The most wicked problem of all

Geert Teisman
Professor of Public Administration and Complex Decision-making
Joint assumptions

- Urban research is about ‘messy, complex and ‘wicked’ problems
- Dealing with complex problems makes urban policy-making a challenging endeavor
- Nobody can understand nor solve complex problems on its own
- Yes, interdisciplinary research is needed
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Yes, interdisciplinary research is needed.
Interdisciplinary approach as own, inherent fascination

- Educated as traffic engineer (applied technical sciences)
- A university degree in sociology (social sciences; cum laude)
- PhD was in public administration (management science)
- First professorship in urban & regional planning

- Public administration started as inter-disciplinary endeavor
  - Building on knowledge from economy, sociology, law and political science
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Interdisciplinary thinking and doing

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The empirical foundation for my statement

- Scientific director of Living with Water (2007-2010)
- Co-director of NetherlandsAboveWater (2010-2013)
- Member Program Committee Smart Urban Regions in the Future (2014-....)
- Chair scientific board Platform31 (2016-....)
The highlights of Living with Water

• A large research program based on joint financing
  • 45 million euro; 50 % national government; 50 % partners involved
  • Aims: integrating flood protection and fresh water facilities with urban & regional development
  • Approach: triple helices of scientist, public servants and private sector

• Lessons
  • It takes 1 year before scientist, private sector en civil servants start to understand each other.
  • Triple helices work because (1) we forced them to do so (push factor) and (2) because they got personally accounted (as person, not as functionary)
  • Consultants were crucial boundary spanners

• Barriers
  • Institutional regime of accountability: define your results in advance and show that these yard-sticks have been reached
  • Private sector involvement was passive, first because of booming economy and then crisis
  • We succeeded in integrated knowledge development in policy domain, less in implementation domain
  • Institutional resistance against change: after ending the program much stayed the same
Highlights NetherlandsAboveWater

- ‘Learning-on-the-job’ program
  - 50 organizations from public & private domain, multilevel involved
  - Three co-directors: project expert, skills expert and scientist
  - Real-live urban & regional development projects & program were central

- Lessons:
  - In project en programs people manage to work on interdisciplinary & joint action basis
  - Back home they tend to forget this quickly
  - New: invitation-planning, 8-P model, value-adding approach and planning as assembling-processing (analogy = production-chains in private sector)

- Barrier:
  - Weak link with science
Platform31

- Merging 4 knowledge organizations from domain of housing, urban development the city as socio-economic
  - Large scientific program ‘knowledge for powerful cities’ (40 million euro)
    - Overarching ‘the urban’ as physical, social, economic and governance entity
  - Lessons:
    - The overarching approach has generated a rich harvest
    - Joint action of scientist and practitioners is fruitful

- Barriers:
  - Answers from PhD studies on questions formulated 5 years ago are not where practitioners are aiming for (while doing research the initial problem is reframed)
  - Research in physical domain done by technical scientist, in economic domain by economist, in social domain by sociologist and social-geographers and in governance domain by public administration and organization scientist (the phenomena of a double pilarisation)
NWO review committee VIDI (grants for experience researchers)

• Interdisciplinary committee: science, health, humanities, social science
  • Aims to grant proposals beyond the boundaries of disciplines
• Fascinating attempt
  • Trying to accept different publication cultures
  • Trying to accept different research traditions
• lessons:
  • Committee members really tried to select on quality
• Barriers:
  • Success = being the best 5% in your discipline: interdisciplinary scientist??
  • Some disciplines have reached scale in which they can professionalize much better: so at the end most of the grants were going to the neurosciences.
SURF program; smart urban regions in the future

• A program with joint financing from NWO, Ministries and Platform31
• Interdisciplinary program committee (engineering, economy, governance)
• Lessons:
  • In terms of programming we have learned to reach hands
• Barriers:
  • Review committees tend to focus on scientific excellence of the main applicant in his own field,
  • Path dependency:
    • surf is a new program within an arrangement that mainly focusses on transport
    • The review committee selected five projects, from which four on transport (on automated vehicles, cars, public transport and cycling)
Two strengths and two weaknesses

• Strengths:
  • We are able to build innovative joint programs
  • As people we are able to work together beyond boundaries

• Weaknesses:
  • Implementation joint programs facing problems to become interdisciplinary
  • Scientific selection based on top publications: this forces PhD’s to focus on center of their science
  • Path-dependency in scientific selection based on 5 % top scientists: money will go to the people central in their discipline
New steps towards impact-full interdisciplinary knowledge

- Chairing the scientific board of Platform31
  - Scientist with solid position in their own discipline and interested in solving wicked problems
  - From housing, sociology, care, physical planning, environmental affairs geography, economy and governance
- Applying the method of the ‘science table’
  - Bringing together chairs from a variety of sciences
  - Assuming that scientists are not able to develop an integrated approach
  - Assuming that practitioners are facing wicked problems they want to and cannot solve
  - Integrated new insights can be generated on the table