

Hans-Joachim Bürkner

# Neighbourhood-based water governance in a Mexican metropolis

**Precarious self-relief  
or sustainable  
self-organisation?**



metropolis meeting: integrated urban governance

porto alegre, 24-25 november, 2009



# 1. Introduction

## Problems

- Basic problem of the Latin American metropolis: provision of infrastructure and services, insufficient water management
- Shortcomings of large technical systems (LTS) trigger alternative, decentralised ways of infrastructure provision
- Close interconnection between different types and quality of water infrastructure, and socio-spatial disparities
- Rising need for multi-level governance while practice remains restricted to the individual levels



## Guiding questions

- How are alternatives to LTS organised? Which requirements do they have concerning social embeddings and local governance?
- Are local, decentralised strategies likely to produce more than precarious self-relief?



It should be more than that...



## 2. Infrastructure and Governance

- Governance as „reflexive self-organization of independent actors“ (Jessop 2002)
- Water management as a special variation of local governance related to infrastructure
- Transformation of LTS: Close connection between space-related governance and infrastructure
- Thesis of evolving **technological recesses**: areas not served or poorly served by LTS which generate alternative types of infrastructure provision embedded in social networks and self-organization (Gopakumar 2004)



### 3. Empirical case studies of decentralised water provision

#### Technological recesses in Guadalajara

- General increase of decentralised technologies and correlated management problems in metropolitan region of Guadalajara
- Large variation of different types of TR according to:
  - Spatial features of neighbourhoods
  - Socio-economic structure of residents
  - Standards of technology and management
  - Costs of services and provision
  - Consummation of resources
  - Connections and interfaces to standardised/decentralised water infrastructure
  - Legal status
  - **Governance modes involved**



## Types of technological recesses

### **Type 1:** Marginalised settlements

Poorly supplied because of informal status;  
reliant upon self-help and local self-organisation

### **Type 2:** Old, well-established middle class neighbourhoods near to the city centre

Low performance of large technical systems;  
community-based organisation

### **Type 3:** New middle and upper class settlements at the urban periphery, established by private developers

Decentralised systems run by private service firms



## Case studies on types of TR

### Type 1: Colonia „Agua fría“

- Marginalised settlement of recent origin with no public water service
- Informal water supply on household and community basis
- Governance: low level of formalisation, spontaneous self-help



## Case studies on types of TR

### Type 2: Colonia „Chapalita“

- Middle class neighbourhood of the 1970s near city centre
- Decentralised, self-organised supply (well and pipelines), independent from public network, poor water quality
- Governance mode: neighbourhood committee with high level of formalisation and professionalism



## Case studies on types of TR

### Type 3: Colonia „Las Cañadas“

- Exclusive upper class gated community in suburban idyll, established early (1970s)
- Privately owned system (well and pipelines), run by private firm
- Governance mode: professional management plus stakeholder supervision



# Case studies: Technologies, governance modes and social embeddings

## Overview

Case	Type	Socio-econ. status	Techn. standard / quality of supply	Governance mode	Resources	Intensity of social interaction	Degree of sustainability
Las Cañadas	3	upper class	high	formalised	financial	low	high
Chapalita	2	middle class	middle	rather formalised	financial/ social	middle	middle
Agua fría	1	lower class	low	informal	social	high	low

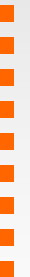


## 4. Achievements and deficits of TR

### Limitations of autonomous governance: internal modes

- Supply dependent upon social embeddings and financial resources: The more money involved, the less social resources are needed and the higher is the degree of sustainability
- Self-organisation: constraints of mobilisation
- Problems of mutualism
- Problems of segregation: urban „ranchos“





## 4. Achievements and deficits of TR

### Limitations of autonomous governance: internal modes

- Supply dependent upon social embeddings and financial resources: The more money involved, the less social resources are needed and the higher is the degree of sustainability
- Self-organisation: constraints of mobilisation
- Problems of mutualism
- Problems of segregation: urban „ranchos“
- *Technological recesses* as an isolated sectoral, social and spatial approach:  
weak connection to other aspects of neighbourhood development and local governance, lacking integration of different „branches“ of neighbourhood-based governance
- Local identification and place-making as a normative demand rather than good practice



## Limitations of autonomous governance: external modes

### a) Between *technological recesses*

- Urban “clan“ mentality: social integration of inner circles vs. closing off from the outside
- Locals are suspicious of negative effects of external intervention
- High competition for rapidly dwindling water resources between individual *technological recesses* und *colonias*
- Hardly any network-building and strategic alliances

### b) Between *technological recesses* und *large technical systems*

- Managers of *technological recesses* act independently from *large technical systems*; missing communication
- Managers of *large technical systems* rarely perceive *technological recesses* as partners



## Limitations of autonomous governance: external modes

### c) **Between *technological recesses/local governance* and local politics**

- Basic distrust by local stakeholders: they do not expect political support for the solution of infrastructure problems
- Weak communication between local communities and public administration
- Selective inter-level contact related to singular events (e.g. planning projects etc.)



## 5. Conclusions

- Lacking horizontal and vertical integration of TR-related governance:
  - TR create isolated solutions; there are doubts about their socially and politically integrative capacities; self-organisation related to infrastructure does not combine easily with other forms of self-organisation
  - Local governance lacks communication among neighbourhood organisations (at the same level); hardly any integration or institutionalisation (e.g. by building associations or larger political pressure groups)
  - Local governance lacks communication with local politics and administration; local rejection of external impulse for integration and/or mobilisation at a larger level
- More precarious self-relief than sustainable self-organisation
- There is need for intermediaries which fill the gaps
- It is difficult to apply pre-conceived models, just because...



...local context matters!

