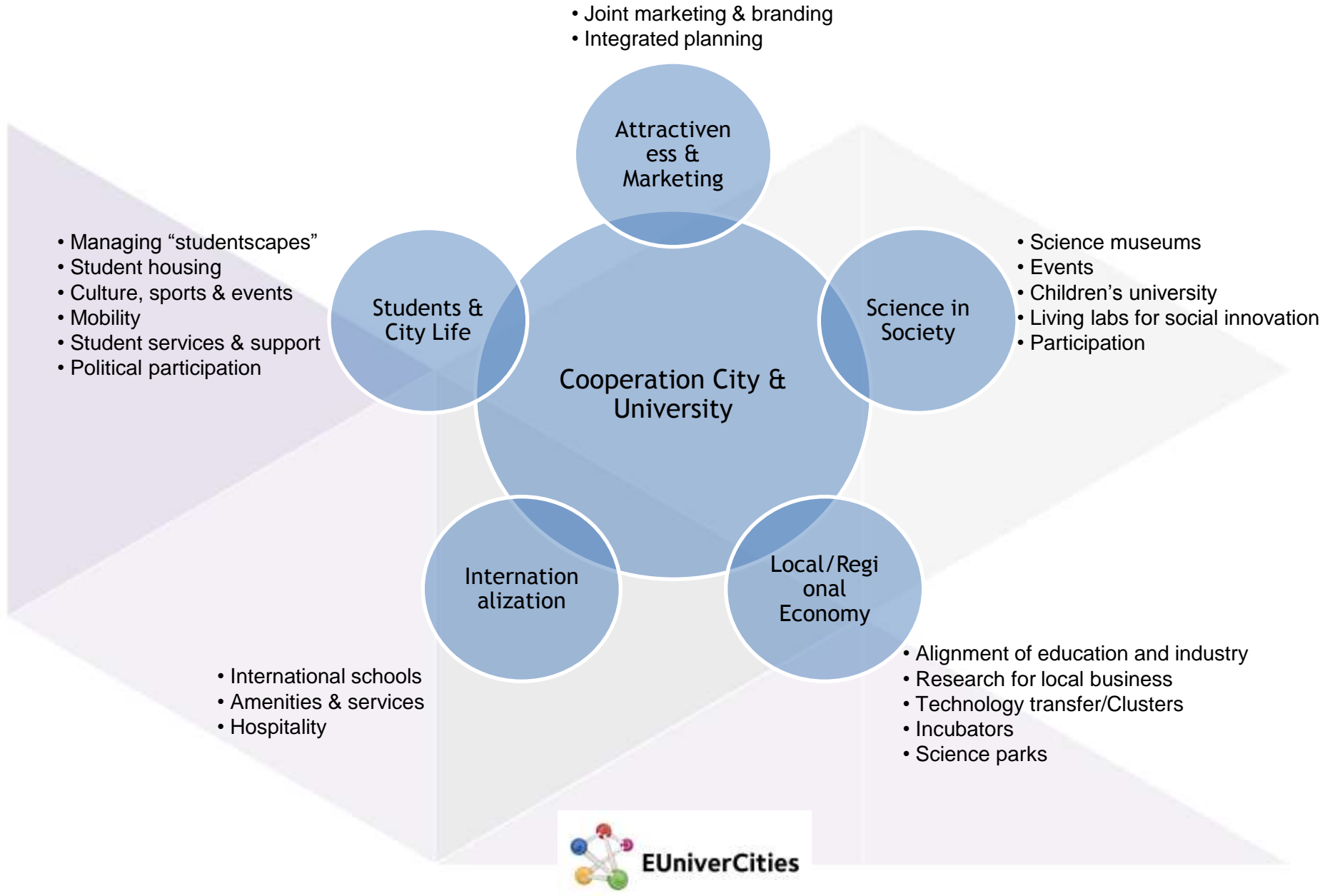


# TRENDS AND PERSPECTIVES ON CAMPUS DEVELOPMENT IN EUROPE

WILLEM VAN WINDEN



# Realms for city-university collaboration





## 11th Century

The first university is founded in Bologna in 1088, followed by the Sorbonne in Paris, and the University of Oxford. They are based on a courtyard typology, and are embedded in the fabric of the city.



## 19th Century

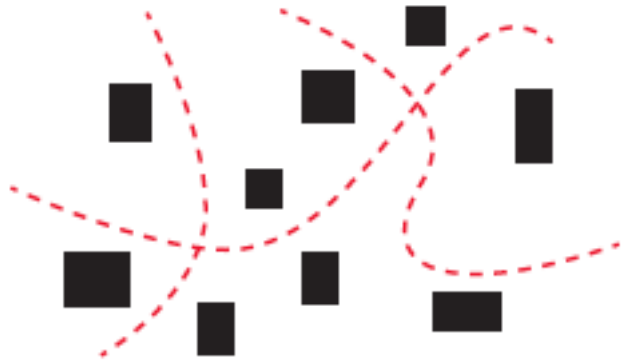
In the 19th century in North America, an alternative university model was conceived by American president Thomas Jefferson. His notion of an ideal learning community, where teaching and studying spaces are arranged around a large lawn and far-removed from the city served as the basis for the design of the University of Virginia (1817).





**1970**

In the late 1960s, with the rebuilding effort, a widespread standardization evolved. At many universities, modern campuses for the sciences were built in town outskirts, and the stacked block came to dominate. The “frightening monotony” of these campuses was quickly lamented in the architecture journals.



## SUBURBAN SPRAWL

The first campuses evolved in late 18th century America based on the English collegiate model, spreading the originally compact elements over large areas of natural landscape. The uplifting qualities of nature were valued as providing a better learning environment than the city.



*Harvard University Campus, Cambridge, USA*



### **SUBURBAN CLUSTER**

This model arose in the post-WWII period, and is based on car-oriented planning and modernist ideas of functional separation. Its buildings are generally located in an open landscape, according to a set of firmly established and defined rules. It is conceived as a detached community set far away from the distractions of the city.



*Utrecht Science Park, NL*





### URBAN CLUSTER

As campuses move to the city, they adopt the urban typology of a grid of streets and blocks with complex spatial hierarchies. If, on the one hand, the campus is completely integrated with this spatial pattern, it risks losing its identity as a knowledge institution, instead becoming an indistinct part of the city. On the other hand, those campuses that have achieved a level of integration while retaining a distinct identity have done so by modifying the city grid to introduce new hierarchies of space, and by a recognizable architectural expression.



*University College London, London, UK*





### **CAMPUS AS A BUILDING**

A single building contains the various activities, functions and facilities of the campus, its form determining the relations between these elements. Within the building, large, open spaces such as courtyards and atria serve the informal meeting and connecting functions traditionally fulfilled by a campus's green open spaces. This typology creates a clear separation between the campus and its surroundings, one that is often reinforced by privately-owned land around the building.



*Apple Headquarters, Cupertino, USA*

# CAMPUS AS ASSET: A GREAT CAMPUS...

.....ATTRACTS MORE STUDENTS

.....FACILITATES GOOD EDUCATION

.....MAKES RESEARCHERS MORE HAPPY AND PRODUCTIVE

CITIES WANT TO BE LIKE CAMPUSES

CAMPUSES WANT TO BE LIKE CITIES

COMPANIES ♥ CAMPUSES

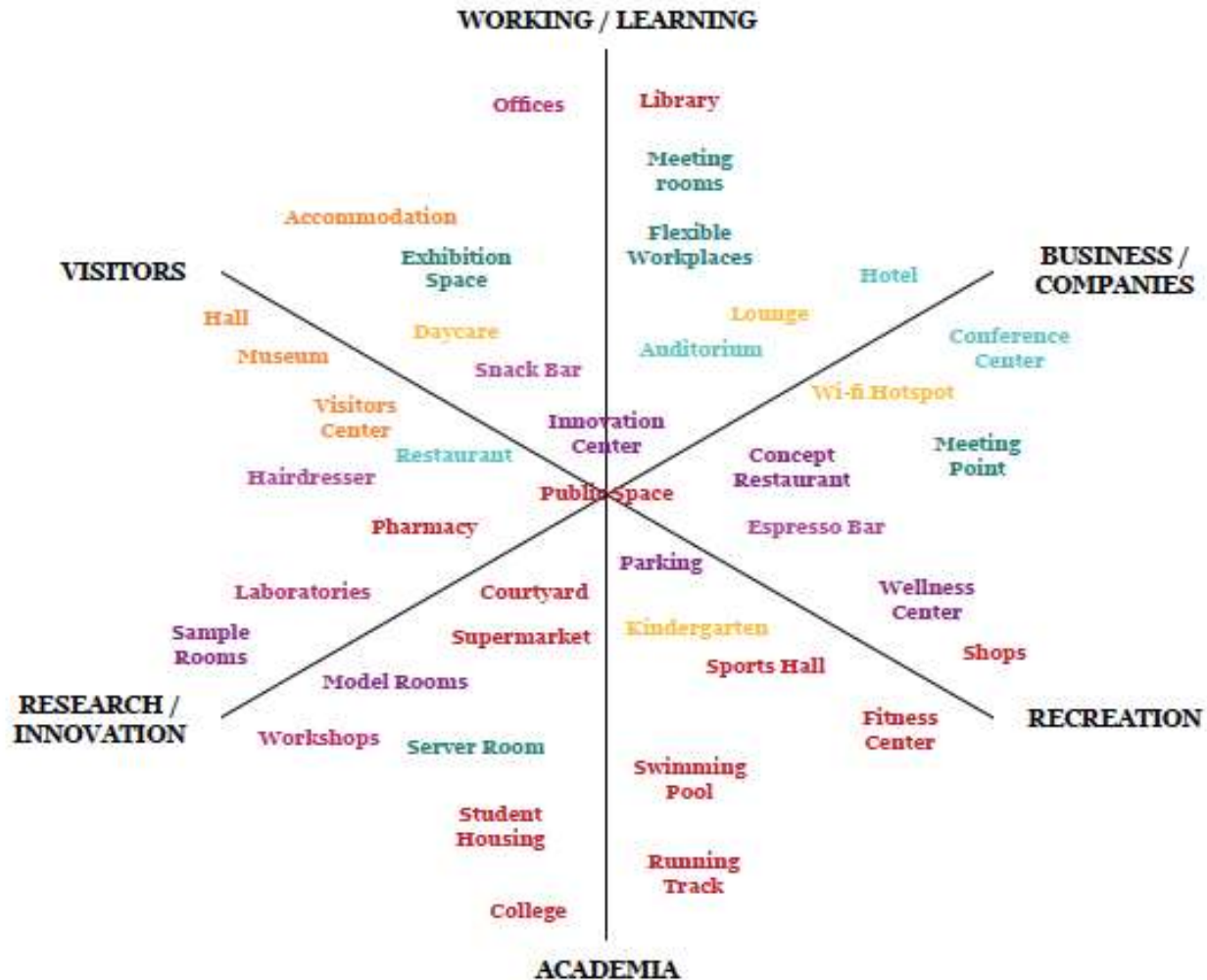


# KNOWLEDGE MILE AMSTERDAM



The screenshot shows a web browser window displaying the Knowledge Mile website. The browser tabs include 'Knowledge Mile', 'Tervetuloa - Solo Sokos', and 'screenshot windows 10'. The address bar shows 'www.knowledgemile.org/organisaties'. The website has a red navigation bar with links for 'map', 'about', 'contact', and 'newsletter', along with social media icons for Facebook, Twitter, Instagram, and LinkedIn. A black banner below the navigation bar reads: 'De Knowledge Mile is een initiatief om de slimste straat van Nederland te creëren.' The main content area is divided into two filter sections: 'CATEGORIE' and 'CHALLENGE'. The 'CATEGORIE' section includes buttons for 'Showcases', 'Projecten', 'Nieuws', 'Agenda', 'Personen', 'Organisaties' (which is selected), and 'Locaties'. The 'CHALLENGE' section includes buttons for 'Art & Design', 'Circular Economy', 'Health', 'Digital Connectivity', 'Jobs of the Future', and 'Mobility'. Below the filters is a search bar with the placeholder text 'Ik zoek...'. On the right side, a map of Amsterdam is displayed with several red circular markers indicating specific locations. The map labels various neighborhoods such as 'AM-WEST', 'GRACHTENGORDEL', 'AMSTERDAM-OOST', and 'AMSTERDAM-ZUID'. The Windows taskbar at the bottom shows the system tray with the date '02/11/2016' and time '06:50'.

# CAMPUS AS CITY





## COMPANIES WANT

- ACCESS TO TALENT
- ACCESS TO RESEARCH FACILITIES
- COLLABORATION WITH RESEARCH GROUPS
- STATUS & IMAGE
- LOCATION



*Temporary or permanent?*  
*Entry & exit criteria?*  
*Financial model?*  
*Levels of engagement?*

## CAMPUSES WANT

CORPORATE RESEARCH PARTNERS  
GUEST SPEAKERS, INTERNSHIPS  
HOME FOR STARTUPS  
STATUS & IMAGE  
PAYING TENANTS

# NEW CAMPUS RWTH AACHEN



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**Cluster Nachhaltige Energie**

E.ON Energy  
Research Center

**Cluster Photonik**

Fertigstellung  
Herbst 2015

**Bilinguale Kindertagesstätte**

Bezug  
Dezember 2014

**Cluster Schwerlastantriebe**

CWD – Bezug  
Frühjahr 2015

**Cluster Smart Logistik**

eLab – Fertigstellung  
August 2015

**Cluster Produktionstechnik**

Fertigstellung  
Herbst 2016

**Cluster Biomedizintechnik**

LBG – Baubeginn  
Frühjahr 2016

# AACHEN MODEL

- CAMPUS AS LOCUS FOR PROGRAMMATIC RESEARCH-BUSINESS COLLABORATION
- COMPANIES BECOME “MEMBER” OF THE CAMPUS
- MEMBERS HAVE RIGHTS AND OBLIGATIONS
- ACADEMIC CENTRE OF EXCELLENCE ORGANISES A CLUSTER AROUND IT
- PRIVATE INVESTORS STEP IN



# SOME CHALLENGES AND DILEMMAS

- CITY-CAMPUS COMPETITION
- DEVELOPING COLLABORATIVE TYPES OF CAMPUS DESIGN AND MANAGEMENT
- SAFEGUARDING THE INTEGRITY OF RESEARCH AND EDUCATION
- DEALING WITH HIGHER DEGREE OF OPENNESS
- VISION ON CAMPUS-CITY INTERPLAY

