Accounting for smart citizen knowledge in controversial regional decision-making processes?

A case of waste oil water injection in north east Twente, the Netherlands

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Overview

• Finding new ways of letting citizens/collectives express their knowledge (‘what matters’)
  • Exploring the underlying decision-making process in a controversial case from a remote rural region → case study

• Discussing the role of intermediaries within regional decision-making processes

• Reframing smart city challenge
  • Investing in social not technological infrastructures!
The Grand Challenges of 21st century

- Common view on e.g. climate change
  - Nature, the climate and the environment threatens the life and sustainability of all the world’s people

- Classic ‘multi-disciplinary messes’ (Ackoff, 1999)
  - Requiring concerted co-ordinated action amongst actors
  - Hierarchical/market solutions not enough – demanding new governance forms (i.e. Intergovernmental Panel on Climate Change)

- ‘Environmental politics is a politics legitimated by a scientific consensus’ (Swyngedouw, 2009)
The rise of post-politics

• “In post-politics, the conflict of global ideological vision embodied in different parties which compete for power is replaced by the collaboration of enlightened technocrats (economists, public opinion specialists ...) and liberal multiculturalists; via the process of negotiation of interests, a compromise is reached in the guise of a more or less universal consensus. Post-politics thus emphasizes the need to leave old ideological visions behind and confront new issues, armed with the necessary expert knowledge and free deliberation that takes people’s concrete needs and demands into account”

- (Žižek, 1999)
Smart cities in a post-political age?

• Consensus on appropriate goals that all agree with
  • competitiveness, globalisation, sustainability, security

• ‘Smartness’ via developing good solutions to urban problems
  • Within an overarching strategic framework to deliver 4 goals

• ‘The wisdom of crowds’ via the policy network
  • From urban government in hierarchies to urban governance in networks
Who is really smart in the smart city?

• The replacement of political debate with expert advice/ adjudication
  • Knowledge input exclusive domain of “experts”
  • Citizens have problems, experts have solutions

• “The sustainable city model is premised on the order of the school, where learned professors are the ones who can really understand the complexities of climate science. As such, they must propose suitable technical solutions to the problem.”

(Davidson & Iveson, 2014)
Different functions played by citizens

• **Managers**: organise & co-ordinate local activities and actions that affect community collective behaviours

• **Creators/builders**: create new community activities, assets, information and knowledge with wider urban benefits

• **Opponents**: challenge changes to local environments threatening perceived stability or desired orders

• **Deliverers**: working together to deliver locally desirable activities not otherwise provided

• **Dividers**: create internal community barriers (across cultural divides), forming enclaves, shaping ghettos, facilitating or driving exclusion.
Research question

How can policy-makers better account for smart citizen knowledge in controversial regional decision-making processes?

Sub-question

• How can policy-makers better react to citizen collectivites to receive early warning of potential urban problems?
Case Study: waste water injection in NE Twente

- Small case study in simple context to explore process
- Small multi-core urban region (c.650,000 residents)
- Old industrial region – textiles – now largely gone
The plan

• Schoonebeek oil field in Drenthe exhausted in 1990s

• High oil prices with Gulf War make new extraction profitable

• Steam extraction – similar to fracking- giving by-product water

• Expensive to treat water, therefore pump into old fields in North East Twente
The regulation process

• NAM (Dutch oil company) applied:
  • For independent Environmental Impact Assessment (MER) and evaluate pumping against other options

• All the experts agreed that there was not an environmental problem!

• Small group of citizens appealed to Council of State (Raad van State)
  • Rejected because
    • (a) not directly connected
    • (b) not experts in field

• All permits duly granted and pumping could start
The rejected citizen knowledge 3 examples

1. Just how many people would be affected if there was a disaster (26,000 vs almost none)

2. Just how deep the water is really being injected (1km vs 3km)

3. Just how resistant to dissolving the salt sealant layer is given hot waste water (soluble vs. resistant)

Source: Citizen expert knowledge dossier, December 2015
The emergence of environmental problems

• **12.2014**: RTV Oost runs three-part news series on the risks of injection
• **03.2015**: Subsidence in houses in affected area in Rossum (MP visit)
• **04.2015**: Leakage in transport pipeline in Hardenberg
• **05.2015**: Pipes revealed to be seriously corroded by water transport
• **06.2015**: Injection (and oil extraction) suspended for safety reasons
• **11.2015**: Province announce re-evaluation committee – citizen support
• **01.2016**: Province declares no popular support in Twente for injection
• **09.2016**: Province & three local municipalities launch court challenge against injections
With the benefit of hindsight ...

• Expert knowledge formed part of technocratic decision-making

• Technocratic decision-making cannot deal with controversy

• Citizen knowledge destabilised expert knowledge

• Initially citizen knowledge rejected as inapplicable/hypothetical

• Later, evidence supporting citizen correctness harder to whitewash
The progress of political awareness

1. Unaware of any potential controversy – permit decision
2. Citizen voices as challenge to ‘efficient’ permit granting in local plan
3. Seeing problems – leaks, subsidence – with own eyes and seeing political salience
4. Restoring role as representative of society – deciding in best interests of Twente
Citizen knowledge outside consensual policy network spaces

• Making better use of citizen knowledge in regional decision-making processes
  • Demands political treatment to improve the overall quality of decision-making progresses → invest in social infrastructures

• Variety of intermediaries (media, political parties and civil society)
  • Can help to sort/judge claims and counterclaims in controversial regional decision-making processes

• Future research should ...
  • ... attempt to bring controversial regional decision-making processes into a more systemic perspective
  • ... help to give city-regional decision-makers the appropriate knowledge to take ‘smart’ decisions for all their citizens’ benefit