

### RESEARCH FRAMEWORK

**SHRINKAGE** In history, any city out-competed in its region in location, resources, work opportunities, or suffering from catastrophes can lose population. Once considered a deviation from the path of growth in traditional urban models, shrinkage is now re-conceptualised as a persisting phase in urban development in the context of demographic decline, economic crisis, resource depletion, etc.

**STRATEGIC PLANNING** arose as a response to the rigidity, over-precision and lack of innovation of statutory planning by making room for strategic thinking and decision-making in the planning process. It is more about exploring strategies — establishing orientation and heightening the sense of preparedness, with a better grasp of the complexity — than making actual plans.

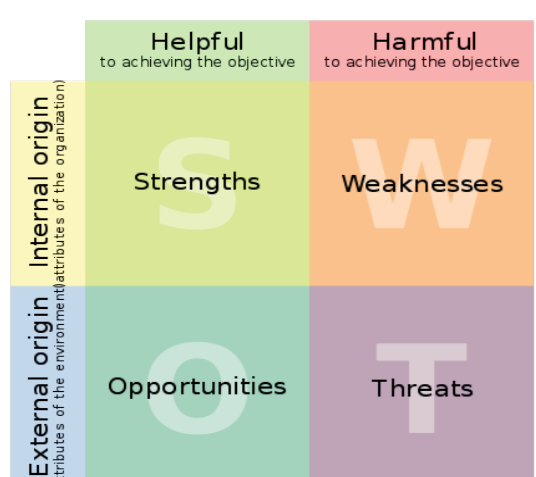


fig.1 SWOT analysis: a typical strategic planning technique

#### What are the challenges for strategic planning in a context of shrinkage?

Four dimensions:

- **The content** of strategies: the goal of urban development, the situation and new resources
- **Scientific knowledge** of shrinkage: non-linear dynamics, interweaved processes and changing conventional thinking
- **Re-scaling**: engaging different scales of space and level of governance
- **Strategy thinking**: from linear, rational plan-making to more flexible, governance-based strategy making in response to uncertainties.

#### What would shrinkage-aware strategic planning look like?

Hypotheses:

- Shrinkage concerns **more than shrinking cities**: uncertainties in growth and interdependencies between cities
- Perspective of shrinkage need to be integrated with **other trends of urban development**.
- **Strategies** can range from response, to maintenance, and to active deployment
- **Different contexts** — national, regional and planning culture — offer different potentials for new paradigms and strategies.

Traditional growth-oriented planning and policy-making does not produce progress as sure as before.

**How should it be done differently when cities stop growing?**

#### Is there a paradigm shift building up in strategic planning?

- There is critically reflection on the dominant paradigm of urban planning, calling for a **paradigm shift**.
- **Two paradigms** are distinguished: one economy-centred, growth-oriented, the other based on re-interpretation of progress with environmental and social focus.
- However, researchers **lack the knowledge** on how shrinkage is met in practice: the behaviour of actors and their methods and tools.
- A **paradigm** can **researched in practice** through tangible elements: planning scope, visions, theories, models, tools, procedures, products, etc.

#### How are shrinkage-inspired 'paradigms' received in practice?

Is paradigm changing in practice? What are the **obstacle and potential for change?**

- **Cultural aspect**: actors' perception of shrinkage and the relation between growing and shrinking cities
- **Knowledge aspect**: theories, models and tools that actors use to frame and respond to shrinkage
- **Institutional aspect**: ideology, established routines that influence the strategies towards shrinkage
- **Personal aspect**: actors' personal pursuits can push planning decisions in certain direction.

**ECONOMY-CENTRED PARADIGMS** Progress is measured by economic growth. Planning is oriented to growth of population and physical space. Mechanisms include *growth coalitions* at the city level and *regional cluster*.

*The growth machine* frames growth as the source of jobs and new facilities, but overlooks the costs of continued maintenance, externalities and fair distribution of benefits.

*Competitiveness* building is the central concern of strategic planning. Strategies are made to enhancing attractiveness for selective groups and heighten the efficiency for economic activities.

*Degrowth* and *post-growth* stress social and environmental aspects. Strategies involve consolidating existing space, public services co-production and temporary use. But they are mostly on vision and project design level.



SHRINKAGE AS A MECHANISM of urban development can be explored for benefits of sustainability and social progress.

The **DIVERSITY OF SHRINKING CITIES** means that some cities have more advantage to recover or transform, therefore inequality should be addressed.

THE **REGIONAL SCALE** could provide opportunity to balance growth and shrinkage, manage development risks, foster diversity of local identity, and maintain livability in the territory.

**INTERNATIONAL COMPARATIVE CASE STUDY** could reveal hidden factors underlying strategic decisions. It also provide wide range of context to explore the potential for new directions of planning with shrinkage.

A **SOCIO-COGNITIVE PERSPECTIVE** can be used to approach study of practice.

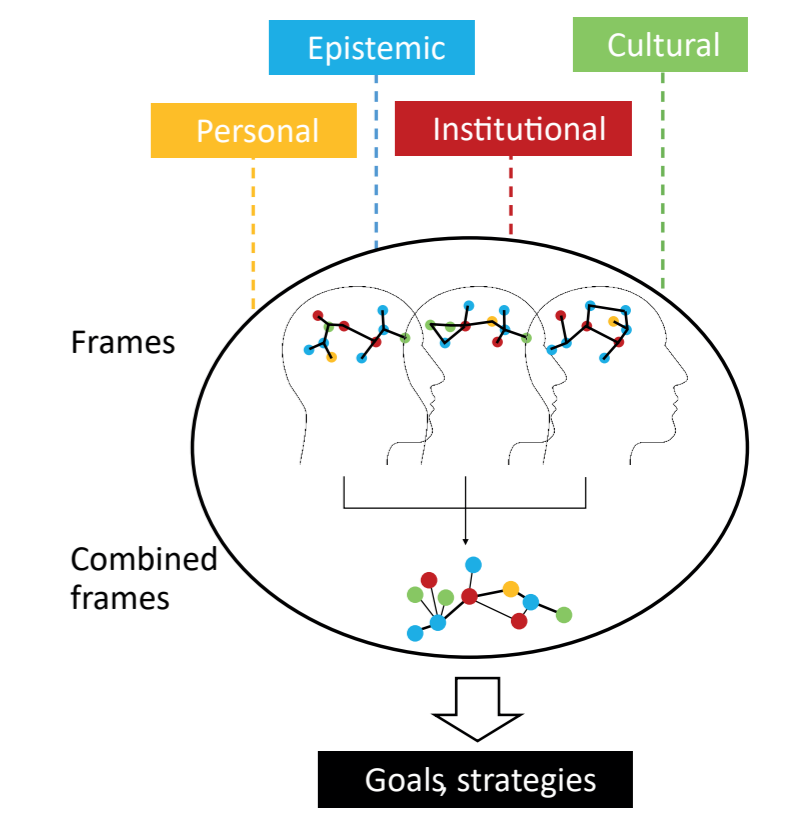


fig.3 frame and social mechanism as analytical framework

### COMPARATIVE CASE STUDY

- Three medium-sized cities / urban settlements
- Different stories tied to their respective national and regional contexts
- Distinct mechanisms of shrinkage
- Unique challenges

#### THE DUTCH CASE

##### Fallen off the edge

The Dutch megalopolis is the country's economic engine and unique in the world. But for the cities just at the edge of it?

**DEN HELDER**  
Population 55,604 (1,229 /km<sup>2</sup>)

- A key maritime base, mono-industrial and reliant on defense budget
- Shrinking for two decades — due to national defense cut-backs and 'unattractive image'
- Location also a strong factor: at the northern tip of the province, outside of the megalopolis Randstad
- What is left from past glory? How can it compete with world-class cities in its neighbourhood? Can it find its new role at the edge of a booming region?

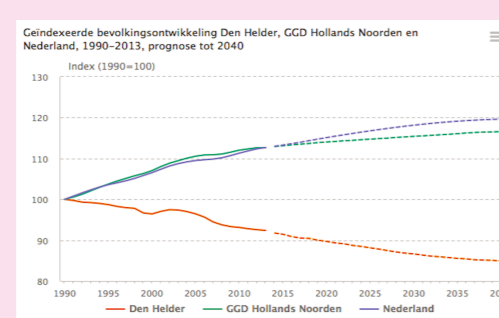


Fig. 6 Demographic trend in national context



Fig. 7 maritime industry

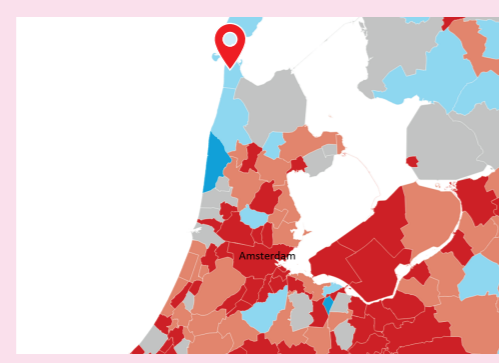


Fig. 8 shrinking in a booming region

#### THE GERMAN CASE

##### One drop in the sea (of shrinkage)

National scale exodus in peace time is a German story. The dramatic geography it left behind persists to this very day.

**ZWICKAU**  
Population 90,515 (882 /km<sup>2</sup>)

- Once the seat of culture and trade, now one of the many suffering from the turn of history
- An important node for the countryside because of the German central location planning model
- Economy went from metal mining, to coal mining, and to car industry; invariably, relying on skilled labour
- Can it capitalise on its past industrial heritage? Can small cities work together to reach the bright side of shrinkage?

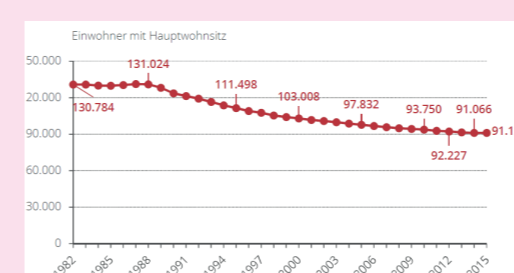


Fig. 9 Demographic trend



Fig. 10 historical city of mining and car industry

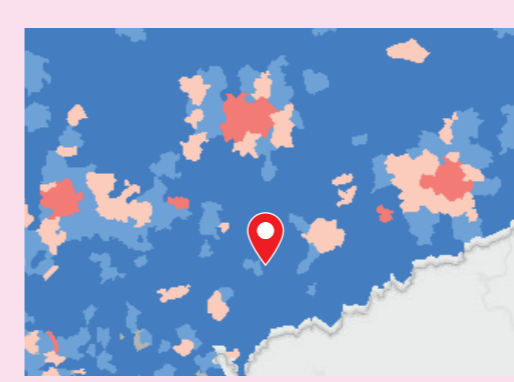


Fig. 11 one of many in a sea of shrinkage

#### THE CHINESE CASE

##### Ups and downs in the manufacturing hub

'Shenzhen speed' urbanisation is a Chinese invention. But fast growth has its instabilities; and even in the Delta, pockets of shrinkage exist.

**WANGNIUDUN** (part of Dongguan)  
population 86,200 (2,728 /km<sup>2</sup>)

- Located in the polycentric region of Pearl River Delta, world-class manufacturing centre
- The district's area compares to medium-sized European cities'
- Whole region is vulnerable to global economy conditions, with many periodically shrinking cities despite high rate of overall growth
- In a densely populated region, can such pockets of shrinkage create opportunity for livability and resilience?



Fig. 12 A highly urbanised area

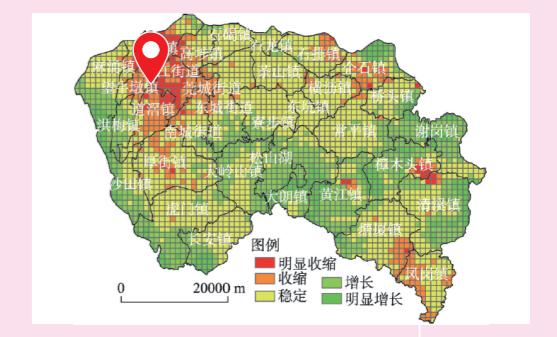


Fig. 13 Dongguan (red = obvious shrinkage)

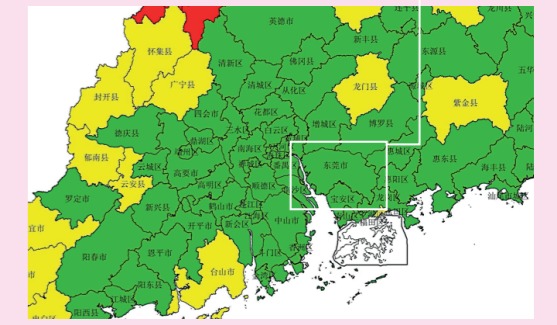


Fig. 14 The region (Yellow = periodic shrinking)

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Fig. 9 Timourou (2017). *Wohnbedarfs- und Wohnbauflächenprognose der Stadt Zwickau*.

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Fig. 14 Du ZW, Li X (2017) Growth or shrinkage: New phenomena of regional development in the rapidly-urbanising Pearl River Delta. *Acta Geographica Sinica*, 72(10), 1800-1811