“High technology fantasies in the Delta? Constructing a national strategic science site in the Dutch post-industrial periphery”

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OVERVIEW

1. Multidimensional role of global science spaces
2. Introduction of a new conceptual framework
3. Importance of strategic place-making
4. Importance of spiritual places (lat. *genius loci*)
1 RATIONALE

The multidimensional role of global science spaces

Economic-function:

• Generators of wealth, employment and productivity (business acceleration/production of applied research)

• External spillover effect: regional upgrading effect

Function as social spaces (Anderson, 1991):

• Particular imagined communities act and interact to achieve desirable goals / personal affection towards a specific space

• Creation of spiritual places

➔ If we want to understand how national science sites can strategically be created, first, we should explore how particular places are created and perceived!
2 ANALYTIC FRAMEWORK (Based on OECD, 2007)

[1] functional effect
- Effort to create a nice and attractive place

[2] regional upgrading effect
- Acquired outcomes leading to a new culture and skills aiming to enhance regional innovation

[3] external recognition
- Effort and outcomes recognized by knowledge migrants

[4] personal attraction affection
- External “driving force” that attracts knowledge migrants
3 RESEARCH QUESTION(S)

National actors

• How can GSSs attract international knowledge migrants beyond the employment and career opportunities they offer?

• How do those people creating science parks aim to establish local environments that attract international knowledge migrants?

International knowledge migrants

• How do international knowledge migrants perceive and begin to identify with place-specific characteristics of particular regions?
4 METHODOLOGY

• Exploratory case study
  – Identify key themes for a future research which will be undertaken in 2016/17

• Narrative analysis technique

• Series of semi-structured face-to-face interviews
  – Snowball technique

• People who deliberatively created a physical local place-environment that attracts and retains international knowledge migrants (creators)

• People who perceived these efforts and outcomes (knowledge migrants)
5 THE CASE OF THE UNIVERSITY OF TWENTE

- Located in Twente region (E NL)
- Old textiles region seeking reinvention
- During the 1970s: creation of the Kennispark
- Entrepreneurial profile
- More than 700 spin-off firms are rooted in the UT
6 ANALYSIS

Creation of Campus environment (functional effect)

- Former country estate “Drienerlo”
- Self-contained campus
- Three functional areas

[Map with areas labeled 1, 2, 3, and notes on their functions: Residential area (student housing, hotels...), Retail & Leisure area (sports, restaurants, café), Academic area (classrooms, library, offices, laboratories, lecture halls)]
6 ANALYSIS

**Creation of a integrated Kennispark structure (regional upgrading effect)**

- Establishment of a visible university-industry linkage
- Reconstruction of campus buildings into shared academic and corporate facilities
- Establishment of a virtual space-architecture
6 ANALYSIS

**Creation of a symbolic profile (external recognition acquisition)**

- 1987: unique profile known as “the entrepreneurial University”
- Creation of more than 700 spin-offs
- Annually 10% of the fastest growing tech companies from the Netherlands have their roots in Twente (*Deloitte Fast 50*)
- The Twente region was evaluated as the most (radical) innovative region in the NL, according to the Innovation Monitor done by the Erasmus University Rotterdam
- Kennispark Twente was announced Best Businesspark in the Netherlands in 2013
External recognition acquisition (personal attraction effect)

• More internationalization efforts
• Objective to offer English-speaking bachelor and master programs only
• Invitation of a number of well known Dutch personalities (e.g. king Willem-Alexander, Prime Minister Mark Rutte)
| How knowledge migrants perceived these efforts | Creation of a campus environment  
(Functional effect) | Creation of an integrated Kennispark infrastructure  
(Regional upgrading effect) | Creation of a symbolic profile  
(External attraction effect) | External recognition acquisition  
(Personal attraction effect) |
|-----------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Positive points | 1. unique, beautiful campus  
2. functional disposition of the campus area | 1. virtual-space architecture of the campus | 1. strong entrepreneurial and innovative profile  
2. funding opportunities  
3. offers unique opportunities | 1. unfolds its local attraction through actual experience  
2. strong internationalization efforts of the UT |
| Negative points | 1. lack of metropolitan and multicultural buzz (village atmosphere)  
2. picture of individual internationalism | 1. no visible university industry – linkage  
2. physical disconnection | | 1. unknown provincial place  
2. no global or national perceived attraction effect |
8 CONCLUSION

• Importance of strategic place-making
  – GSSs attract knowledge migrants beyond a purely economic dimension
  – Place-related attraction effect (personal affection towards a specific place, spirit e.g. beautiful landscaped campus)

• Importance of the *genius loci*
  – Place-related atmosphere (e.g. metropolitan/multicultural atmosphere)

Further research

• More explanations/conceptual frameworks are needed to explore

• [1] how a spirit in particular places can be created through strategic place-making and [2] how knowledge migrants acquire particular connections and entanglements in particular places, creating spill-over effects that drive innovation-based regional economic development.