

# **Sharing cities rising to the challenges of technological change and democratic crisis**

---

**From imagined community to community of practice**

**Sharing Cities Summit**

**November 12, 2018**

**Barcelona**

**Yochai Benkler, Harvard University**

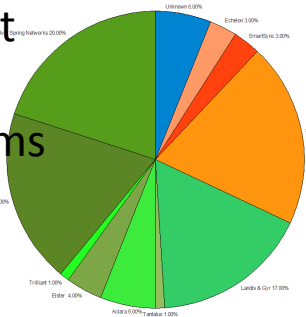


a multilingual free  
encyclopedia  
**Wiktionary**  
['wɪkʃənɹɪ] n.,  
a wiki-based Open  
Content dictionary  
Wilek ['wɪl kənɪ]



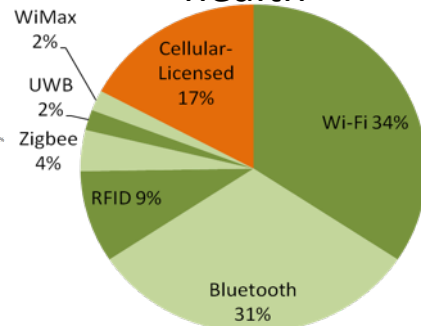
Smart  
Grid  
Comms

Market share by company and technology



The Wi-Fi community built by you  
Get wireless broadband at over 3 million locations in the UK  
and across the world simply by sharing some of yours

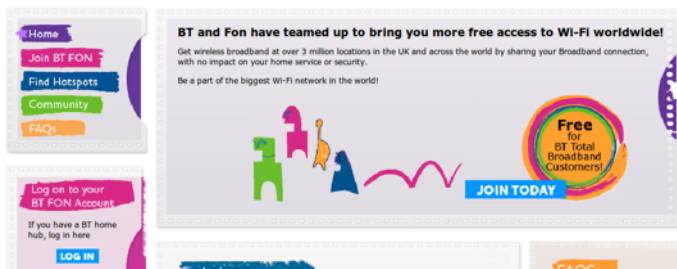
health



I E T F

Across the information and communications  
infrastructure, commons-based strategies  
succeeded over years in providing the basic  
infrastructure of communications and knowledge

connectivity



Centralized  
Authority/Control

more / less  
participatory/ corrupt

Monopoly  
Big corporations  
Industry coordination

States

More/less  
devolution/  
subsidiarity

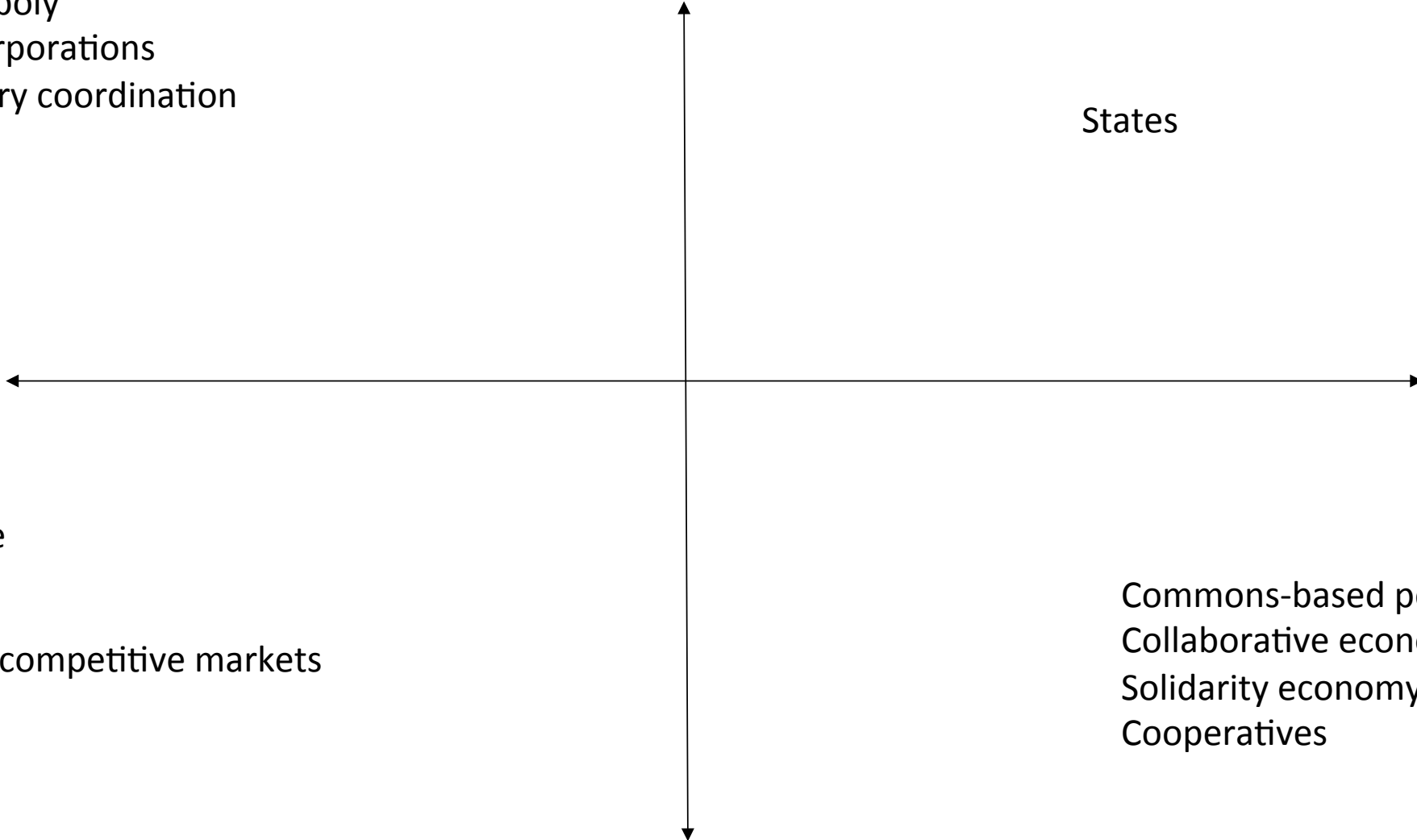
Market =  
Property  
Wage  
Commodity  
Exchange

Non-market  
Social relations

~ competitive markets

Commons-based peer production  
Collaborative economy  
Solidarity economy  
Cooperatives

Decentralized  
Competition – Coordination – Cooperation



Centralized  
Authority/Control

States: more / less  
participatory/ corrupt

Monopoly  
Big corporations  
Industry coordination

More/less  
devolution/  
subsidiarity

“Golden Age”  
of capitalism  
1945-1973~

Liberalization/  
Neoliberalism  
1980s=>2007~

Market =  
Property  
Wage  
Commodity  
Exchange

Non-market  
Social relations

~ competitive markets

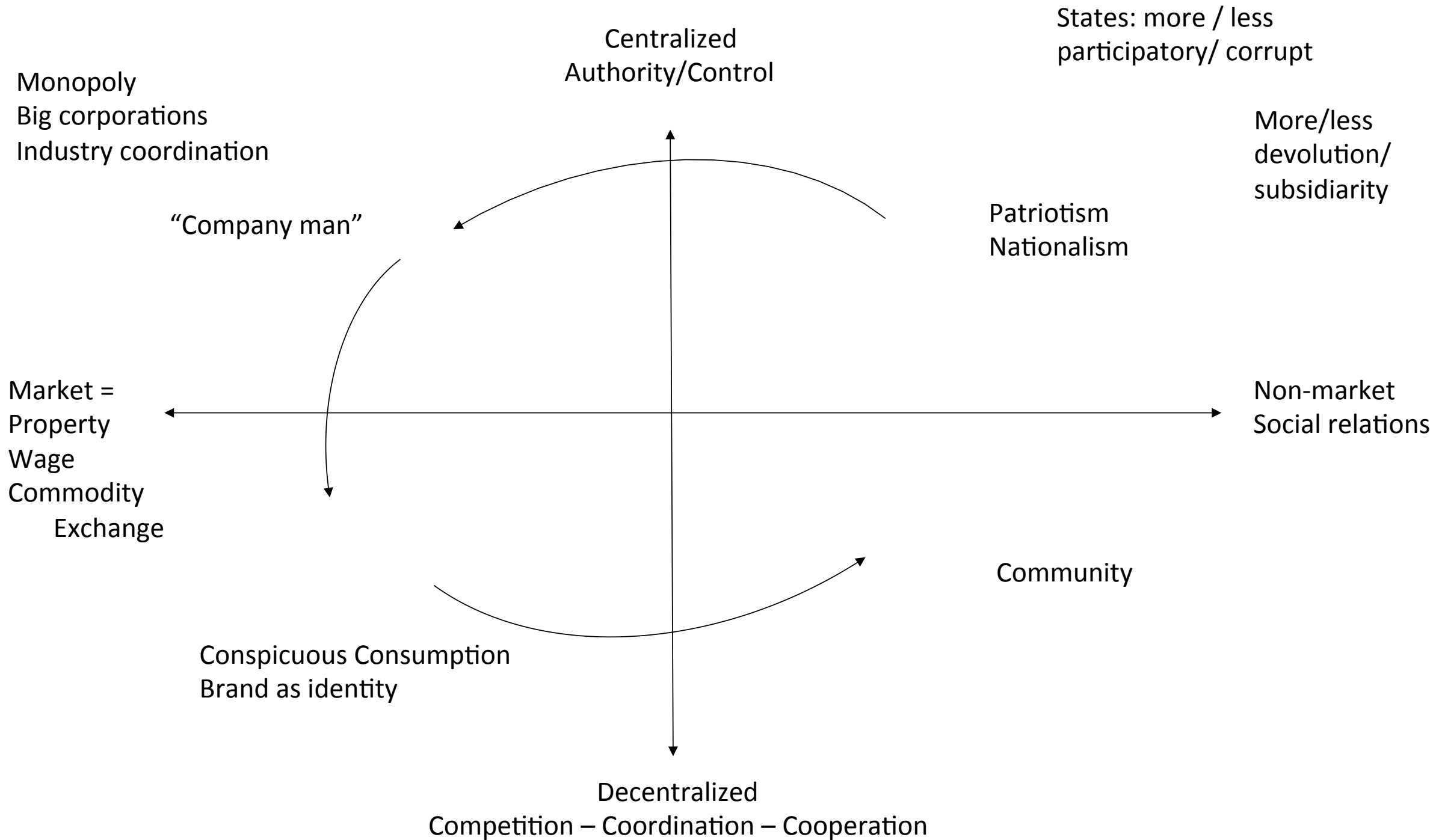
Social production  
Freedom in the commons

Decentralized  
Competition – Coordination – Cooperation



a multilingual free  
encyclopedia  
**Wiktionary**  
[ˈwɪkʃənəri] n.,  
a wiki-based Open  
Content dictionary  
Wiktionary [wɪkʃənəri]





Centralized  
Authority/Control

States: more / less  
participatory/ corrupt

Monopoly  
Big corporations  
Industry coordination



Nationalism

More/less  
devolution/  
subsidiarity



Non-market  
Social relations

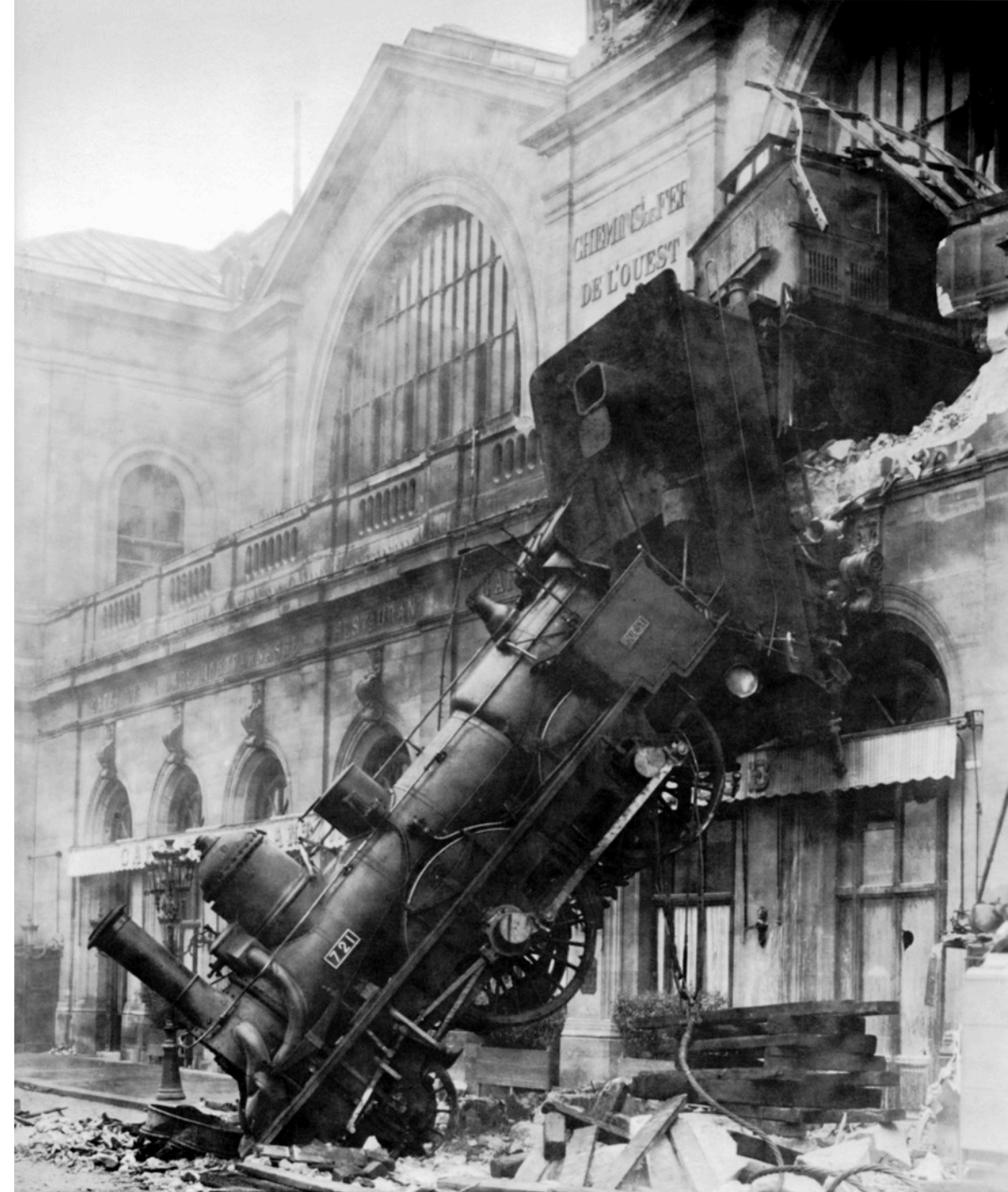
Market =  
Property  
Wage  
Commodity  
Exchange



Decentralized  
Competition – Coordination – Cooperation









Exogenous, deterministic

**Technology**



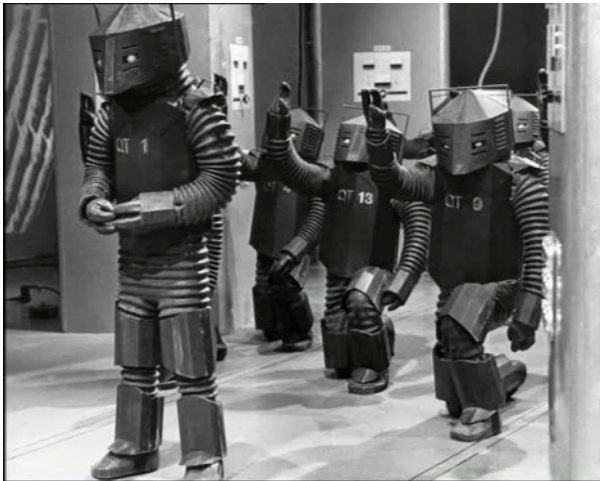
~Efficient, deterministic

**Markets**



Adapt or decline

**Society**

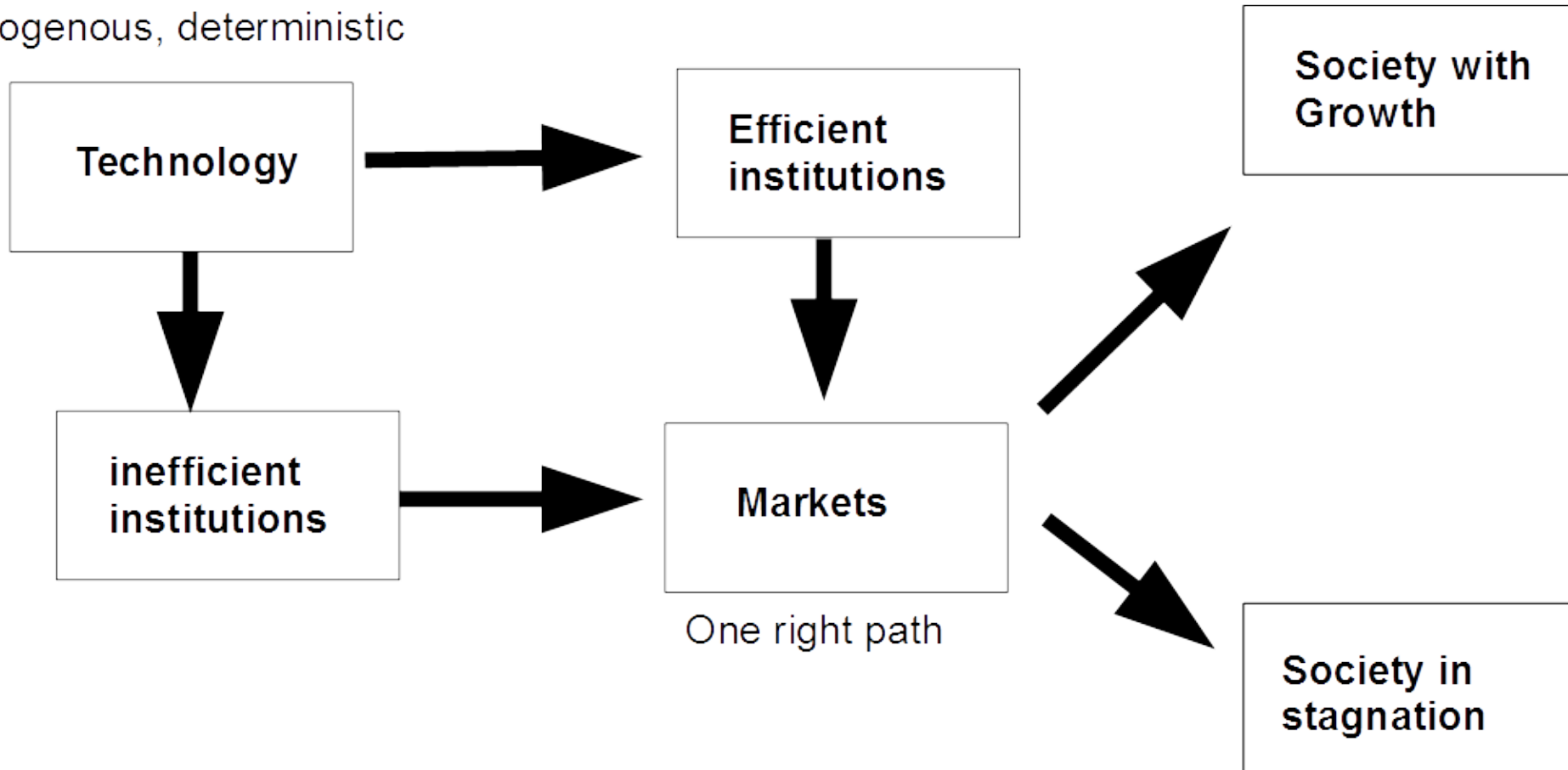


Robots will take the jobs

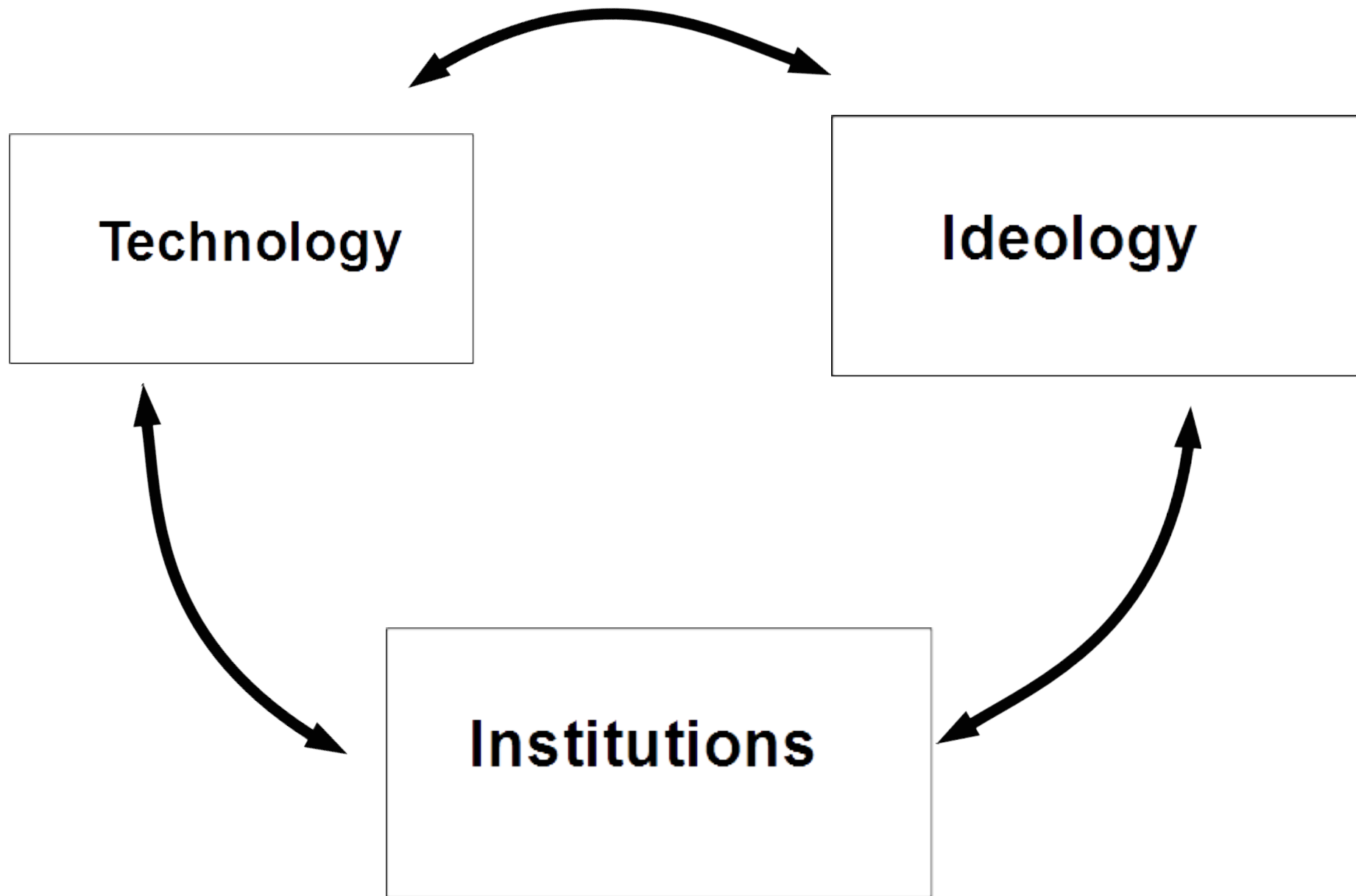


Platforms will casualize work

Exogenous, deterministic



If you, the regulator/legislator, do not get with the program, your society will fall off the train





J Ind Compet Trade (2011) 11:309–324  
DOI 10.1007/s10842-011-0109-2

---

## Barcode Empires: Politics, Digital Technology, and Comparative Retail Firm Strategies

Bartholomew C. Watson





Low-cost, low-service, high turnover  
Leveraging data for power over suppliers and workers to achieve cost-squeezing-based profits

Shopkeepers → Retailers

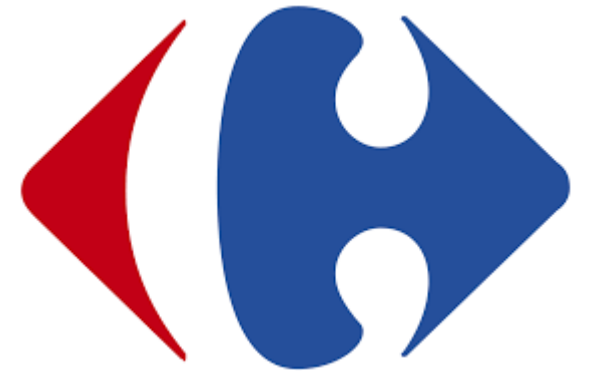
**Dansk  
Supermarked**

Relational contracting with suppliers, long-term employee relationships, high-unionization, higher union coverage, training and high-value strategy

Shared overall patterns => technology matters

High diversity on the most important social dimensions => politics, institutions, culture matter

Local regulation, like zoning, played an important role

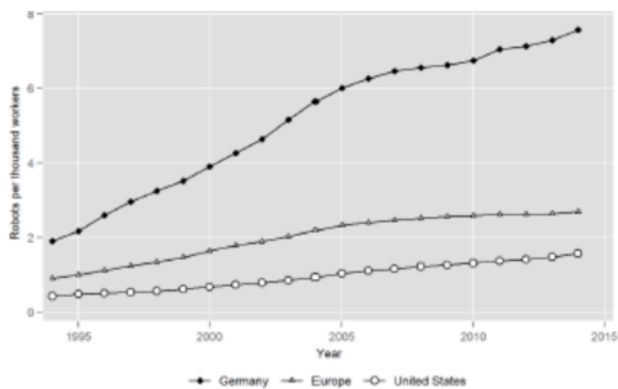


Vertical integration; limited coalitions with workers; direct competition with suppliers

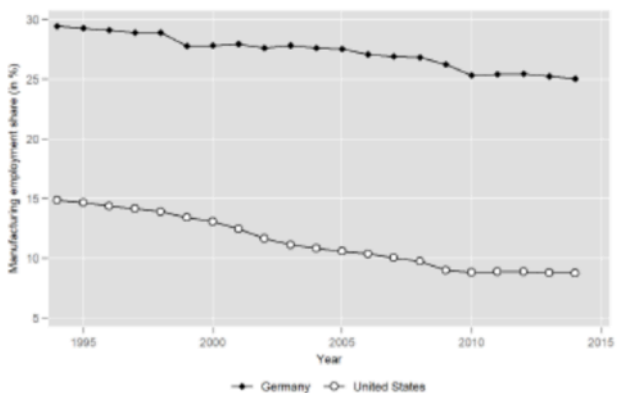
## German Robots – The Impact of Industrial Robots on Workers

Wolfgang Dauth  
Sebastian Findeisen  
Jens Güdelum  
Nicole Wübner

ISSN 2195-2663



(a) Industrial robots.



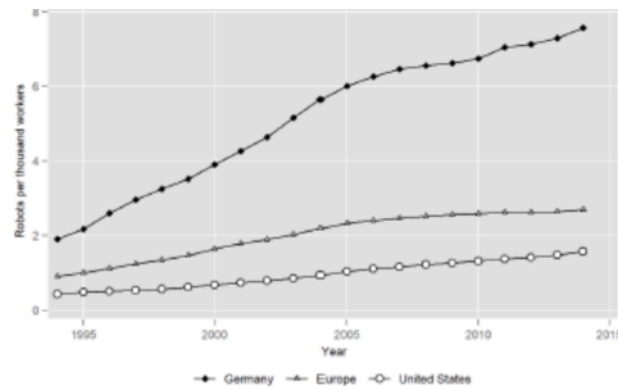
Robotics density in manufacturing higher in Germany than US for decades, but manufacturing employment declines more in US

Politics, unions, co-determination all work to contain patterns of adoption

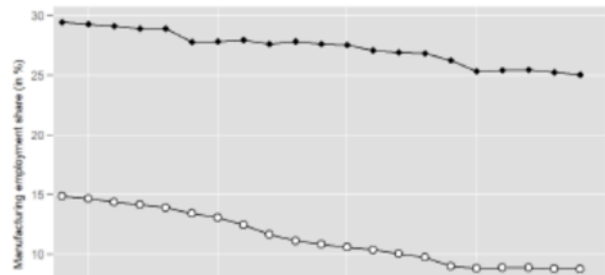
## German Robots – The Impact of Industrial Robots on Workers

Wolfgang Deuch  
Sebastian Findeisen  
Jens Güdelum  
Nicole Wölner

ISSN 2195-2663



(a) Industrial robots.



“Cobots” emerging as fastest growing segment

Too soon to tell if the “these robots complement human labor” is

=> lip service to calm political anxieties about the future of work;

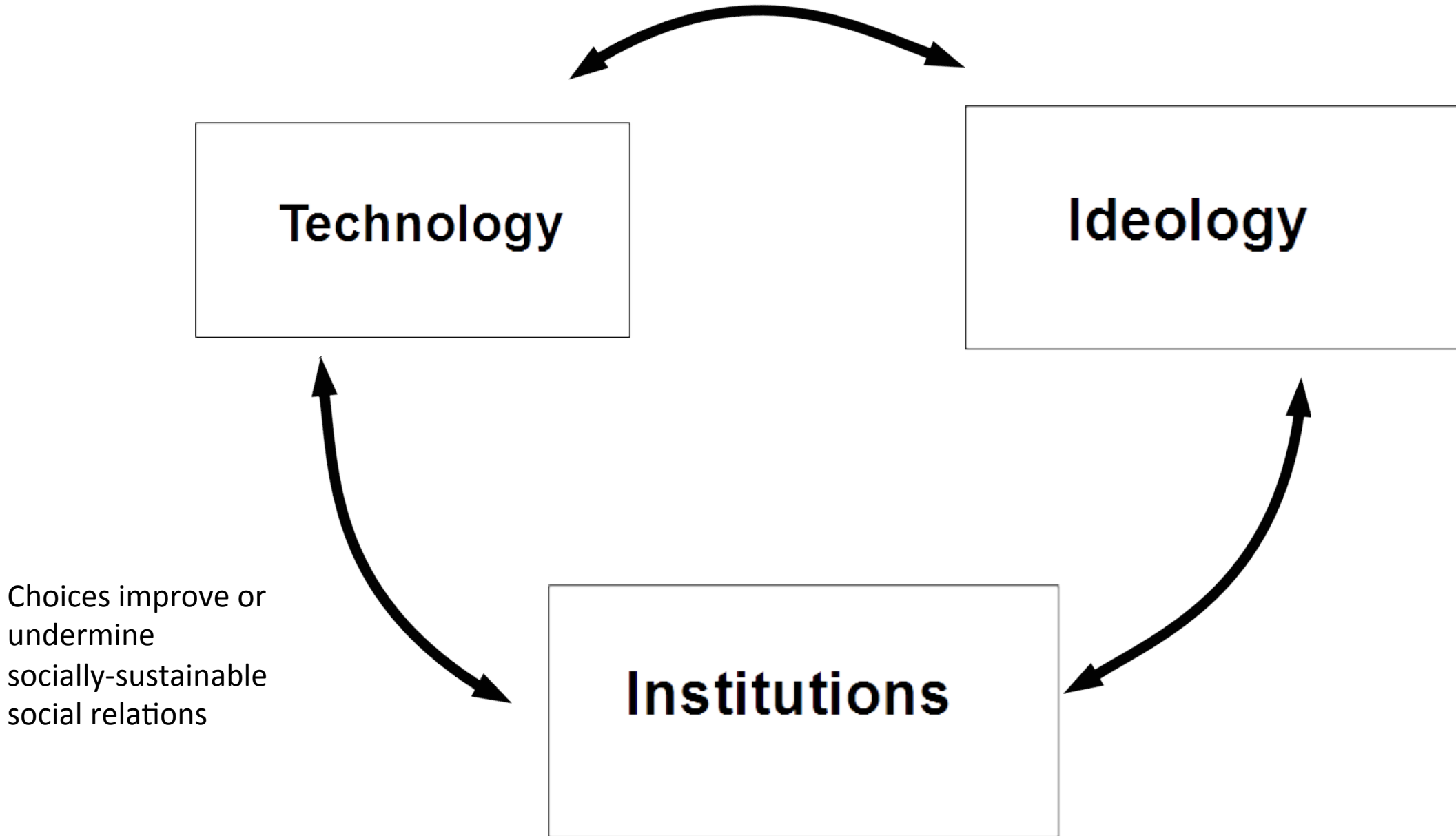
=> straight up efficiency-driven improvement

=> A shift in the direction of innovation from labor-displacement to labor-complementarity in response to political-institutional dynamics

# COBOTS OFFER GAME CHANGING BENEFITS

Cobots from Universal Robots give companies access to all the benefits of advanced robotic automation, with none of the extra costs associated with traditional robot programming, set-up, and dedicated, shielded work cells. This makes robotic automation affordable for SMEs, small-batch production runs, and other setups where it would otherwise be too expensive.

[WATCH VIDEO](#)







# Platforms: Choices

consumers



vendors



Neighbors,  
Co-Workers  
Peers



Neighbors  
Co-Workers  
Peers



- Lower transactions costs ✓
- Regulatory avoidance ✗
- Negative externalities ✗

# Platforms: Choices



~8.5M use Daily / Weekly

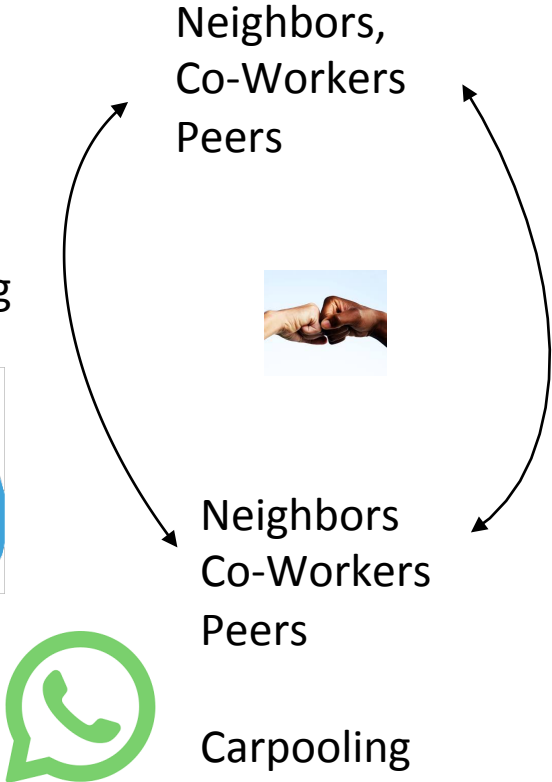
consumers



vendors

- Technological ensemble is identical
- Social-economic model different
- Meaning is difference

~13.6M in 2016  
commute to work      ~x2 mass transit  
x15 cycled



# Cities: Choices



# Efficiency/Innovation vs. Community?

---

- False choice: profitable for someone  $\neq$  efficient!
- Sidewalks, streets, squares, parks:
  - **Without commons cities would not be cities**
  - **Commerce and community are impossible without robust commons**





# Sharing Cities Declaration

---

**Consumer ↔ Vendor**  
**Commodified exchange**



**Peer ↔ Peer**  
**Social production**

**Precarious labor &**  
**Extractive profits**



**Fair economic model &**  
**rewards**

**Form contracts of**  
**adhesion**



**Participatory community**  
**governance**

**Proprietary & opaque**  
**Tech & Data**



**Open & transparent**  
**Tech & Data**

**Regulatory arbitrage /**  
**Responsibility avoidance**

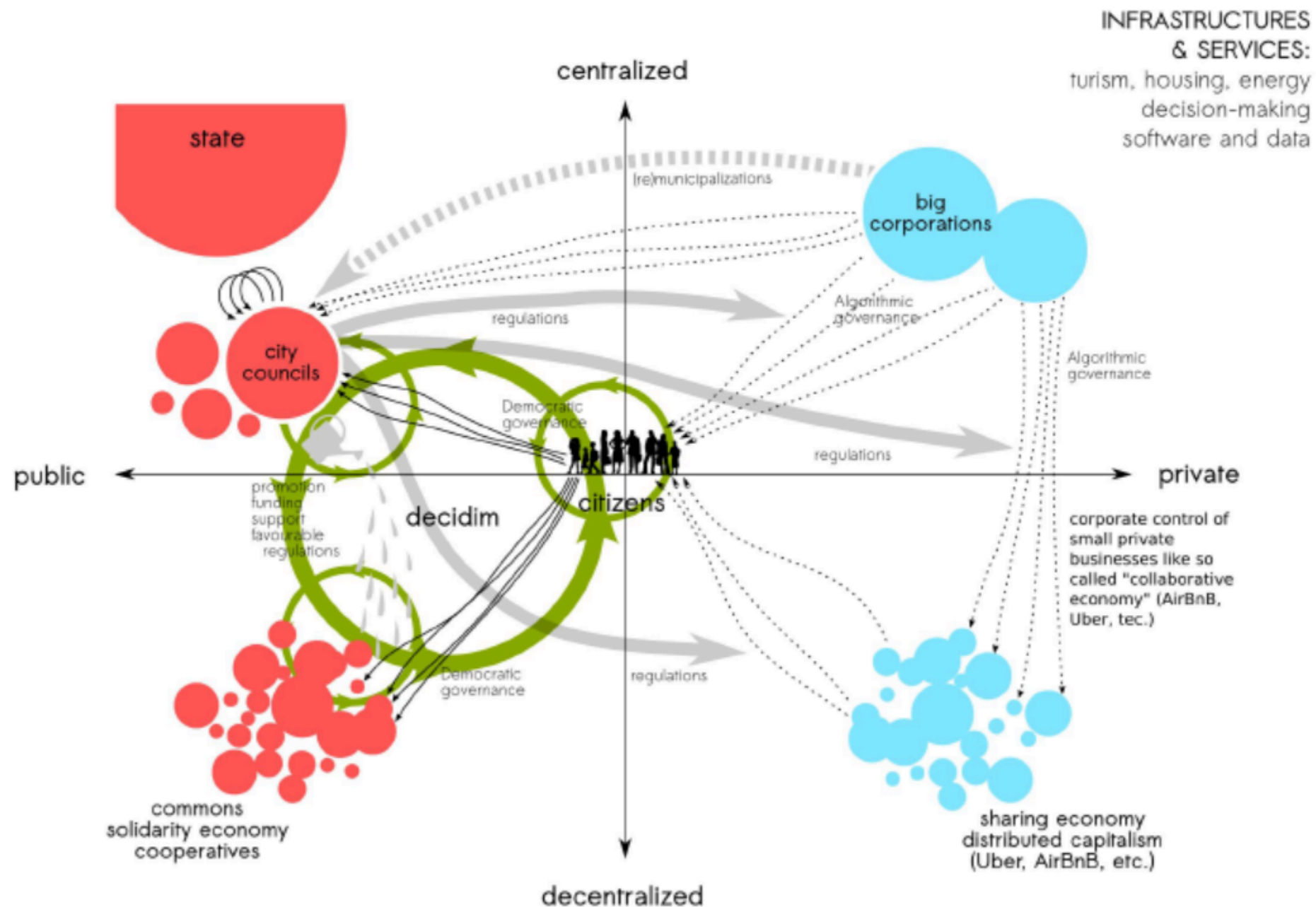


**Responsibility for impact; duty**  
**to avoid, mitigate, redress harm**

# Not just a “sharing cities” issue!

---

- “5G” => *ubiquitous high capacity wireless connectivity*
- IoT => where is data stored and how is it controlled
- “Blockchain” => what kind of decentralization?
- AI is all about policy choices
- Mobility
- Governance



# **Why care? Why Cities?**

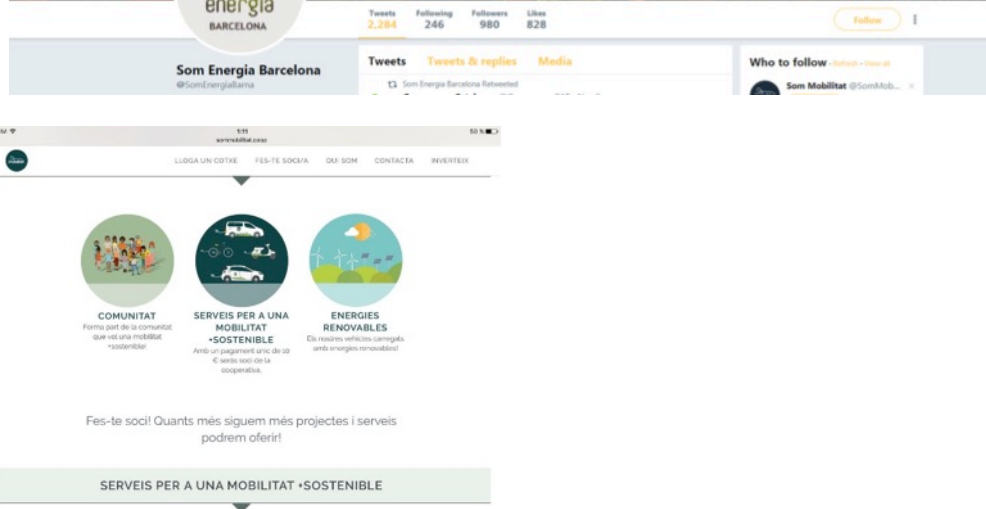
---

- **Threat: Rising nationalism and illiberal majoritarianism**
  - Driven by diverse mixes of economic insecurity and identity threat
- **Cities can make a difference in people's day-to-day experience**
  - E.g. cities cooperation around the global climate crisis
- **Cities can offer hundreds of millions of people a real, lived experience of socially-embedded production and meaningful participatory democracy**
- **Cities are where we can experiment with combining technological freedom with participatory public administration**



# Imagined Community => Community of Practice

Instead of imagined community based on abstract notions of us/them, cities can build the real experience of *community of practice based on making and doing together*





#### Involved in the debate



#### Research

