

# TA and STI policy as dancing partners

Critical insights in the new spirit of Technology Assessment

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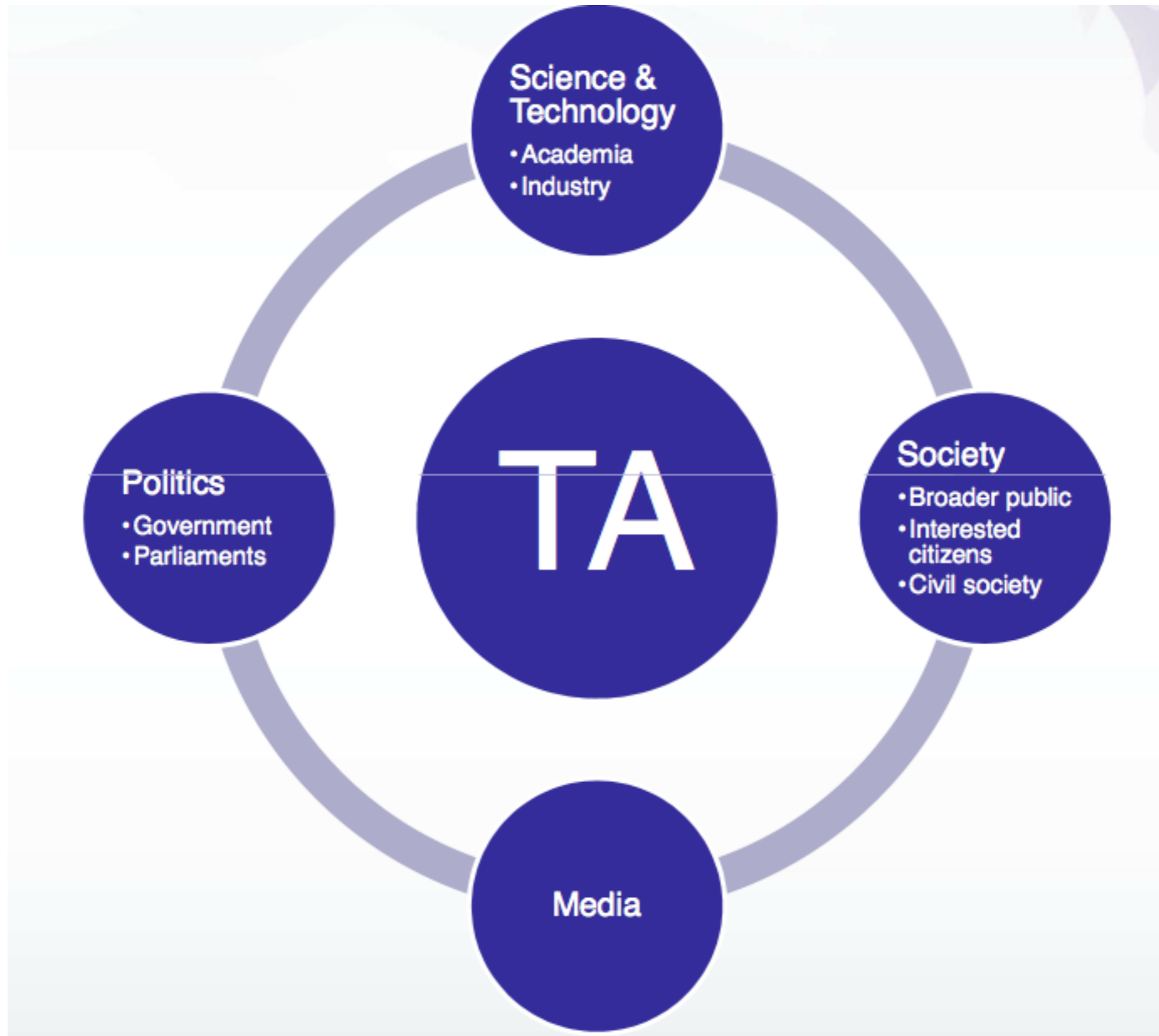




# Overarching themes

- The rise, fall and possible renaissance of institutionalized Technology Assessment (TA)
- A power of capture of TA through interactive dynamics with STI
- TA are embarked in broader issues...
- ... where they (are asked to) act as « **test legitimators** » by exerting a **critical capacity on STI** (Boltanski & Chiapello 1999)

# TA as an institutional boundary space



# Institutionalized TA

- A concept imported from the US to Europe
- Link with the political world
- Multiple missions of anticipation and evaluation of STI...
- Focus on impacts on society, political agenda and connection with decisional processes

# 1972: A « proud reaction »

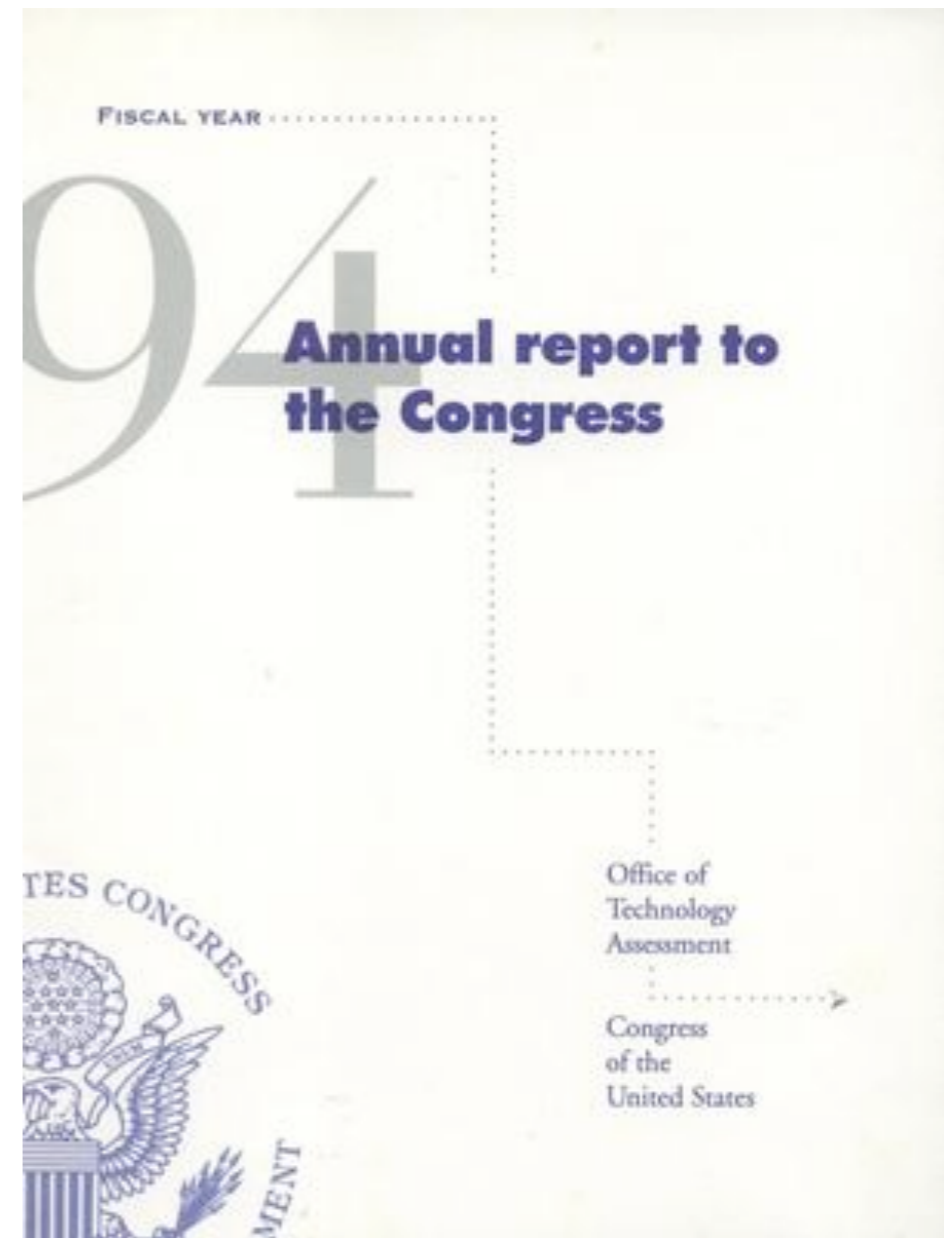
(Mironesco 1997)

- Context of environmental and pacific movements
- Rebalance executive and legislative powers
- Provide Congress with their own experts on STI issues



# 1st generation

- Early warning TA: providing information about possible side effects of S&T at the earliest possible stage
- Scientific report to support decision-making
- Adopting a neutral, non partisan perspective







# 1995: OTA's dismantling

« OTA was politically biased, we need to save public money »



# European wave of TA institutionalization

- 1983: Creation of OPECST, France, followed by DBT (85), RI (1986), STOA (87), POST (89), TAB (90), TA-SWISS (92), ITA (94), NBT (99), IST (00)
- OTA as a model, leading to different institutional configurations
- EPTA network



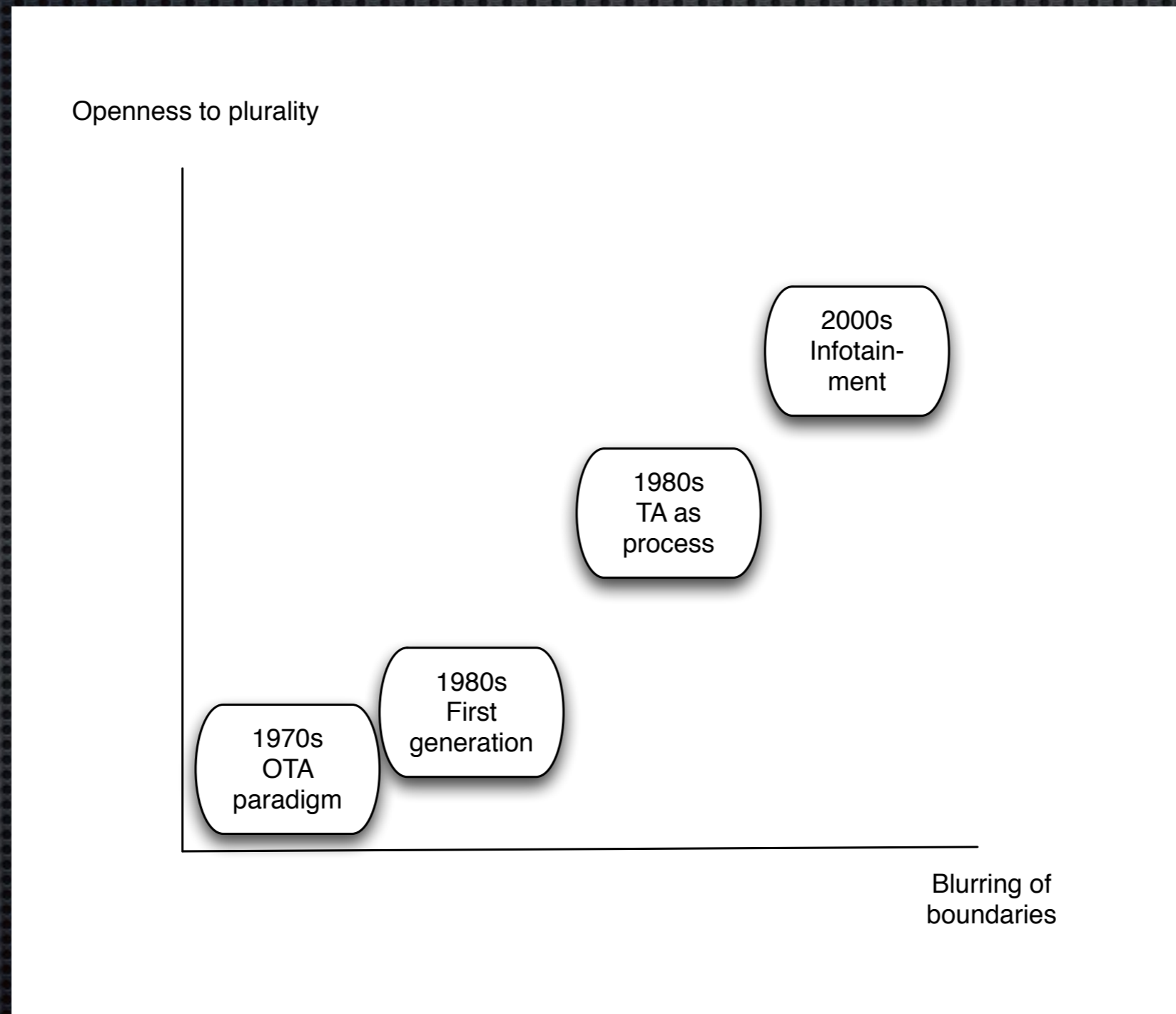


# A second generation of TA

Process-oriented TA (Van Eijndhoven 1997)



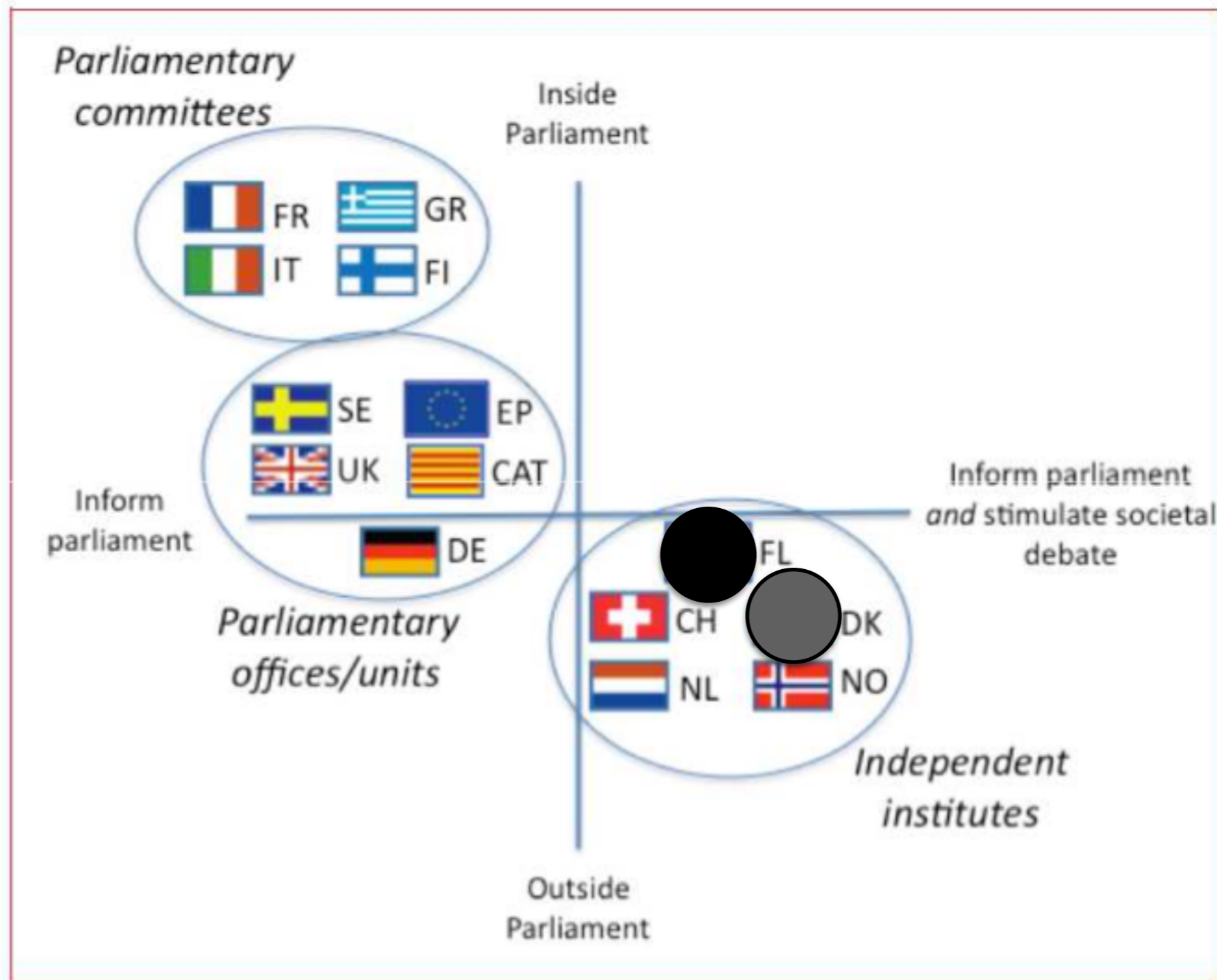
# Co-existing TA practices





# TA in Europe today

Figure 2 Classification of PTA organisations



Source: Technopolis Group

Legend: CAT=Catalonia, CH=Switzerland, DE=Germany, DK=Denmark, EP=European Parliament, FI=Finland, FL=Flanders, FR=France, GR=Greece, IT=Italy, NL=The Netherlands, NO=Norway, SE=Sweden, UK=United Kingdom. Source: Technopolis Group.



**this side up**



**fragile**

**HANDLE**

*with*

**CARE**



# S&T institutions under pressure

- ✦ **Universities** need to be excellent while addressing a third mission (orientation to society)
- ✦ **Research funding agencies** cannot just continue in their original role (Rip, 2000)
- ✦ **High-Tech firms and industries** have to address their impact on health and the environment
- ✦ **PTA** have to consider their strategies of how to survive under changing circumstances (OTA, DBT, IST)



A green highway sign with white text and an arrow. The sign is mounted on a metal post with five brackets. The text on the sign reads "The Future" in a large, sans-serif font, followed by "NEXT EXIT" in a smaller, all-caps font. To the right of the text is a white arrow pointing up and to the right. The background of the sign is a solid green color with a thin white border.

The Future

NEXT EXIT



What's the future of institutionalized TA in the 21st century?

# PACITA project

- Documenting, debating, doing TA
- Normative commitment towards « expanding the TA landscape »
- Catching up/deficit model (non-PTA countries)









# Pure science is «put to test»

- STI faces critiques and responds by providing new justifications
- STI finds the moral support it lacks in its close cultural environment to maintain its power of mobilization
- Towards a **strategic science** (Rip 2000)
  - A new social contract (Guston 1999)
  - Synergies between policy-makers and scientists

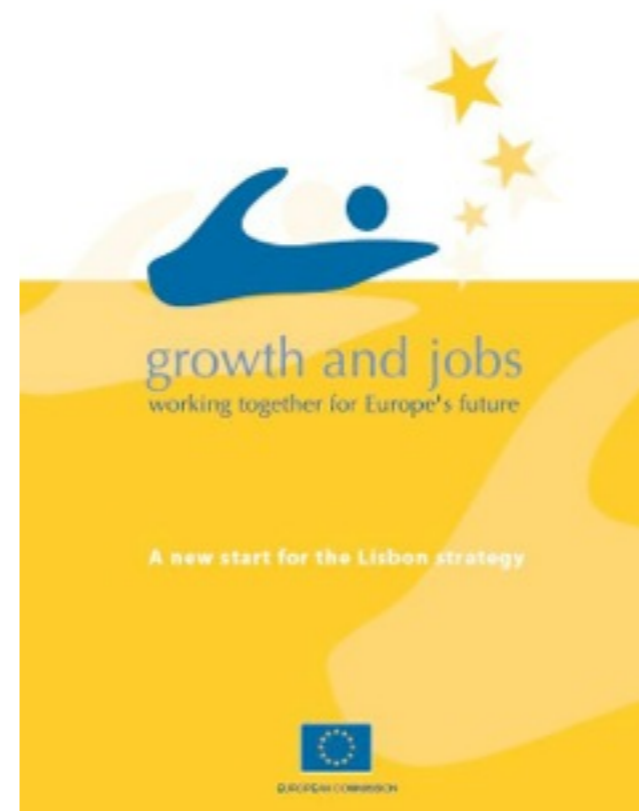
# TA is «put to test»

- Strategic science as the « habitat » of TA
  - TA contributes to broadening out STI (Van Oudheusden 2012)
- TA and some of its critiques:
  - *Technology Arrestment*
  - Re-constructing the modernist division of work
  - Tyranny of quantifiable impact



# Where are we heading?

- The emergence of new political discourses (knowledge-based economy, responsible innovation)
- STI as strategic resources to address « grand challenges »
- TA as a boutique luxury, depends on its harmless incorporation into strategic science regimes?



# The other side of the coin

- ***Society, the endless frontier*** (Bensaude-Vincent 2009)
- **Pervasive neoliberalization** of STI (Tyfield 2012):  
instrumentalization to serve an economic project,  
commercialisation of science, relevance > excellence  
==> delegation of care about side effects and withdraw  
of the State
- TA's survival goes through a **meaningful semantic shift**: « *knowledge-based policy-making* », « *instance of responsible research and innovation* »



# Conclusions (I)

- STI's superior capacity to adapt to changing circumstances *versus* increasing fragility of TA institutions (USA, FI, Dk)
  - A loss of critical capacity in TA
- Putting technologies in democracy is reduced (again) to the the **narrow normative framing** of social acceptability

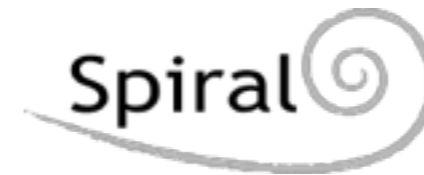
# Conclusions (2)

- STS is not enough to be critical of STI
  - STI need to be **democratically debated**: why are we developing new technologies? Whose for? According to what goals? How can we assess these goals are achieved?
- Neoliberalization of STI impacts TA
- Renaissance of Technology Assessment?



# Thanks for your attention!

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[www.pacitaproject.eu](http://www.pacitaproject.eu)



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## Big Data

Locating crime spots, or the next outbreak of a contagious disease, Big Data promises benefits for society as well as business. But more means messier. Do policy-makers know how to use this scale of data-driven...



### volTA n. 5: October 2013

Welcome to the fifth issue of volTA: BIG DATA, interpreting the digital exhaust of everybody, everywhere. volTA is a new magazine on Science, Technology and Society in Europe, initiative of fifteen technology assessment organisations that work together in the European PACITA project aimed at increasing the capacity and enhancing the institutional foundation for knowledge-based policy-making on issues involving science, technology and innovation.

  
[SEARCH](#)

### The Method



**Communicative TA**  
Technology assessment is inherently communicative. Without some link to the outside...