Urban Thinkscapes

building for knowledge and innovation

Luleå, Feb 2016

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How can we develop the city – its buildings, the spaces around them and its points of connection – to enable **and sustain** a Learning Society?

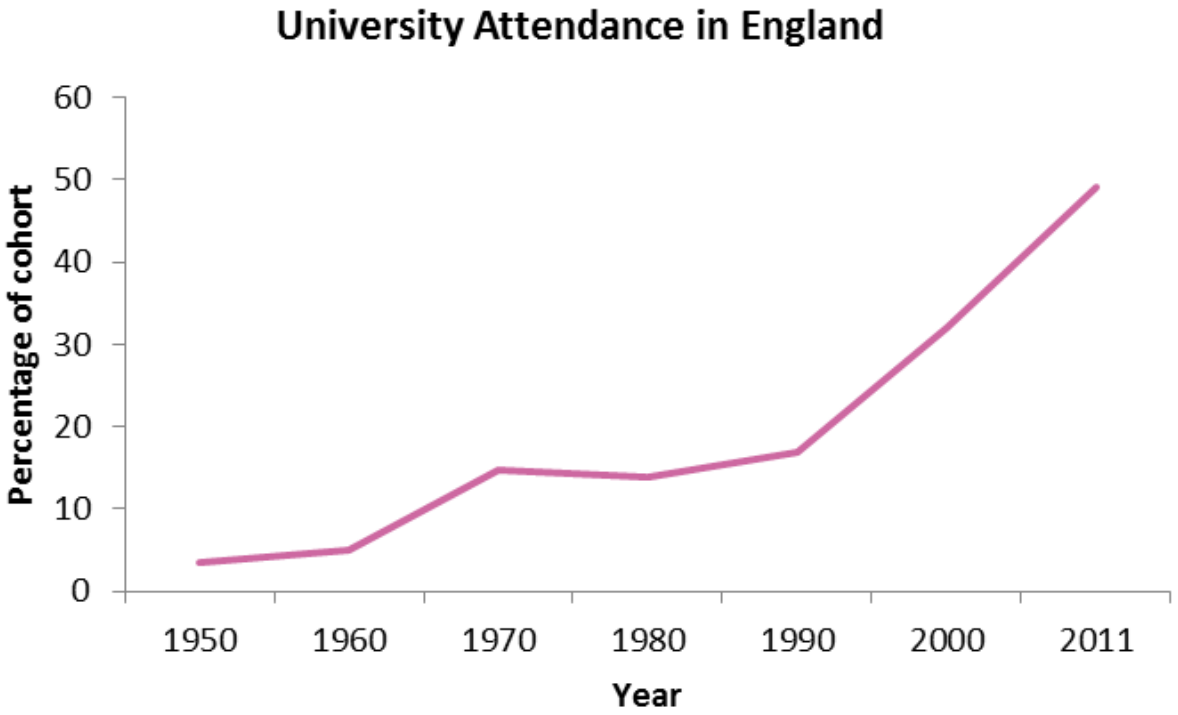
Overview

1. What research tells us about…
   - The knowledge society
   - The processes of making knowledge and innovations

2. Design Principles for making a Learning City.

3. Design Processes for making a Learning City.

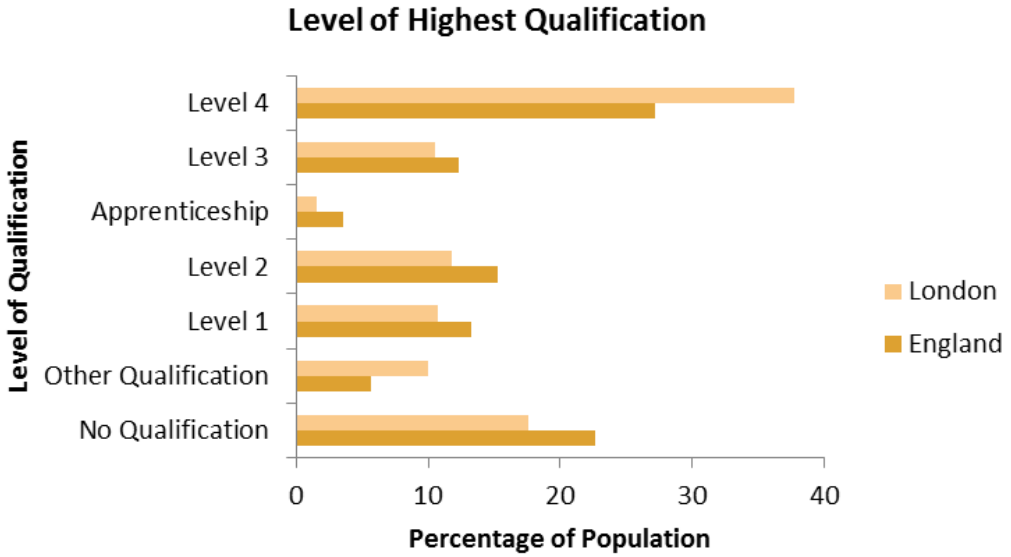
The Knowledge Society



In 1950 just 3.5% of a cohort went to university in England. In 2011 49% of the peer group went to university with 65% qualified to enter some type of tertiary education. 55% of those entering university are women. The largest degree educated group is currently under 40 – so this is an emerging trend.

Urban Intelligence

People go to (large) cities to study and then stay.



44.7% of people in inner London have a degree, compaired with 27.4% for the nation as a whole.

Urban Benefits

*Smart people push **UP** urban wages **for everyone**.*

As the number of college graduates in metropolitain area increases by 10%, individual earnings increase by 7.7%, ***no matter waht level of education an individual holds.***

Glaeser & Gottlieb 2008

What's happening in knowledge cities?

Cities display a superliniarity as they grow and this holds true for knowledge production.

The addition of one more person to a city improves creativity by more than one.

1+1=2+

Bettencourt et al. 2007

Knowledge is urban, as well as individual, rocket fuel.

What’s the mechanism that makes cities so creative?

Buzz: face-to-face connection in cities

- Cities enable face-to-face contact between informed and diverse people.
- This produces higher levels of innovation and there by economic prosperity.

Storper and Venables 2004

Buzz: Face-To-Face Contact and the Urban Economy

Cultural norms about where knowledge should be produced

Greening and "Knowledging" Cities

Cambridge Science Centre, UK

The Urban Thinkscape

Understanding how knowledge works enables informed design and planning

Core Principles

1. New ideas tend to emerge through **combining** different elements of old ideas in an original manner.

2. **Knowledge** **spills over**; ideas spread easily.

3. Ideas are **fragile** and don't travel well.

4. Ideas can be shared without being **diminished**, unlike many other resources.

Design Principles for a Learning City

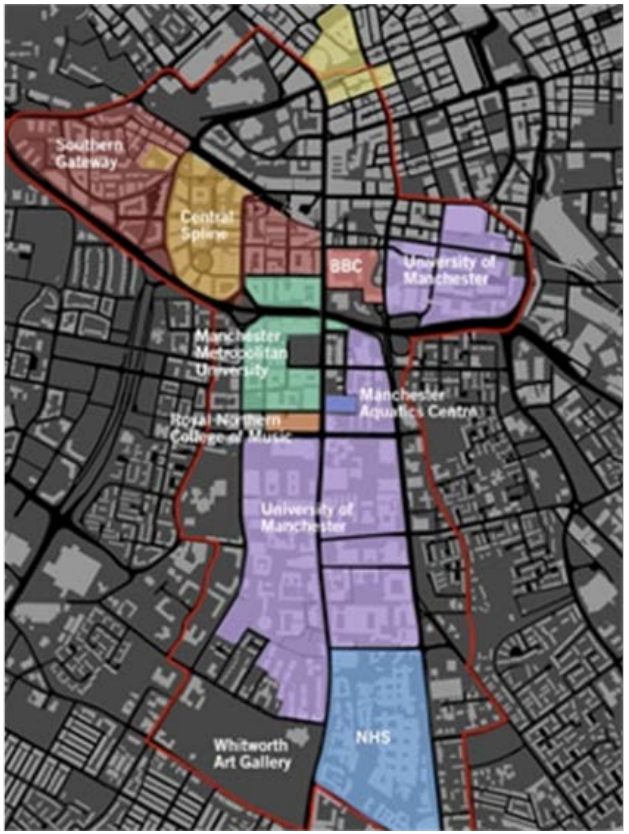
1. Density	**3. Edges**
3. Diversity	**4. Dynacism**

Density

- Knowledge and ideas "spill over" – but do not travel well.
- Building knowledge-creating assets close to each other is important.
- **Density in use** (temporal density) is also vital – 24/7 thinking.

The Knowledge District

- Bring assets together.
- Increase intensity.
- Increase interaction.
- Brand.



City of Manchester, Manchester Knowledge Corridor UK

Diversity

- New knowlege and insights require diversity.
- The foundation of this diversity is human diversity.
- Diversity in planning and design also plays a vital role.

Diversity in building type and quality

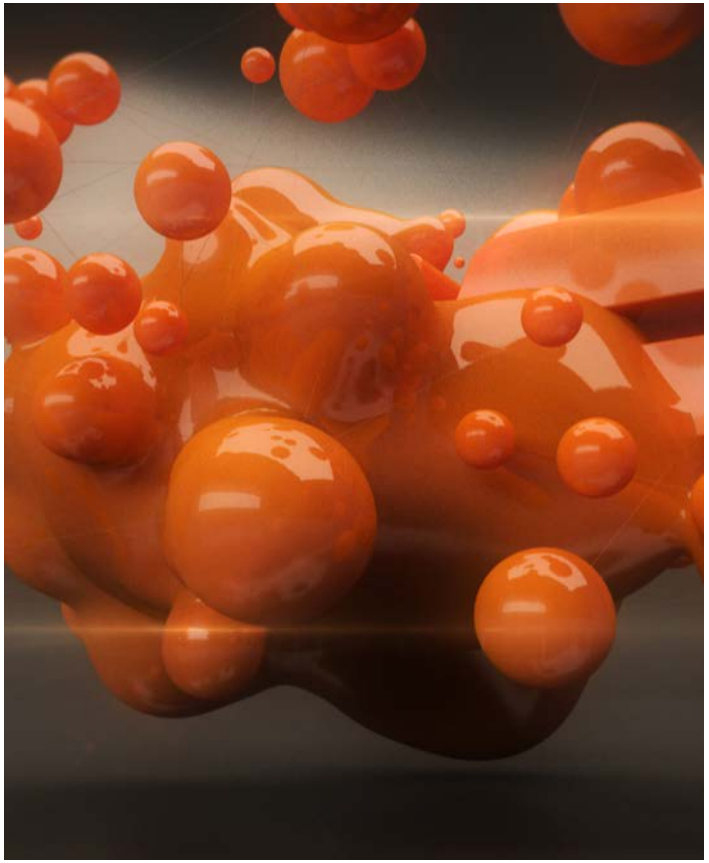
"Nobelhuset" by David Chipperfield & Christoph Felger, David Chipperfield Architects Berlin

Aalto Design Factory, Finland

Edges

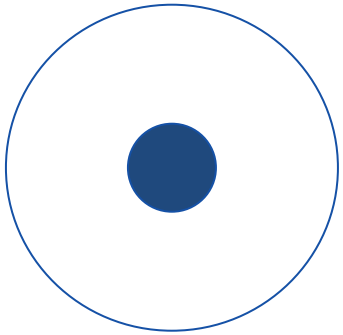
Innovation happens when **different types** of knowledge (*well, knowledgable people*) interact with each other.

In planning and design, its important to think about the **edges** where different types of knowledge/people come in to contact with each other.

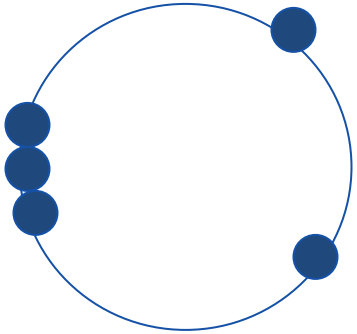


From Centre to Edge

City Planning



Traditional



Looking outwards

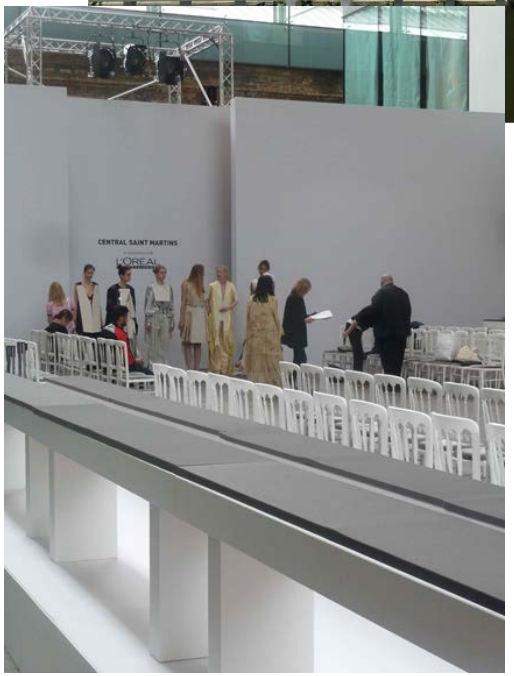
KTH Campus Plan

University Building: UCL, Institute of Making

Dynacism

- Knowledge should change and evolve.
- Flexibile spaces and re-purposed buildings are essential.

Keetwonen, Amsterdam



Central Saint Martins, London

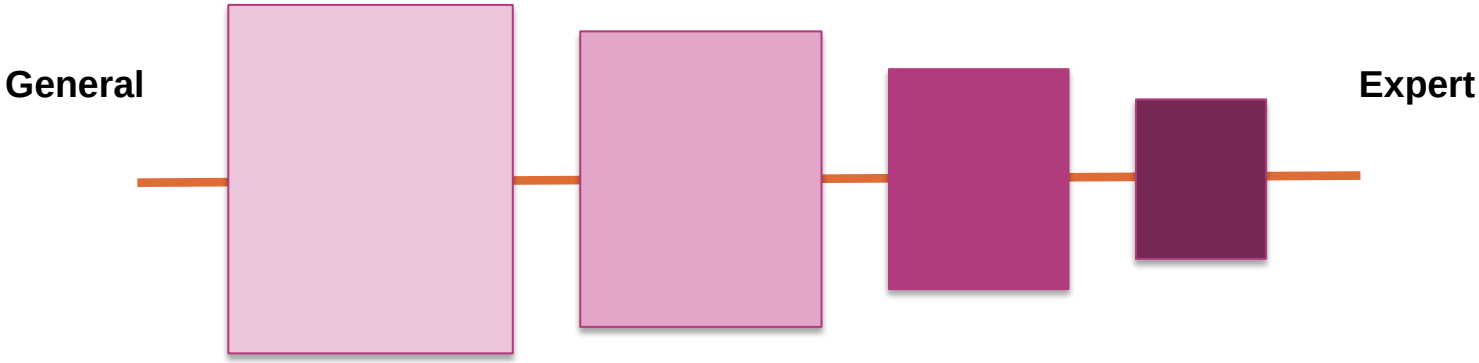
Design Principles for a Learning City

1. Density	3. Edges
2. Diversity	4. Dynacism

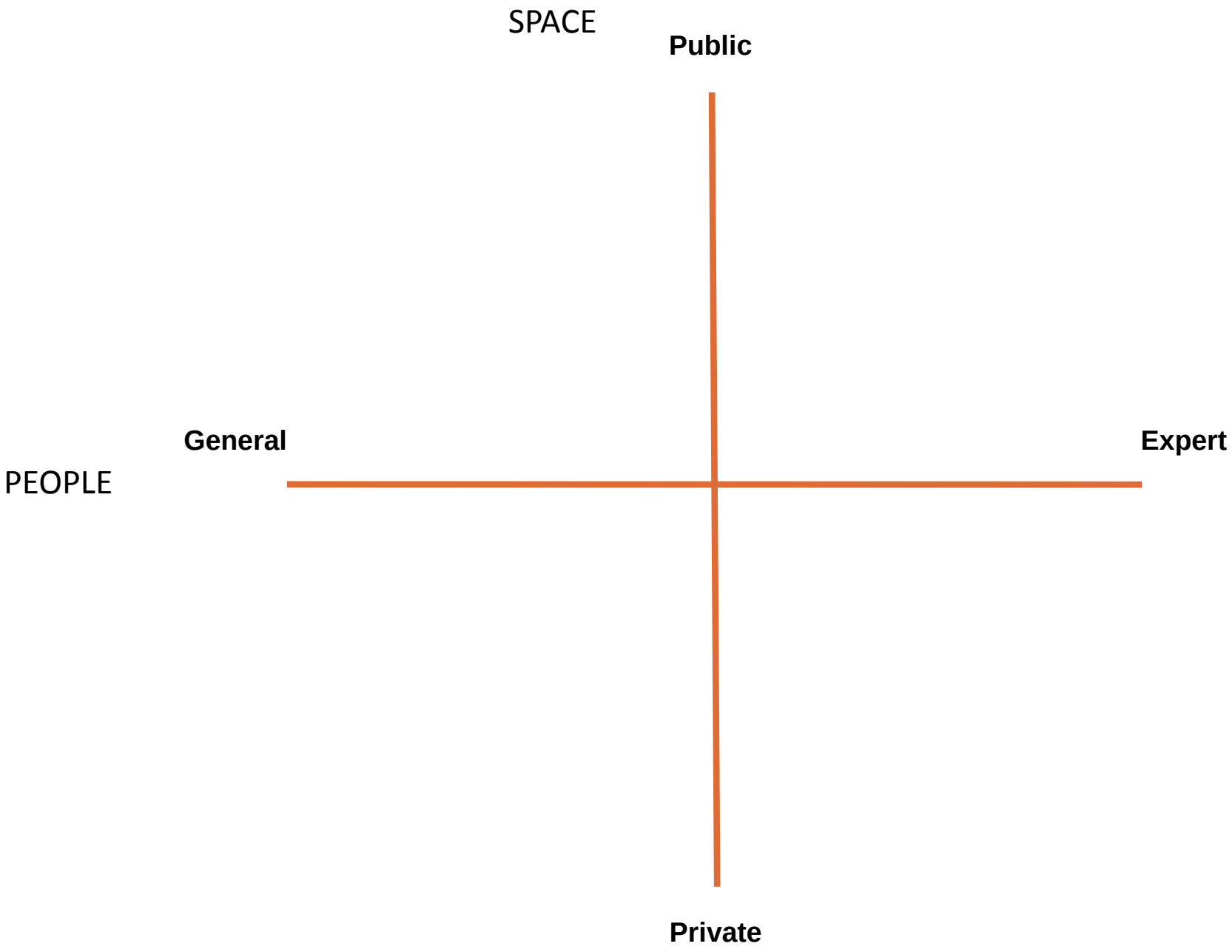
Process

Thinkscape Matrix:

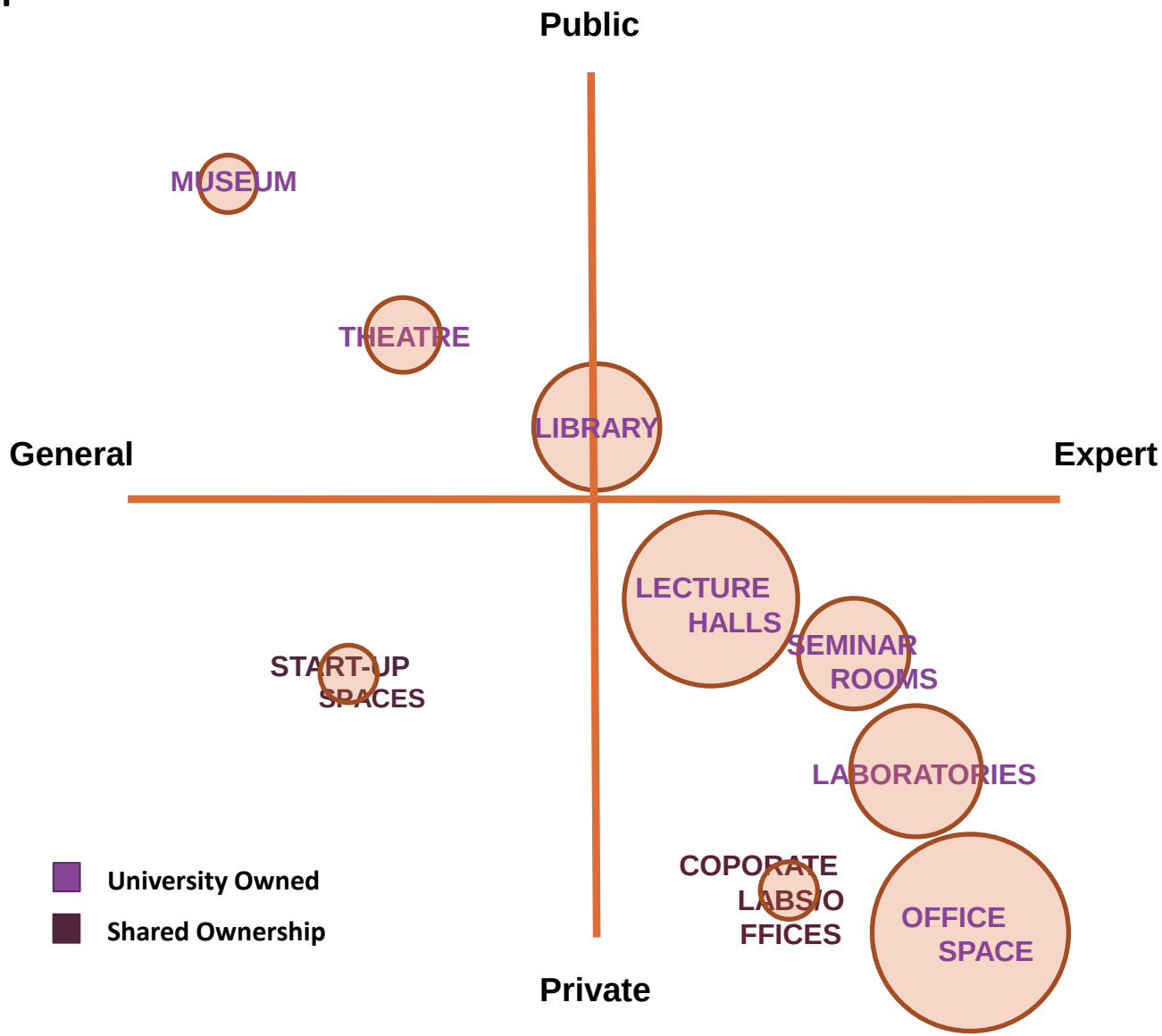
a tool for the **co-creation** of public university campuses

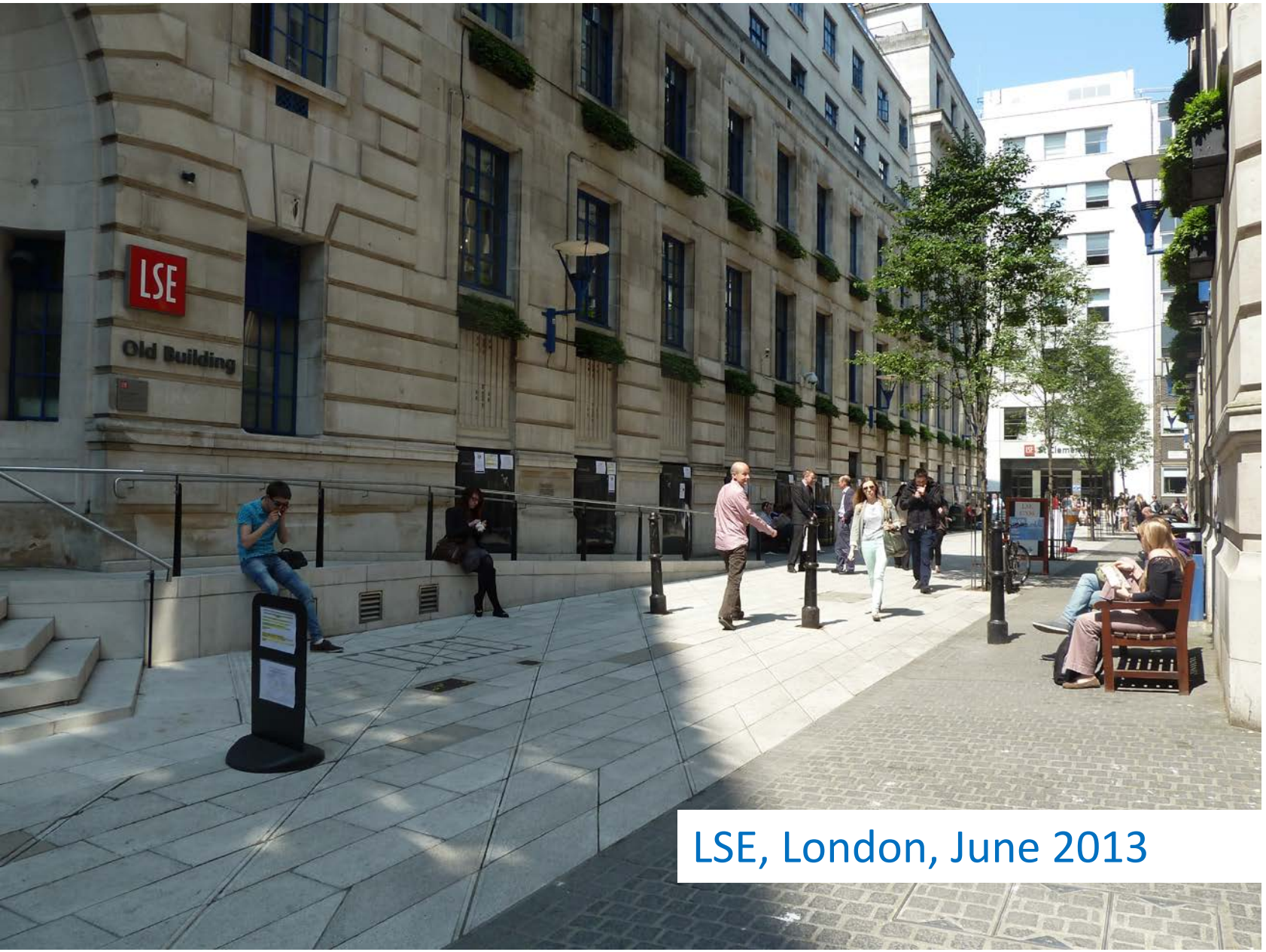


Different Knowledge Publics

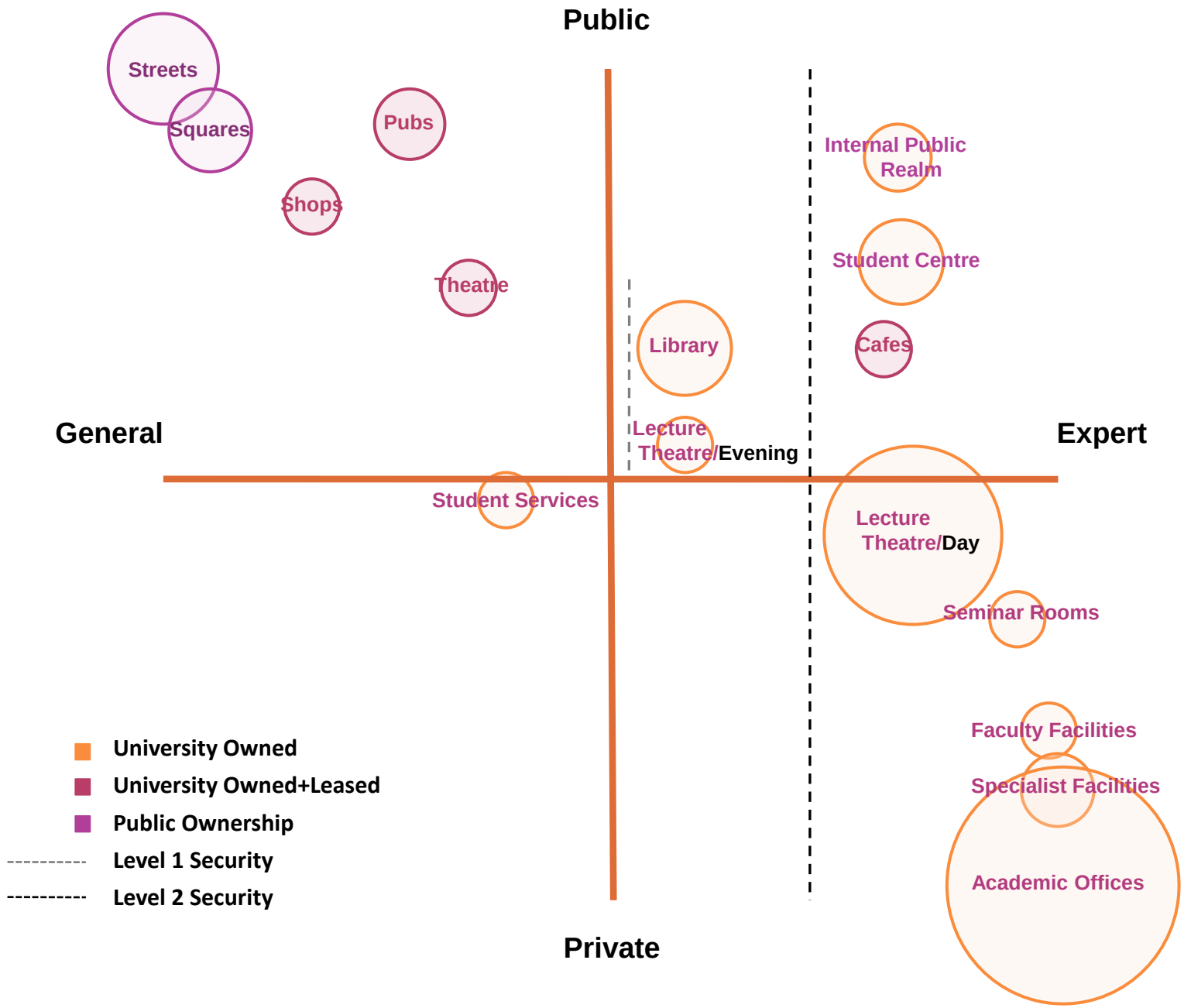

SPACE
Public
General
Expert
PEOPLE
Private

QH Group

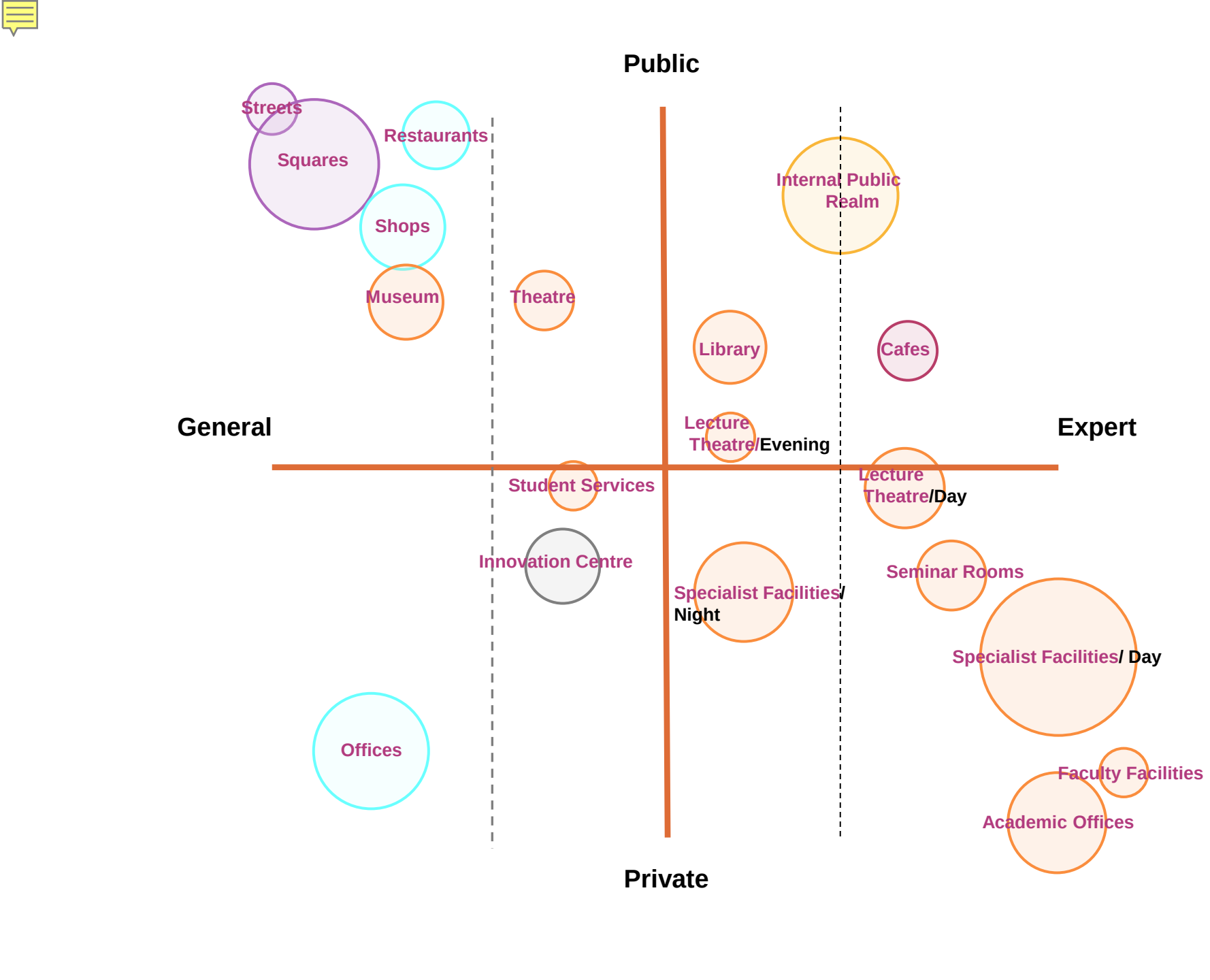

Public
MUSEUM
THEATRE
LIBRARY
General
Expert
LECTURE HALLS
SEMINAR ROOMS
START-UP SPACES
LABORATORIES
COPORATE LABS/O FFICES
OFFICE SPACE
University Owned
Shared Ownership
Private



LSE, London, June 2013


Public
Private
General
Expert
Streets
Squares
Pubs
Shops
Theatre
Internal Public Realm
Student Centre
Cafes
Library
Lecture Theatre/Evening
Student Services
Lecture Theatre/Day
Seminar Rooms
Faculty Facilities
Specialist Facilities
Academic Offices
University Owned
University Owned+Leased
Public Ownership
Level 1 Security
Level 2 Security

CSM, London, June 2013

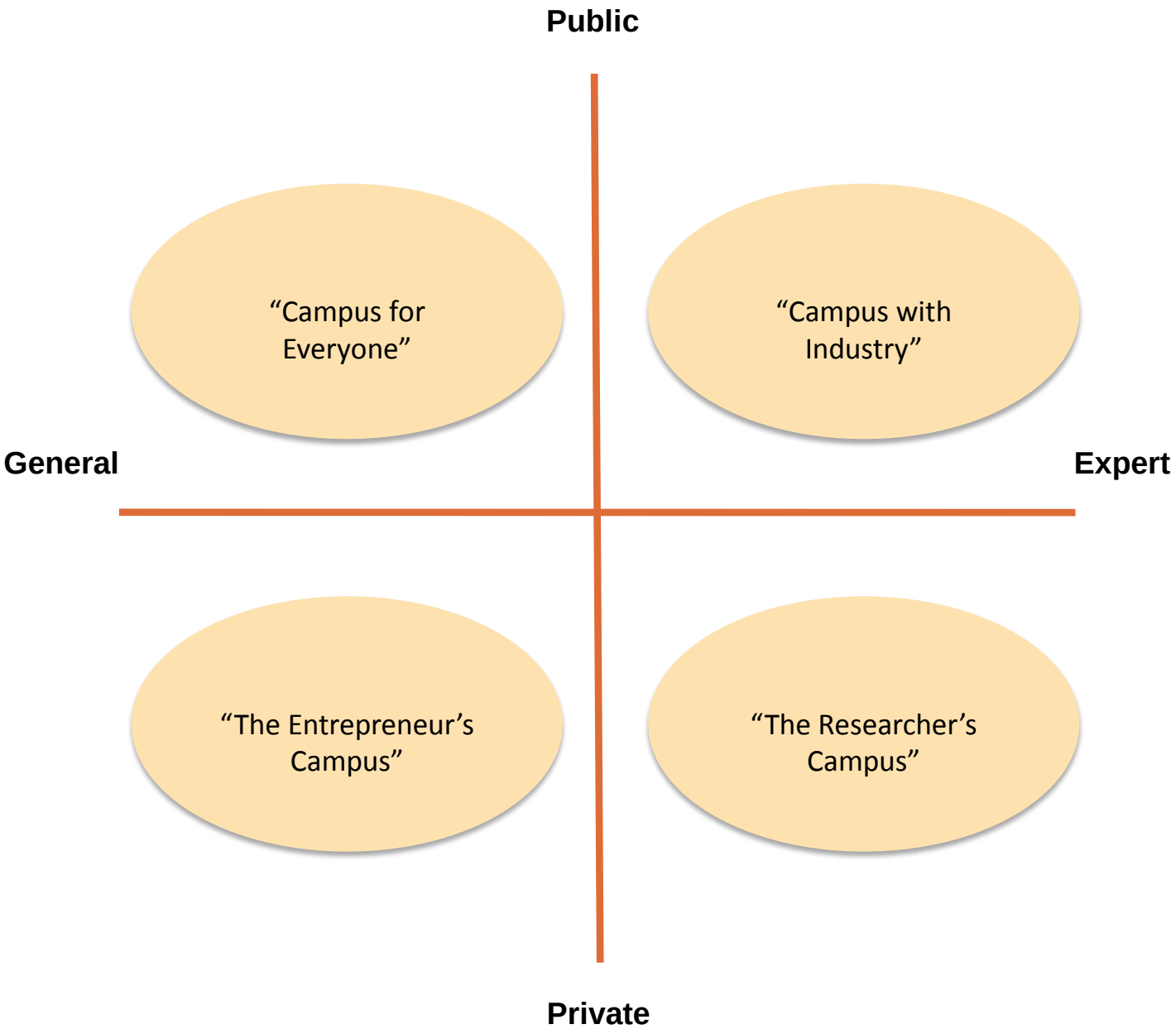

Public
Streets
Squares
Restaurants
Shops
Museum
Theatre
Internal Public Realm
Library
Cafes
General
Expert
Lecture Theatre/Evening
Student Services
Lecture Theatre/Day
Innovation Centre
Seminar Rooms
Specialist Facilities/ Night
Specialist Facilities/ Day
Offices
Faculty Facilities
Academic Offices
Private

LSE

- "Traditional” campus – academic offices and lecture halls.
- Owned by the university.
- Early and tight security.
- Internal "public” realm that’s really private.

CSM

- A greater variety of space types.
- A greater variety of owners.
- Later tight security – and a large ”in-between”, semi-secure realm for public-private interaction
- Active engagement in the external public realm by the university.


Public
"Campus for Everyone"
"Campus with Industry"
General
Expert
"The Entrepreneur's Campus"
"The Researcher's Campus"
Private

Reflections for Luleå

Its all about people.

- This is a numbers game; more people create more creativity. How can the university, its campus and its knowledge partners help attract and retain people with ideas in Luleå?
- Remember the importance of ”buzz” – face-to-face contact between diverse people. What’s the coffee strategy?
- A focus on the design of **edges** helps enable buzz. What’s the ground floor strategy?
- The process of campus making and re-making can be a creator of buzz.

End – and thank you!

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