



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

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- 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*)

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

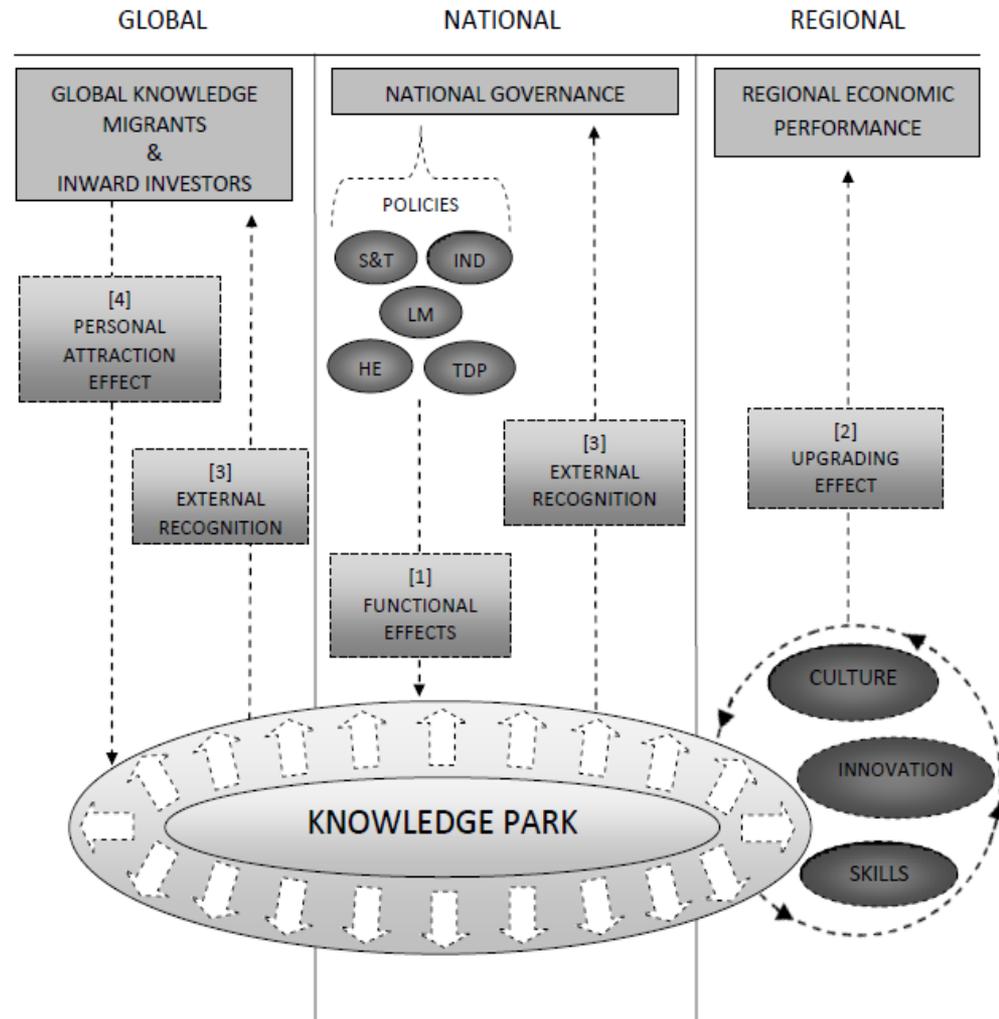
- Acquired outcomes leading to a new culture and skills aiming to enhance regional innovation

[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?

- 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 deliberately created a physical local place-environment that attracts and retains international knowledge migrants (creators)
- People who perceived these efforts and outcomes (knowledge migrants)

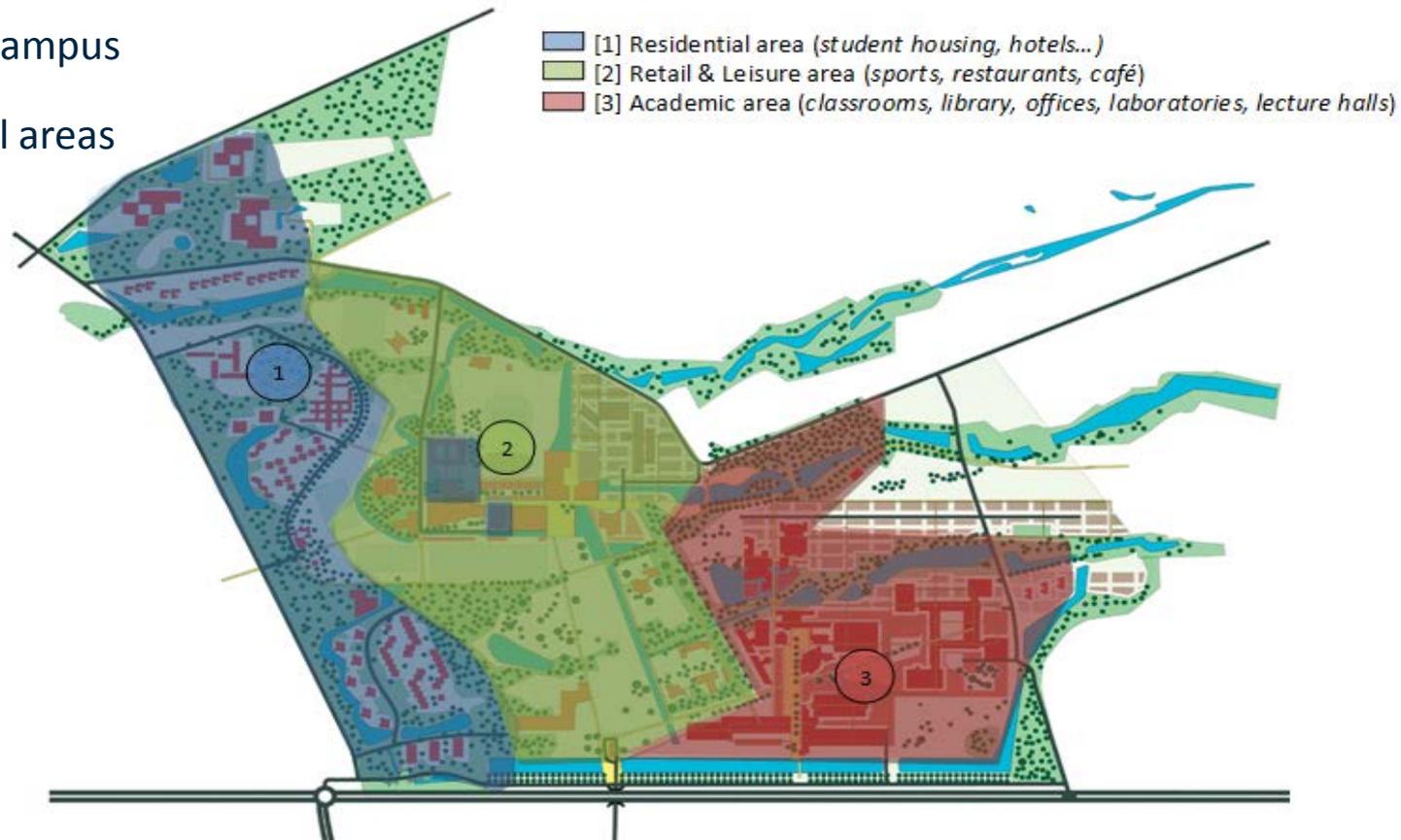
5 THE CASE OF THE UNIVERSITY OF TWENTE



- 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

Creation of Campus environment (functional effect)

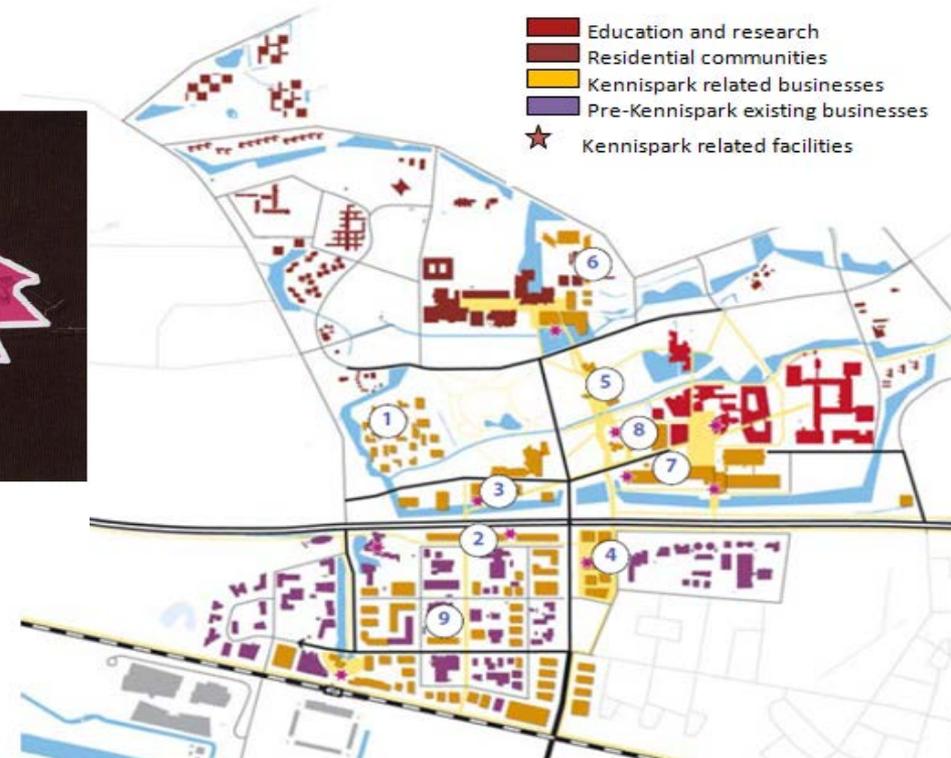
- Former country estate “Drienerlo”
- Self-contained campus
- Three functional areas



6 ANALYSIS

Creation of an 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



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 techcompanies 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)



7 RESULTS



What creators wanted to achieve

How knowledge migrants perceived these efforts	Creation of a campus environment (Functional effect)	Creation of a integrated Kennispark infrastructure (Regional upgrading effect)	Creation of a symbolic profile (External attraction effect)	External recognition acquisition (Personal attraction effect)
Positive points	<ol style="list-style-type: none"> 1. unique, beautiful campus 2. functional disposition of the campus area 	<ol style="list-style-type: none"> 1. virtual-space architecture of the campus 	<ol style="list-style-type: none"> 1. strong entrepreneurial and innovative profile 2. funding opportunities 3. offers unique opportunities 	<ol style="list-style-type: none"> 1. unfolds its local attraction through actual experience 2. strong internationalization efforts of the UT
Negative points	<ol style="list-style-type: none"> 1. lack of metropolitan and multicultural buzz (village atmosphere) 2. picture of individual internationalism 	<ol style="list-style-type: none"> 1. no visible university industry – linkage 2. physical disconnection 		<ol style="list-style-type: none"> 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.**