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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

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A BRIEF HISTORY OF ME

How (and why) I got where I am.
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A BRIEF HISTORY OF ME

How (and why) I got where I am.

Toronto service
design visualisations
urban living
future(s)
metadesign
service design
urban
agriculture
food
collaborative urban maps
"rururban"

Lancaster
graphic design
food
visualisations
urban living
future(s)
metadesign
service design

Milan
creative communities
service design

Shanghai
service design
food
"rururban"
SCENARIOS OF FUTURE URBAN LIVING

Foresight report: Living in the City

SCENARIOS OF FUTURE URBAN LIVING

Foresight report: Living in the City

DIGITAL CITY

widespread substitution of physical movement of objects and people by many forms of digital communication and experiences
SCENARIOS OF FUTURE URBAN LIVING
Foresight report: Living in the City

HIGH-TECH CITY
mobile lives on the surface and through the air
SCENARIOS OF FUTURE URBAN LIVING
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
SCENARIOS OF FUTURE URBAN LIVING

Foresight report: Living in the City

FORTRESS CITY

rich societies break away from poorer in fortified enclaves. War for resources.
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?
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.
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“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/
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
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*

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**Decision Making in the scenario(s)**

**Policy-Orienting Scenarios**

**Future Studies**

- S1
- S2
- S3

**Strategic Planning**

- P1
- P2
- P3

**Design Orienting Scenarios**

**Design of the scenario(s)**

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**KEY**

- s: scenario
- P: project / potential project
Design Experiment:
Future visioning workshops series
August 2013
Activity of mapping relationships between research topics

Liveable Cities is an interdisciplinary research project that aims to develop a framework for understanding the role of engineering and urban design in shaping city resilience. The project examines how cities can be designed to enhance individual and collective wellbeing.

The diagram represents the connections between research topics, as identified by Liveable Cities researchers during a consultation exercise organized for a research meeting at the University of Sheffield in August 2013. The information was then integrated and synthesized. This map is to be considered a first prototype for a visualization technique, and it needs to be further refined.

Liveable Cities is an interdisciplinary research project that aims to develop a framework for understanding the role of engineering and urban design in shaping city resilience.
DIAGRAMS FOR DESIGN

Using information visualisation processes throughout the design process

- Macro scale
- Collaborative (sync and non sync)
FUTURE VISIONING WORKSHOP

A multidisciplinary design orienting conversation on radically different future
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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.”

Popularity of bikes
“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”

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 maximize journey time and economic impact”

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.”

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”

Movement of goods
“the containerization of freight, that has made the world as a whole in the way things move around”

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”

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.

"if we imagine a chicken and egg scenario of planning, which comes first: transport or land-use? 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.”

"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 pleasant to move around. Landscape design can become one of the key discipline to improve the way we live in cities”

"the containerization of freight, that has made the world as a whole in the way things move around’"
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?
FUTURE VISIONING WORKSHOP
A multidisciplinary design orienting conversation on radically different future

1 Set the context
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3 explore possible worlds
Thinking cards + silly ideas

Thinking cards
- technology
- society
- politics/economics
- environment

SMART ENVIRONMENTS
Real life and digital life converge in environments that sense people’s behaviour and respond to it.
**FUTURE VISIONING WORKSHOP**

*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
FUTURE VISIONING WORKSHOP

Reports and other outcomes

liveablecities.org.uk/challenges/future-visions
VISUALISE

Focus on activity 3 and 4

(Work in progress)
Activity 3

Mapping emerging issues, relevance and relations

Transport and Utilities sector

Liveable scenarios in sustainable cities

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

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

About this visualization:

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 reveal the participants' imaginations and push their thinking boundaries. Each group (A, B, C, D, E, F) was given a set of 'thinking cards' to help them imagine what a future livable city could be in terms of what that city would look like and where people would feel happy living from now. The cards portrayed ambiguous issues that might become relevant in the future, and were used as props to stimulate creative discussion.

Key to the diagram

- Green circle: positive focus
- Orange circle: negative focus
- Yellow: strong focus
- Black: weak focus
- Green line: connections

Future Visioning Workshop Series
Transport and Utilities Sector
**VISUALISE**

**Activity 3**

Mapping emerging issues, relevance and relations

**Archaeologists and historians**
Activity 3
Mapping emerging issues, relevance and relations

Transport and utilities sector

Archaeologists and historians

VISUALISE

Education on personal responsibility & sustainability issues

Technology to enhance wellbeing

Solidarity, help, creative communities

Slowness

Privacy/use of data

Solidarity, help, creative communities

People-driven design

digital tools for city living (IoT)

Top-down push to behavioural change

City

Space

Commun
VISUALISE

Activity 3
Mapping emerging issues, relevance and relations

Transport and utilities sector
“Slowness”

Archaeologists and historians
“Slowness”
**VISUALISE**

Next steps

1. **WORKSHOPS**
   - retail
   - environm.
   - heritage
   - transport

2. **VISIONS OF FUTURE** (mapped conversations)

3. **THEMES** + synergies and controversies

*Feedback, dissemination, further discussions*

Mapping of activity 2 to be completed
Mapping of activity 3 to be designed
Comparative mapping, overlaying
# FUTURE VISIONING WORKSHOP

## 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 detailed information on how the results will be used (even though we know it will be included in Liveable Cities outcome)
SOME NOTES ON MY RESEARCH

Putting the experiment in context

- **diagrams**
  - why
  - what type?
  - what types?

- **visualisations**
  - why
  - what type?
  - what types?

- **future scenarios**
  - why
  - what type?

- **design orienting scenarios**

**METHODS, PROCESSES, AND TOOLS**

- **cities&liveability** → interdisciplinarity complexity

**LITERATURE REVIEW**

**RESEARCH QUESTION**

**DESIGN EXPERIMENTS**

**CONTEXT**

**future visioning workshops visualisations**
THANK YOU

Grazie
Takk

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