

Faculty of Design

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Drawing Futures Together. Diagrams for the Design of Scenarios of Future Liveable Cities

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DRAWING FUTURES TOGETHER. Diagrams for the Design of Scenarios for Liveable Cities

Serena Pollastri RSD3 Symposium Oslo, October 2014











Foresight report: Living in the City

Urry, J., Caletrio, J., Birtchnell, T., Pollastri, S. *Future Cities: Living in the Cities*. UK Government Office for Science. 2014

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Foresight report: Living in the City



Foresight report: Living in the City



HIGH-TECH CITY mobile lives on the surface and through the air

Foresight report: Living in the City



LIVEABLE CITY

low carbon cities with a new idea of wellbeing (live small, drive less) and connect with those nearby

Foresight report: Living in the City



rich societies break away from poorer in fortified enclaves. War for resources.

Foresight report: Living in the City

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RESEARCH CONTEXT

Cities, complexity, futures



Design approach:

- map the system to find emerging opportunities, rather than solving single problems

- design tools for collaboration.

how many designers does it take to change a light bulb?

how many designers does it take to change a light bulb? Does it have to be a light bulb?

THEORETICAL FRAMEWORK

Metadesign approach.

Metadesign:

John Wood (2008, p. 4) identifies Metadesign as an approach able to "transform the world by **reimagining new ways to live**". This profound rethinking of the system is needed because working within the limits of the current system to make it "sustainable" is not enough (Wood, 2009).

Metadesign is the **collaborative design of the design tools**, processes that are able to produce a systemic change



THEORETICAL FRAMEWORK

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Metadesign is the **collaborative design of the design tools**, processes that are able to produce a systemic change "How can visualisation processes contribute to the design of future scenarios of radically different liveable cities?"

A VISUAL HISTORY OF THE FUTURE (FORESIGHT)

Evidence based report on how future cities have been visualised in the past 100 years.



https://www.pinterest.com/visualfuture/

VISUAL HISTORY OF THE FUTURE A TAXONOMY



A VISUAL HISTORY OF THE FUTURE (FORESIGHT)

Evidence based report on how future cities have been visualised in the past 100 years.

- * who makes the visualisation --> process and actors * what is the purpose -> agency of the image
- * subject of the visualisation



DIAGRAMS FOR DESIGN

As a method for representing the complexity of urban life

> The key role of diagrams as negotiation and decision-making tools is to *enable common and shared understanding in multi-actors context* (Ciuccarelli, Ricci and Valsecchi, 2008). Diagrams have always been integral part of different disciplines, from architecture and engineering to mathematics and natural sciences. In design research, diagrams are "operating devices able to *reveal weak links* among the elements of the system and to *show the driving forces* that can facilitate (or hinder) a design intervention" (Scagnetti et al., 2007)

DIAGRAMS FOR DESIGN

Using information visualisation processes throughout the design process



SCENARIOS

POS and DOS





scenario

project / potential project



Design Experiment: Future visioning workshops series

LIVEABLE **CITIES**

Liveable Cities

Transforming the Engineering of Cities for Global and Societal Wellbeing

Research Themes



August 2013 Activity of mapping relationships between research topics





MAP OF RELATIONSHIPS **BETWEEN RESEARCH TOPICS**

The map represents the connections between research topics, as indicated by Liveable Cities researchers during a visualisation exercise organised for a research meeting in August 2013. The infor-mation needs to be integrated and updated. This map is to be con-sidered a first prototype for a visualisation technique, and it needs to be better refined.

Liveable Cities is an interdisciplinary research project that aims to develop a method of designing and engineering low-carbon, resource-secure, - UK cities that do not compromise on Individual and collective wellbeing.



DIAGRAMS **FOR DESIGN**

Using information visualisation processes throughout the design process

> - Collaborative (sync and non sync)



A multidisciplinary design orienting conversation on radically different future







A multidisciplinary design orienting conversation on radically different future







A multidisciplinary design orienting conversation on radically different future

1 Set the context

What are the most relevant things that happened in the last 50 years in your sector?

Decline of the car

"what changed in the sector is the belief that car is the answer."

"not just in London, but in a lot of the major towns, what has changed is how people are moving using the bicycle and the decline of the car. Other than fashion and accessories for the middle age men who like to buy stuff, it is also about taking the street back, and making car drivers think twice about driving at speed (because there are more bikes)."

Re-birth of the railway

"the assumption that the railway industry was in terminal decline"

Design with people in mind

"the role of stations has changed: from big, celebrated places where people would meet, to something that, as cities get denser, people don't pay attention to. Now people are back thinking more about the stations, which are being upgraded and made more open. Stations now are thought of more from the people point of view, and are becoming something more than places where you go to get somewhere else."

"the change is that I heard this morning an engineer saying 'cities are about people"

Lenght of travel

"the amount of long distance journey has doubled over the past 15 years in the UK, that means that we need to think about transport in a different way: people will need to travel further and more frequently"

Popularity of bikes

Movement of goods

Integrated planning

"we started to make more efficient

the use of roads that are already in

place. We started to implement a

multimodal approach, in which we

look at all the steps of getting from

A to B in an integrated way, to max-

imize journey time and economic

"the containerization of freight, that has made the world as a whole in the way things move around"

"the idea of a green infrastructure. We can use the landscape to link different elements together, for example through cycle ways, transport corridors, water, energy, climate control. This holistic use of landscape makes it much more pleasurable to move around. Landscape design can become one of the key discipline to improve the way we live in cities"

impact"

"if we imagine a chicken and egg scenario of planning, which comes first: transport or landuse? In this country, as in many other countries in the world, we plan for the land use, and then we retrospectively fit the transport system around it. I think that this is the wrong way to do it, and historically strong networks were what gave shape to the society that we want."

Energy issues

"internal combustion engine is really not the future. The view now is that there must be alternative ways to produce energy for vehicles, which is something that 10, 15 years ago people wouldn't really consider"

A multidisciplinary design orienting conversation on radically different future

1 Set the context

What are the most relevant things that happened in the last 50 years in your sector?

2 get negativity out of the way

What are the worst possible things that could happen in the last 50 years?



A multidisciplinary design orienting conversation on radically different future

1 Set the context

What are the most relevant things that happened in the last 50 years in your sector?

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What are the worst possible things that could happen in the last 50 years?

3 explore possible worlds

Thinking cards + silly ideas







UMPTION & controlled



SMART ENVIROMNENTS

Real life and digital life converge in environments that sense people's behaviour and respond to it.

A multidisciplinary design orienting conversation on radically different future

1 Set the context

What are the most relevant things that happened in the last 50 years in your sector?

2 get negativity out of the way

What are the worst possible things that could happen in the last 50 years?

3 explore possible worlds

Thinking cards + silly ideas

4 design the future city of your sector

Design your city. How will people live, what the city will look like, what are the paradigms of production and consumption



Some (very) preliminary results

Retail Sector



Environment and natural scientists



Archaelogists, and culture and heritage sector



Transport and utilities



Reports and other outcomes



Engineering of cities has traditionally adopted best practice derived from personally and vicariously garnered experience, using top-down approaches for engineering provision while taking only broad cognisance of the needs of society via collective governance. This

More information

Some reports from the Future Visioning

Focus on activity 3 and 4 (Work in progress)



Activity 3

Mapping emerging issues, relevance and relations

Transport and Utilities sector

FUTURE VISIONING WORKSHOP SERIES

TRANSPORT AND UTILITIES SECTOR

Liveable scenarios in sustainable cities

The Future Visioning Workshop brings together and leading expert in transport and utilities to explore visions of sustainable, liveable future cities. Through a combination of hands-on activities and open discussion, this 2-hour workshop enables deep, creating thinking in a short time.

This is one of a number of sector-specific events to establish visions of the city that will inform design and engineering recommendations and visions for future cites.

About this visualisation:

This diagram maps the main issues emerging from the discussion generated in one of the activities of the workshop (Activity 3).

This activity was designed to stretch the participants' imagination and push their time hori-zon. Each group (A, B, C, D, E, F) was given a set of 'Thinking cards' to help them imagine what a future liveable city could be in terms of what that city would look like and where people would live fifty years from now. The cars portrayed ambiguous issues that might become relevant in the future, and were used as props to stimulate a creative discussion.

Key to the diagram





Activity 3

Mapping emerging issues, relevance and relations

Archaeologists and historians

FUTURE VISIONING WORKSHOP SERIES

HERITAGE, CULTURE, AND ARCHAEOLOGY

Liveable scenarios in sustainable cities

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Planetory Wellbein

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Activity 3

Mapping emerging issues, relevance and relations

Transport and utilities sector



Archaeologists and historians



Activity 3

Mapping emerging is-sues, relevance and relations

Transport and utilities sector

"Slowness"



Archaeologists and historians

"Slowness"



design

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Next steps



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Mapping of activity 2 to be completed

Mapping of activity 3 to be designed

Comparative mapping, overlaying

liveable cities framework

Feedback, dissemination, further discussions

Conclusions

Preliminary findings

- Interesting when compared
- Design of the activities and material is crucial (more than facilitation)
- Fine balance creativity/structure
- Leave room to disagree

- Conversations are more important for the analysis than artefacts produced in the workshops.

Limitations

- Participant's profile
- Time available
- We have no detailled information on how the results will be used (even thou we know it will be included in Liveable Cities outcome)

SOME NOTES ON MY RESEARCH



RESEARCH QUESTION

DESIGN **EXPERIMENTS**

CONTEXT





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