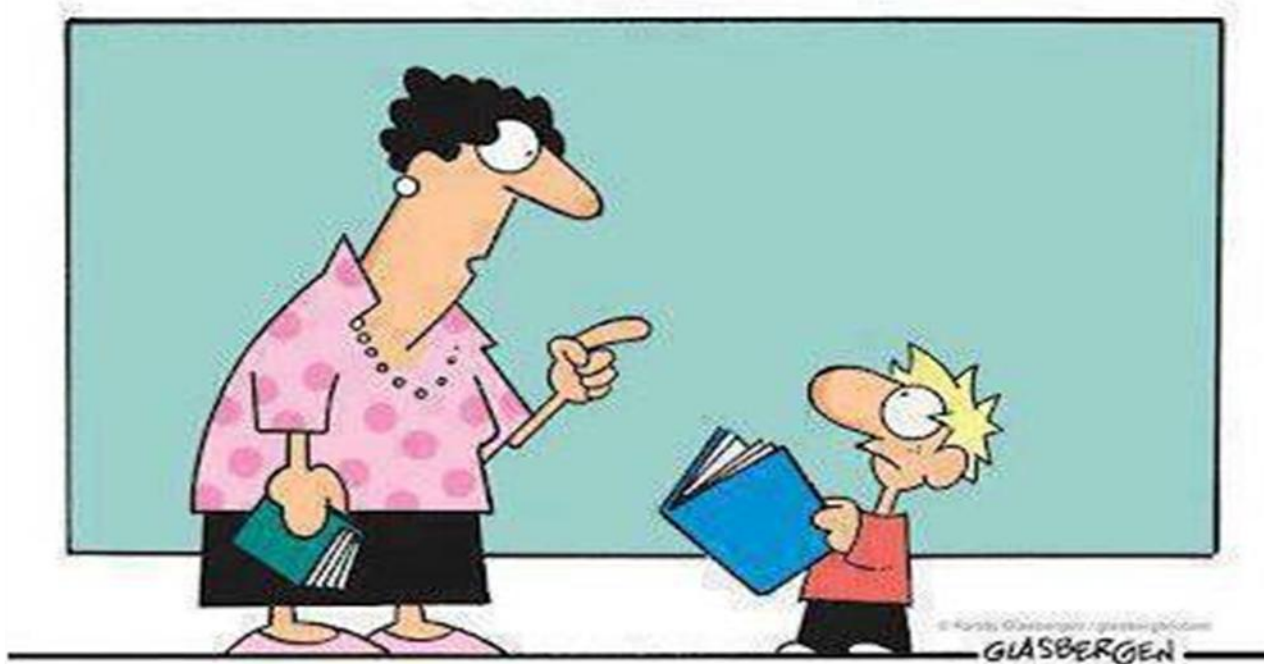


Networks and social change

JOÃO CARAÇA

Calouste Gulbenkian Foundation

UNICA, 16 October 2015, Brussels



It's called reading.
It's a process to install new software in your
brain.

- Networks are patterns of interaction due to flows of exchange
(goods, objects, messages, symbols)
[adapted from Castells, 2000]
- A network is a set of interconnected nodes – it can have hubs but no centre
- Networks constitute a fundamental pattern of life
- Networks include / exclude

Types of networks

- Bulk-goods networks
- Political / military networks
- Prestige-goods networks
- Information networks

[from Chase-Dunn & Hall, 1997]

Types of networks

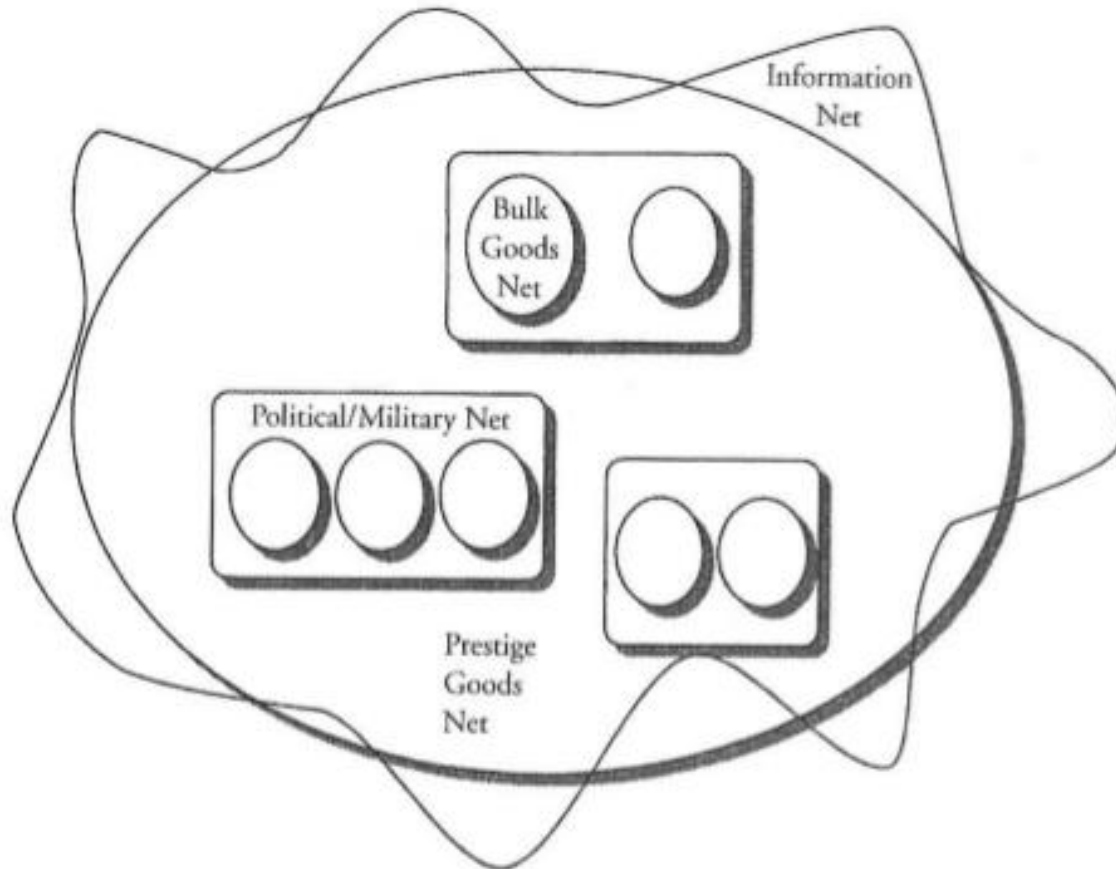


FIGURE 3.1 Nesting of the Boundaries of the Four Networks of Exchange

evolving structures of knowledge...

- XIV **Renaissance** / gunpowder / paper / 'France', 'Italy'
- XV **Discoveries** / linear perspective / printing press / Portugal, Florence, Venice
[subject & object]
- XVI **Circumnavigation** / mechanics / optics / Portugal, Spain, Venice
[ethics & politics] + [light & vision]
- XVII **Westphalia** /academies of science / United Provinces, France, UK
[public & private] + [theology & philosophy] + [space & time] + [matter & mind]
- XVIII **Enlightenment** / progress/ France, UK, Austria
[state & church] + [science & philosophy]
- XIX **Nation state** / modern universities / UK, Prussia
[economy & society] + [ownership & production]
- XX **Welfare state**/ technoscience / 2 cultures / US, USSR
[home & work] + [science & technoscience]
- XXI **e-networks** / cultural macedoine / big data / ???
[&&&&&&...]

... leading to changing values & a separation of cultures

evolving structures.../ changing social order...

XIV **Renaissance** / gunpowder / paper / 'France', 'Italy'

XV **Discoveries** / linear perspective / printing press / Portugal, Florence, Venice
[subject & object]

*water
mills*

XVI **Circumnavigation** / mechanics / optics / Portugal, Spain, Venice
[ethics & politics] + [light & vision]

XVII **Westphalia** /academies of science / United Provinces, France, UK
[public & private] +[theology & philosophy] + [space & time] + [matter & mind]

wind

XVIII **Enlightenment** / progress/ France, UK, Austria
[state & church] + [science & philosophy]

XIX **Nation state** / modern universities / UK, Prussia
[economy & society] + [ownership & production]

coal

XX **Welfare state**/ technoscience / 2 cultures / US, USSR
[home & work] + [science & technoscience]

XXI **e-networks** / cultural macedoine / big data / ???
[&&&&&...]

oil