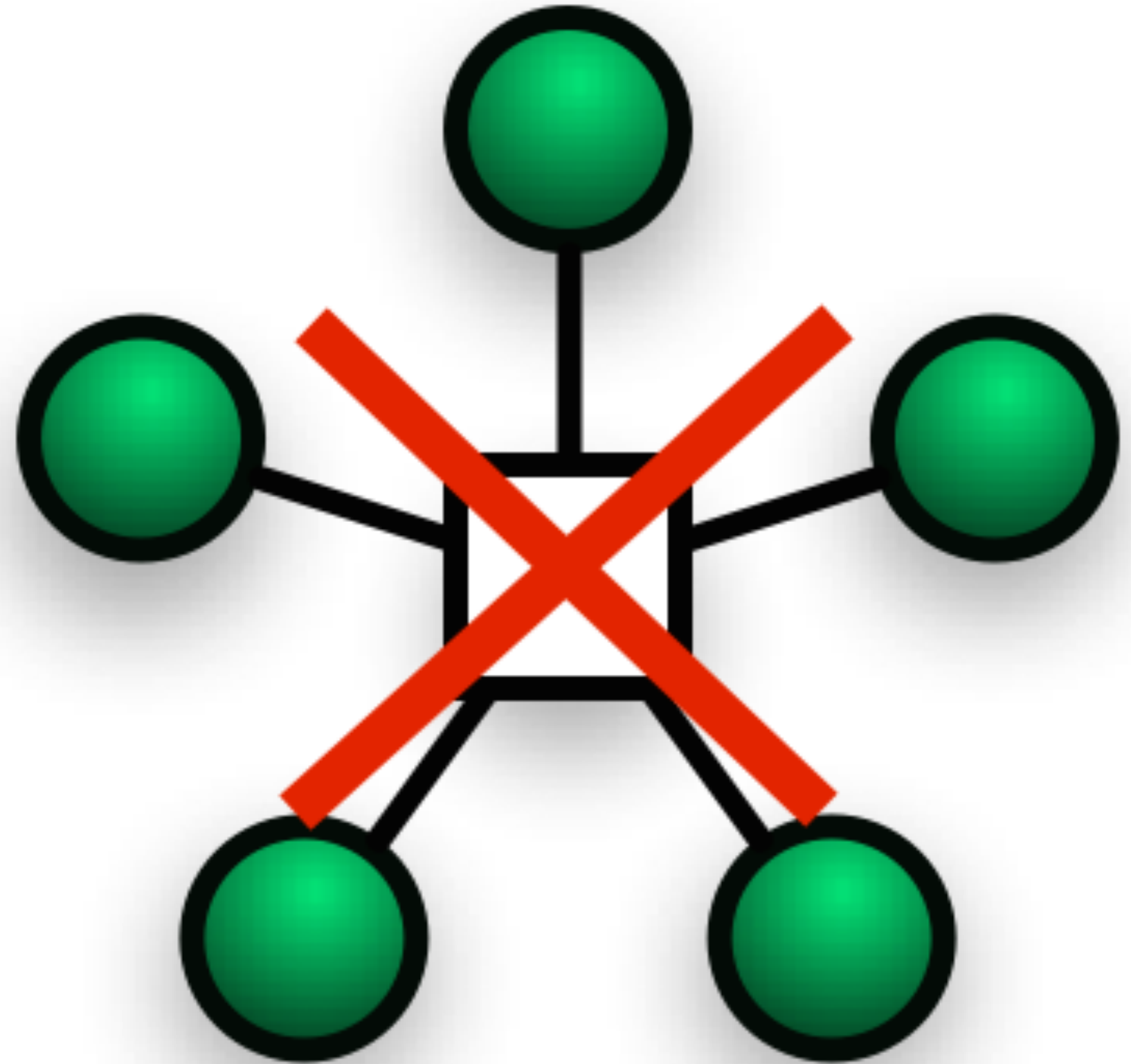
NOTE: this is a *fiction*!

² George Orwell, "Nineteen Eighty-Four", 1949.

Why cloud computing has become so *dystopian*? -- because we have sold freedom for *convenience*

- Ubiquitous/global accessibility
- Concentrated data for easy analysis
- Easy control of the information flow
- No extra cost for sharing
- No need to think about where the information locates

The inconvenient truth of centralized systems: what if the core/cloud fails?



Inconvenience of centralized systems

- Ubiquity or *no accessibility*
- When the core fails, no alternative
- When the core loses data, *no backup*
- The system performance is restricted by the capability of the core
- Endpoint systems will lost *all capabilities*

Centralized systems are *not* sustainable

- ...then how cloud computing systems manages the sustainability?

Distributed systems provide
sustainability and resilience against
failures

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