



MappingDESIGNSCAPES: Making Sense of Our Initiatives Together

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CommunitySense
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Sharing design-enabled innovation lessons learnt



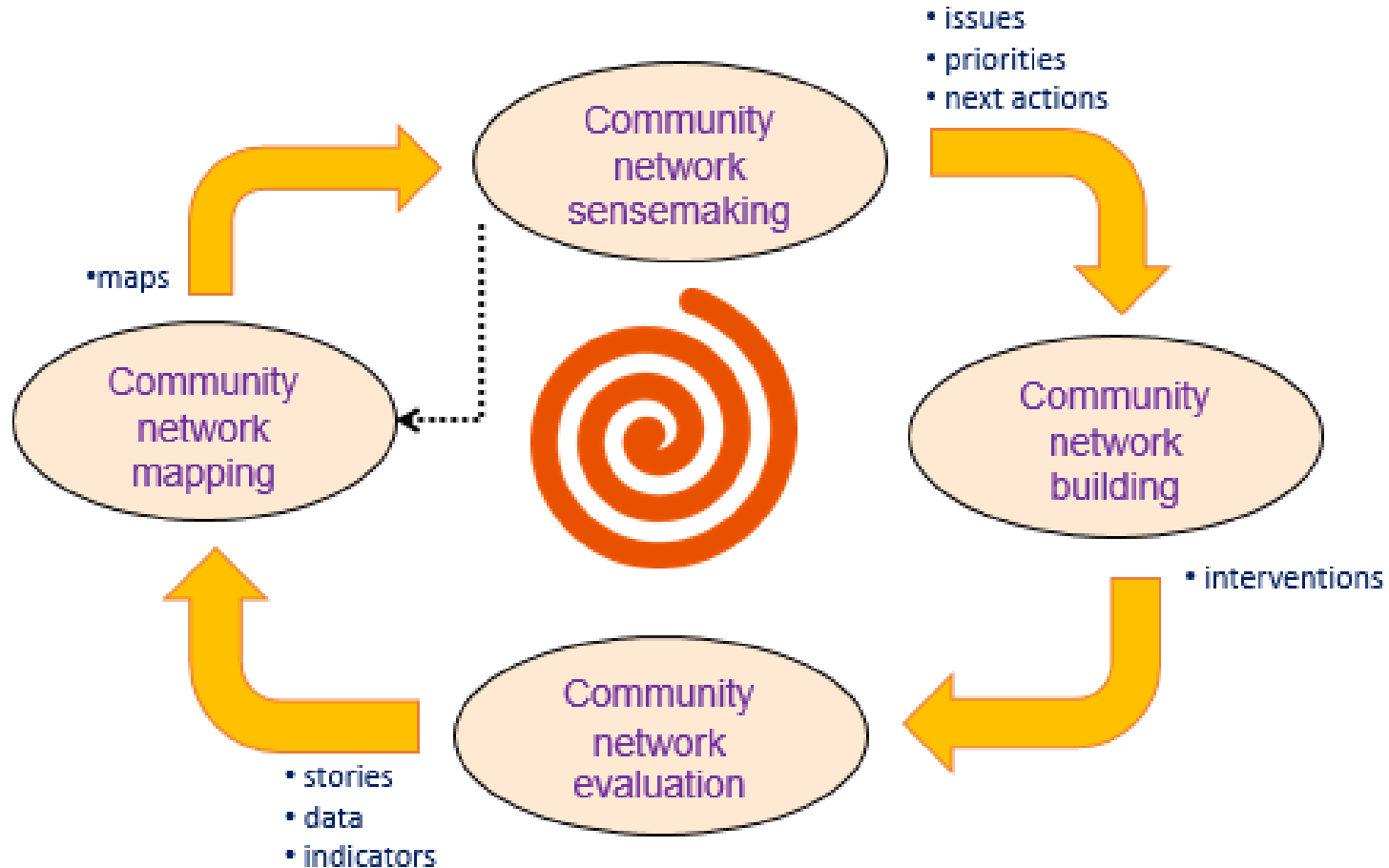
- DESIGNSCAPES
 - Many initiatives in all cities
 - Initiatives wide-ranging in scope
 - Different interpretations of what design-enabled innovation is
- How to effectively share design-enabled innovation lessons learnt?
- The question: can we use *participatory collaboration mapping* to catalyze the process of sharing lessons learnt?

Participatory collaboration mapping



- **Participatory community network mapping:** the participatory process of capturing, visualizing, and analyzing community network relationships and interactions and applying the resulting insights for community sensemaking, building, and evaluation purposes (De Moor, 2017).
- In essence
 - Together with community members, we first define *THEIR* mapping *language*
 - then *map* relevant parts of their *collaboration ecosystems*
 - In a *sensemaking* process, stakeholders then reflect upon selected map *perspectives*, to identify *issues*, *priorities*, and *next actions*

The CommunitySensor methodology



A. de Moor (2017). CommunitySensor: Towards a Participatory Community Network Mapping Methodology. *The Journal of Community Informatics*, 13(2):35-58

Kumu: online network visualization tool



Clarity begins with Kumu.

Kumu is a powerful data visualization platform that helps you organize complex information into interactive relationship maps.

The BoostINNO project



CITIES

COUNTRIES

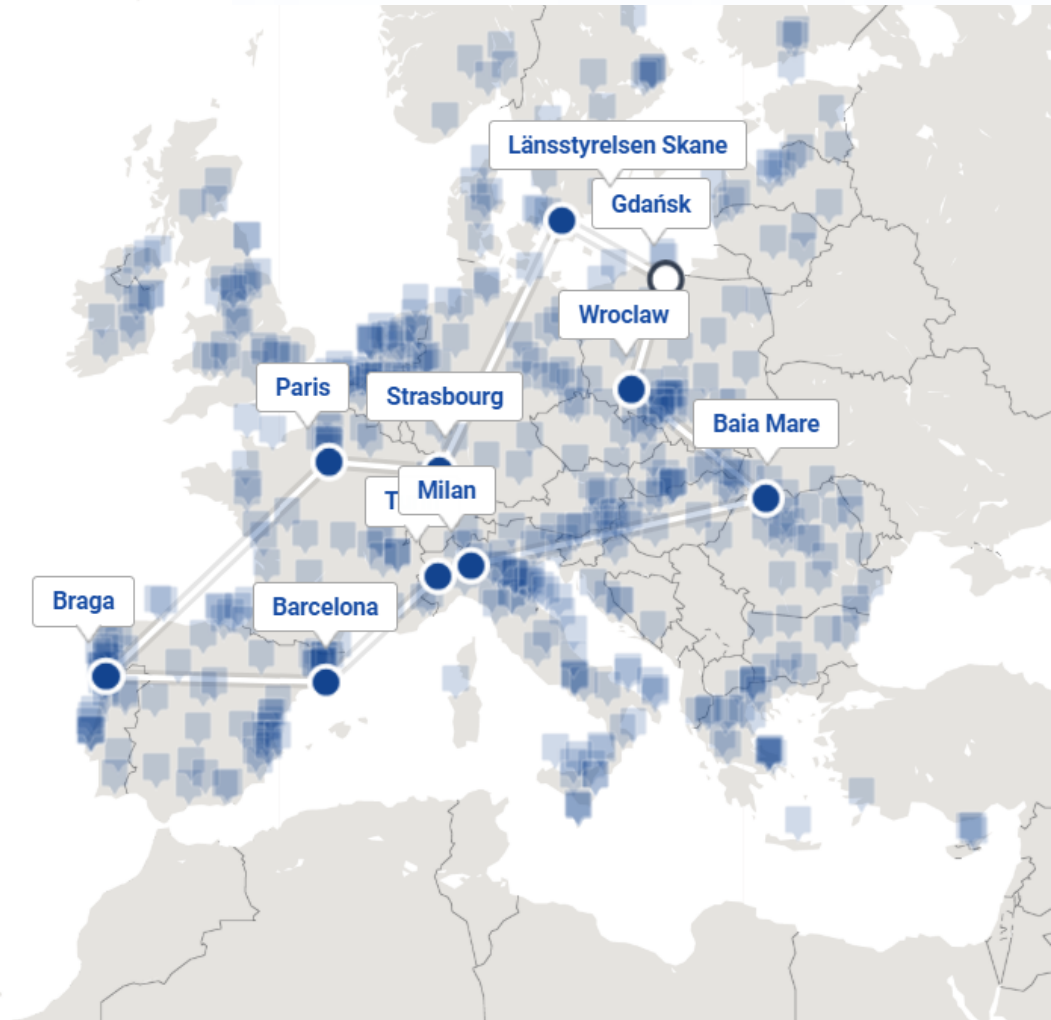


BoostInno

The work developed by the cities of this Action Planning network has proven that social innovation is not just a trend, but it could also be qualified as a fundamental change in the management of cities, in the management of impact and in the relations cities uphold and develop with their inhabitants. Some would describe this change as an equivalent of the industrial or the IT revolution: up until now, one of the basic assumptions of urban policy was that citizens were to accept what is decided, planned and built. Recent years have shown that it is often the citizens who make the city, in a collaborative perspective.

Lead Partner: Gdańsk - Poland

Partners: Wroclaw (Poland), Baia Mare (Romania), Milan (Italy), Turin (Italy), Barcelona (Spain), Braga (Portugal), Paris (France), Strasbourg (France), Länsstyrelsen Skane (Sweden),



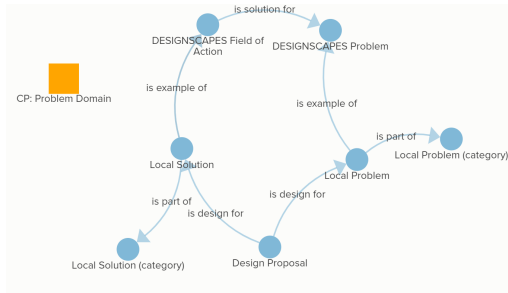
BoostINNO: F2f collaborative sensemaking



MappingDESIGNSCAPES outputs



- Conceptual model

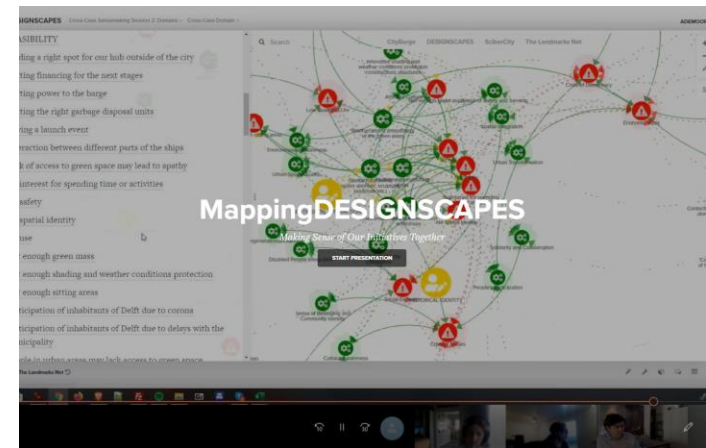


- Visual knowledge base
(3 urban prototype cases)

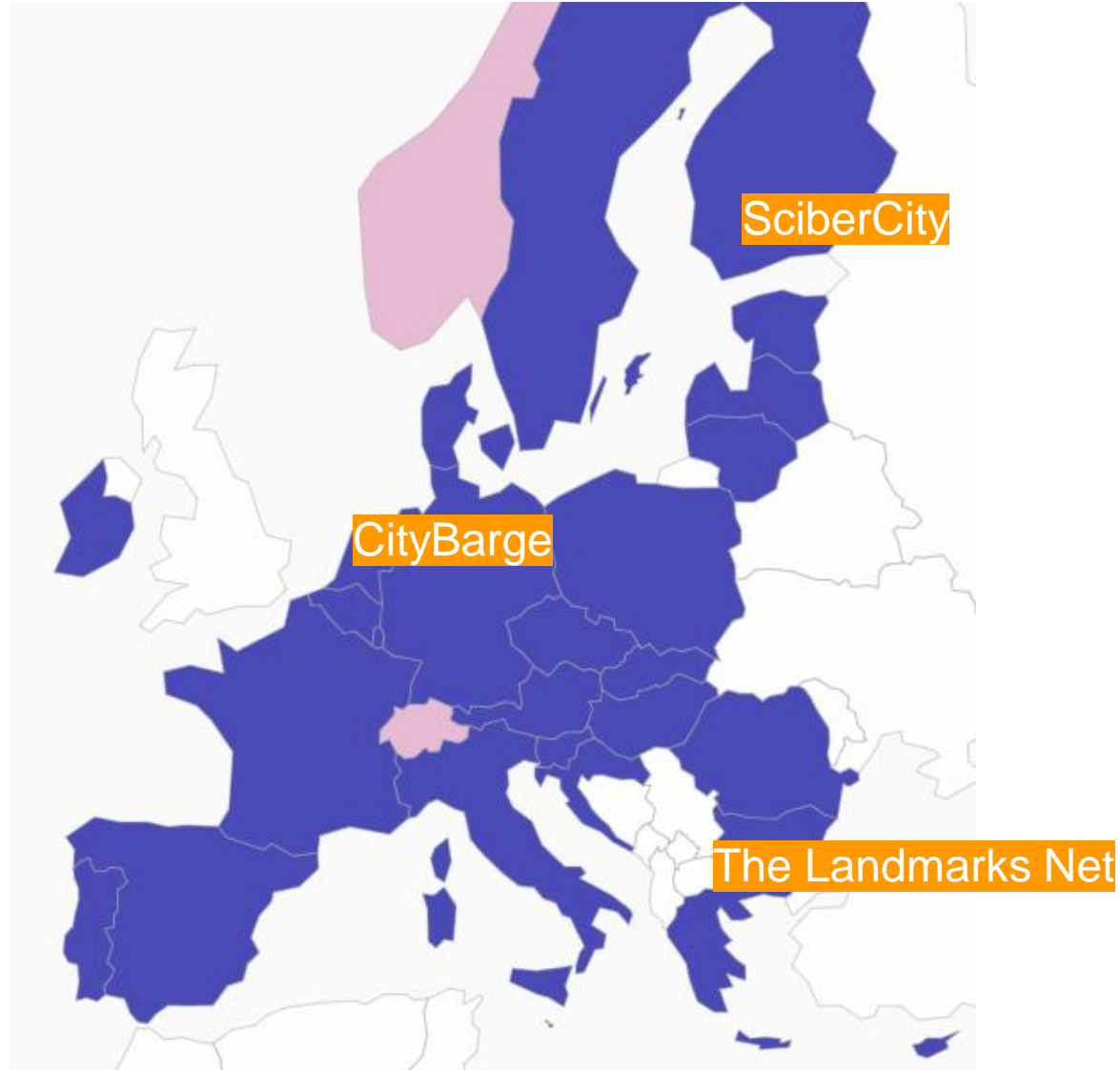


- Interactive lessons-learnt demonstrator

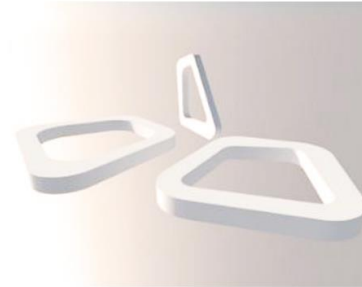
- (White paper)



MappingDESIGNSCAPES: the cases



Case #1: The Landmarks Net



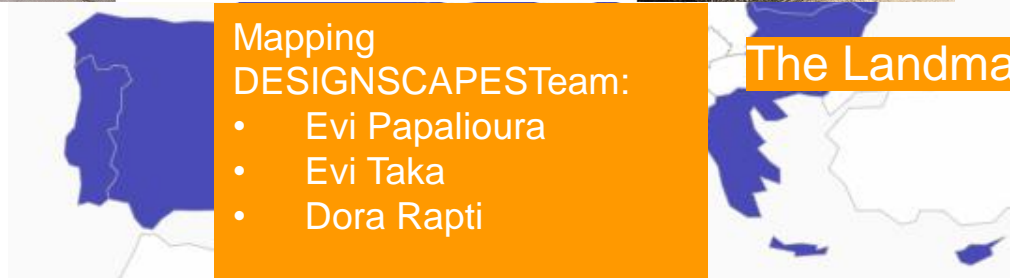
The Landmarks' net refers to the design and construction of a landmarks' web, along in the area of the Municipality of Neapoli – Sykies (Greece) and their connection to the existing free-space urban context, parallel to the activation of a human network through educational interaction and participatory design

The Landmarks' net

Mapping
DESIGNSCAPE Team:

- Evi Papalioura
- Evi Taka
- Dora Rapti

The Landmarks Net



Case #2: SciberCity



SciberCity used a participatory process to create future personas called 'SciberPunks' that could be used in more than human design scenarios for the purpose of building empathy towards the environment and its non-human inhabitants. The design process utilized real data and information as well as arts-based methods to support building empathy via data.

SciberCity

MappingDESIGNSCAPES

Team:

- Annika Wolff
- Antti Knutas
- Anne Pässilä
- Teija Vaino
- Lasse Kantola
- Jon Lautanen



Case #3: CityBarge



CityBarge

MappingDESIGNSCAPES

Team:

- Tomas te Velde
- Shaun Akse
- Mark Baken
- Eveline Beukers
- Peter de Bruijn
- Antine Redingius
- Geert-Jan van der Wielen

CityBarge contributes to the liveability of cities by reviving the canals and providing a clean, easy and affordable water logistics solution. Together with its partners, Skoon Energy, KOTUG International and FYNLY, CityBarge developed a fully electric push-boat combined a system of mini-hubs on the canals.

COVID: no more f2f co-creation workshops / everything online



MappingDESIGNSCAPES approach: (1) mapping

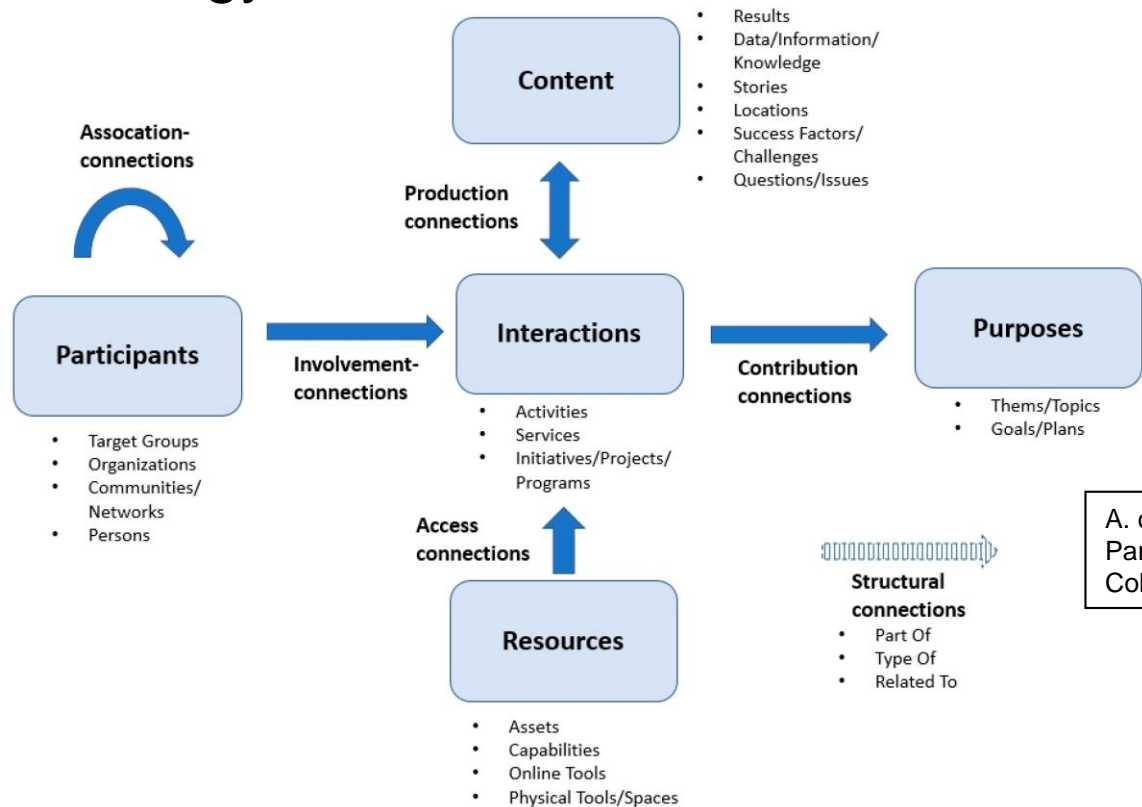


- Created initial *conceptual framework*
- Defined *architecture* of visual knowledge base + *implementation* in Kumu
- Using conceptual model, individual interviews + surveys to create “*seed maps*” for 3 selected urban prototype cases
- Created *aggregate maps* (project scopes/problem domains/design) out of seed maps for cross-case analysis

Foundation of MappingDESIGNSCAPES conceptual framework



Customization of the CommunitySensor community network ontology



A. de Moor (2018). A Community Network Ontology for Participatory Collaboration Mapping: Towards Collective Impact, *Information*, 9(7): art.no.151.

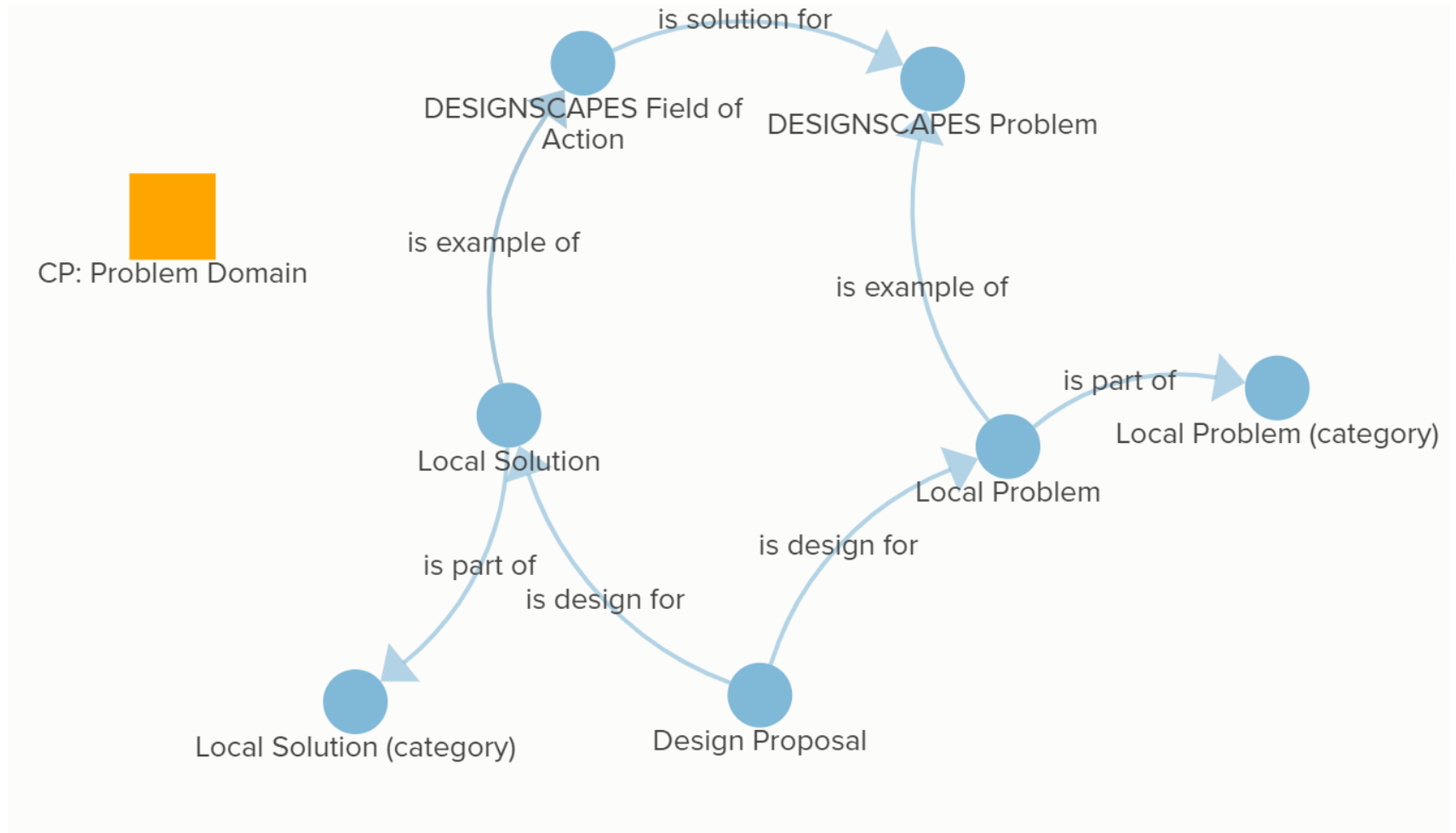
- DESIGNSCAPES application form structure = “interlingua”

DESIGNSCAPES conceptual framework: key concepts



- Problem Domain
 - DESIGNSCAPES Problems
 - DESIGNSCAPES Fields of Action
 - Local Problems
 - Local Solutions
- Project Scope
 - Project Focus
 - Project Orientation
 - Innovation Targets
 - Design Agency
 - Design Approaches
- Design
 - Design Projects
 - Design Process
 - Design Activities
 - Design Tools
 - Design Proposals
 - Design Context

DESIGNSCAPES conceptual framework: Excerpt - Problem Domains



MappingDESIGNSCAPES visual knowledge base



MappingDESIGNSCAPES DESIGNSCAPES Conceptual Framework Overview

DESIGNSCAPES CONCEPTUAL FRAMEWORK (draft)

PROJECT SCOPE

Project Focus

- Marketing Innovation
- Organizational Innovation
- Process Innovation
- Product / Service Innovation
- Project Focus

Innovation Targets

- Innovation Target
- One or more national markets / societies
- One or more organisations, groups or individuals
- One or more regional or local markets / communities
- Other innovation targets
- The global market / society

Project Orientation

- Not for profit, mostly aimed at generating societal/communitarian value
- Other project orientations

KEY DESIGN STORIES

Search

Legend

- design proposal
- design tool
- design project/process/activity
- domain solution
- domain problem
- design for
- includes/part of
- influences
- solution for
- tool used
- type of

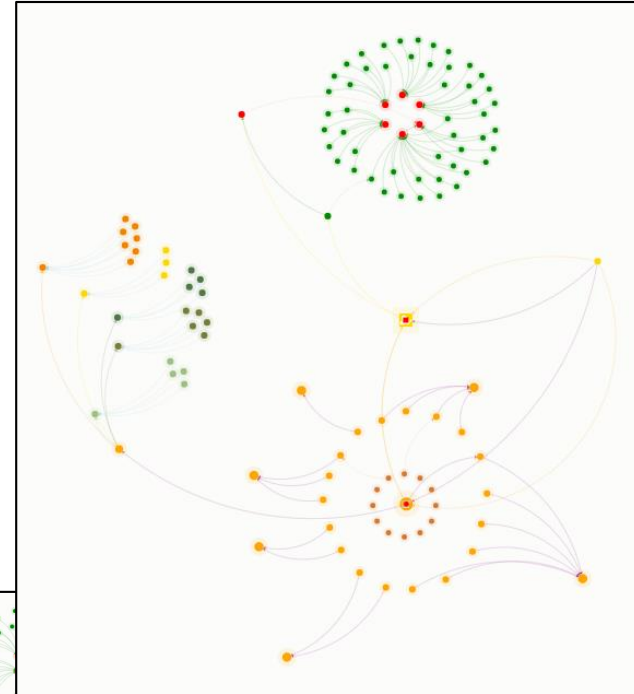
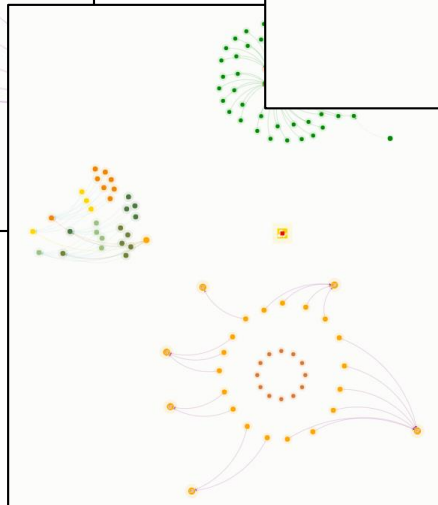
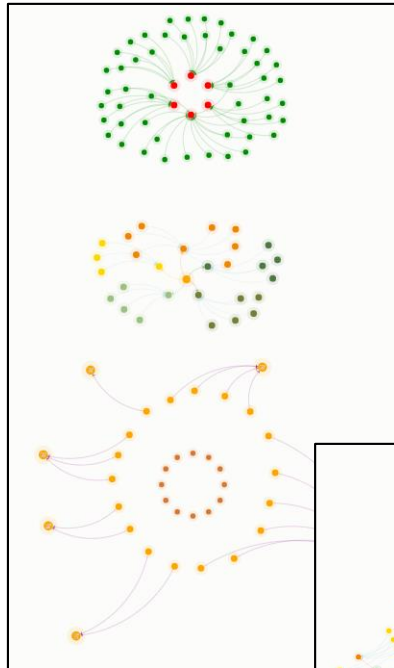
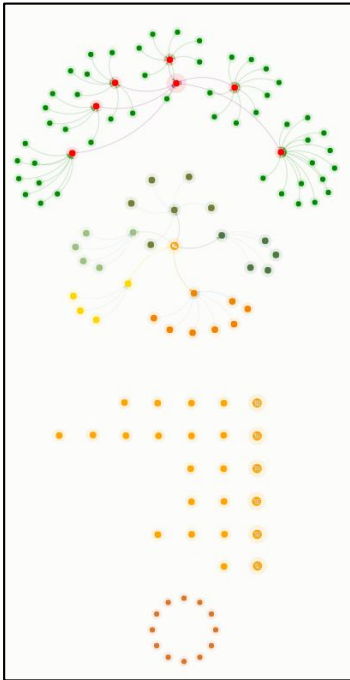
ADEMOOR

The “Making of the MappingDESIGNSCAPES Conceptual Framework”



DESIGNSCAPES Conceptual Framework

DESIGNSCAPES Conceptual Framework v0.1
DESIGNSCAPES Conceptual Framework v0.2
DESIGNSCAPES Conceptual Framework v0.3
DESIGNSCAPES Conceptual Framework v0.4
DESIGNSCAPES Conceptual Framework v0.5
DESIGNSCAPES Conceptual Framework v0.6
DESIGNSCAPES Conceptual Framework v0.7
DESIGNSCAPES Conceptual Framework v0.8



Evolution of:

- Types of elements and connections;
- Clustering of elements/relative positioning of those clusters of elements;
- Local/global conceptualizations
- Visualization elements/connections

Seed map: The Landmarks Net



THE LANDMARKS NET (draft)

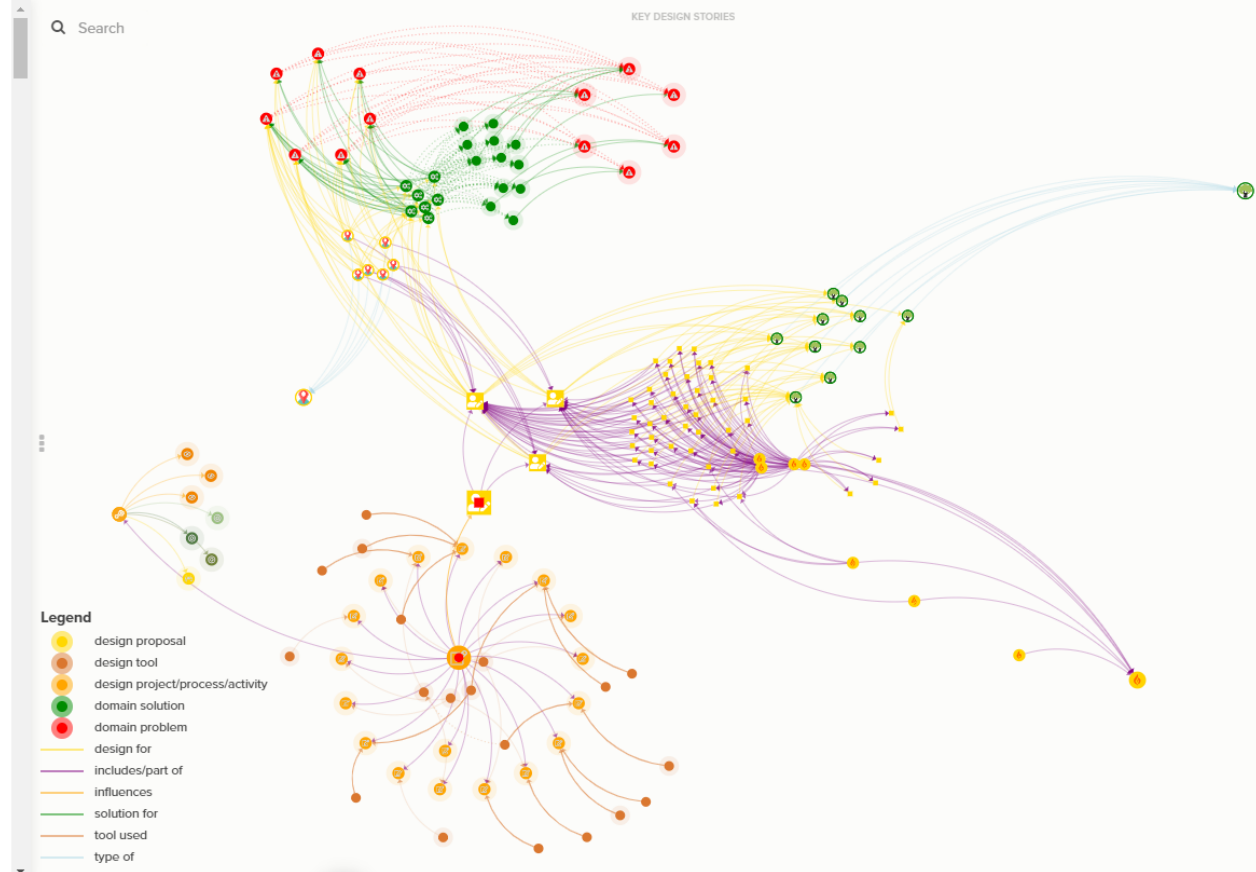
This map sketches the design approach of The Landmarks Net project.



Project concepts and objectives

The project refers to the design and construction of “The landmarks’ net”, in the Municipality of Neapoli – Sykies (Thessaloniki, Greece) and their connection to the existing green-space grid, parallel to the activation of a human network with common environmental and educational actions.

This can be achieved by the creation of pocket parks for educational play, using urban landmarks as a focal point in the



Seed map: SciberCity



MappingDESIGNSCAPES SciberCity Overview

SCIBERCITY (draft)

This map sketches the design approach of the SciberCity project.

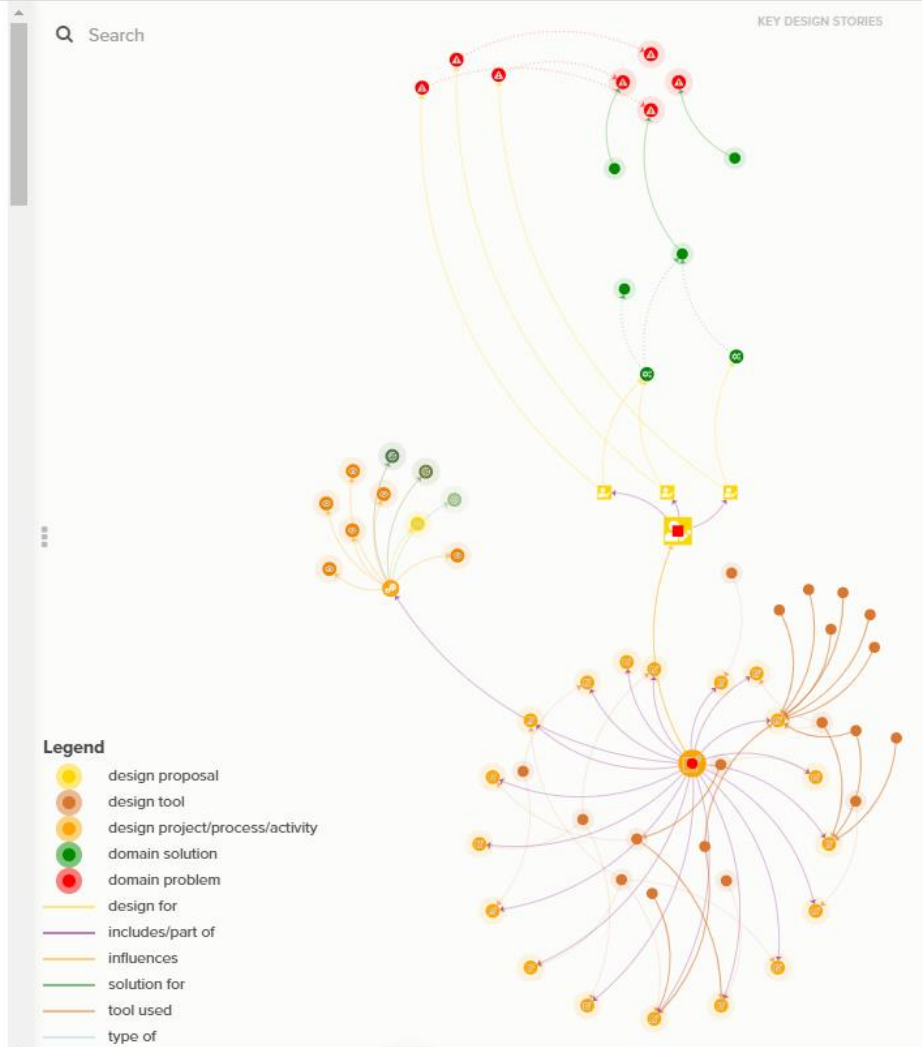


Project concepts and objectives

Innovating new approaches to building environmental empathy through data by imagining how it would feel to embody data as a SciberPunk that can immediately experience and communicate data through augmentations.

MAP PERSPECTIVES

Check out the various perspectives:



Seed map: CityBarge



MappingDESIGNSCAPES CityBarge Overview

CITYBARGE (draft)

This map sketches the design approach of the [CityBarge](#) project.



Project concepts and objectives

Through transport over canals, inner-city waste-logistics can be sustainable, silent and unobstructive for traffic. The River Barge 2.0 autonomously collects waste and provides the chance for 'reversed collection' and more recycling.

River Barge 2.0 tackles air pollution, high costs of waste collection and traffic congestion in city centres.

MAP PERSPECTIVES

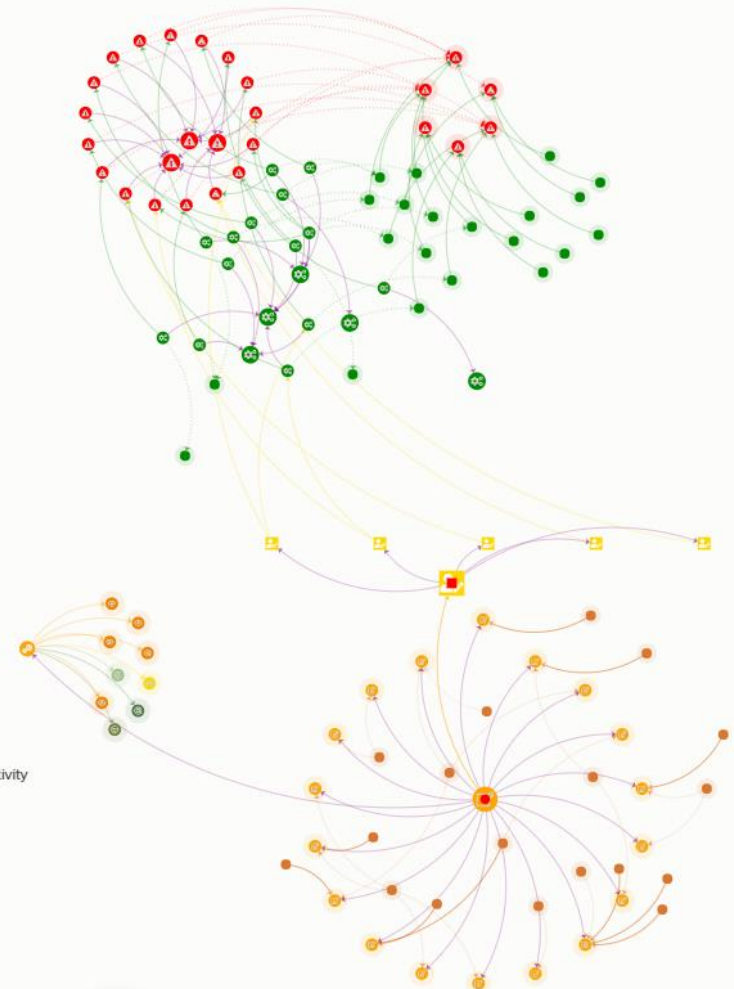
Check out the various perspectives:

Search

KEY DESIGN STORIES

Legend

- design proposal
- design tool
- design project/process/activity
- domain solution
- domain problem
- design for
- includes/part of
- influences
- solution for
- tool used
- type of



Cross-case map: Project Scopes



DESIGNSCAPES CROSS-CASE SENSEMAKING

PROJECT SCOPE

Design Projects

- [CityBarge Design Project](#)
- [SciberCity Design Project](#)
- [The Landmarks Net Design Project](#)

Project Focus

- [Marketing Innovation](#)
- [Product / Service Innovation](#)

Innovation Targets

- [One or more regional or local markets / communities](#)
- [The global market / society](#)

Project Orientation

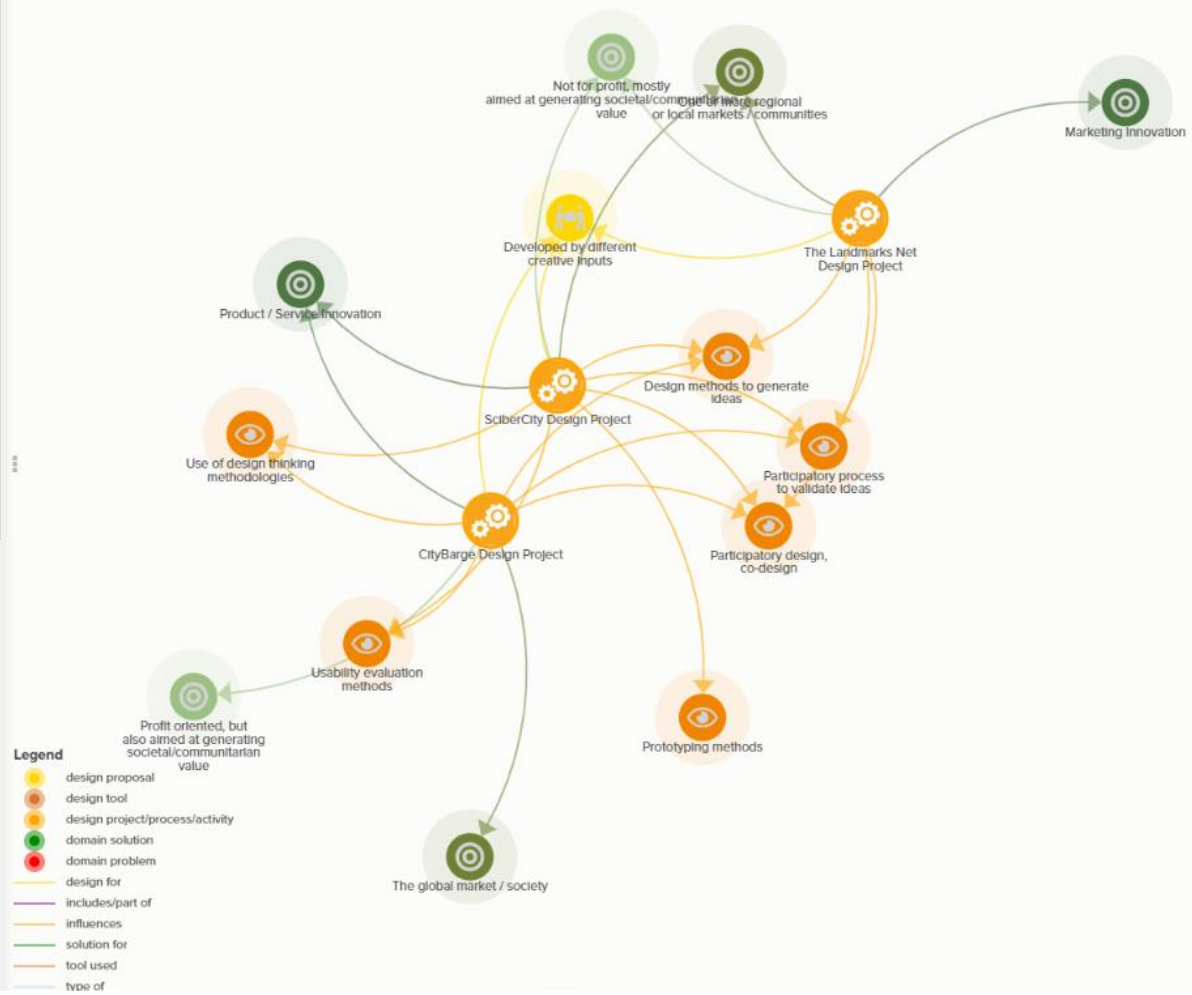
- [Not for profit, mostly aimed at generating societal/communitarian value](#)
- [Profit oriented, but also aimed at generating societal/communitarian value](#)

Design Approaches

- [Design methods to generate ideas](#)
- [Participatory design, co-design](#)
- [Participatory process to validate ideas](#)
- [Prototyping methods](#)

Q Search

KEY DESIGN STORIES



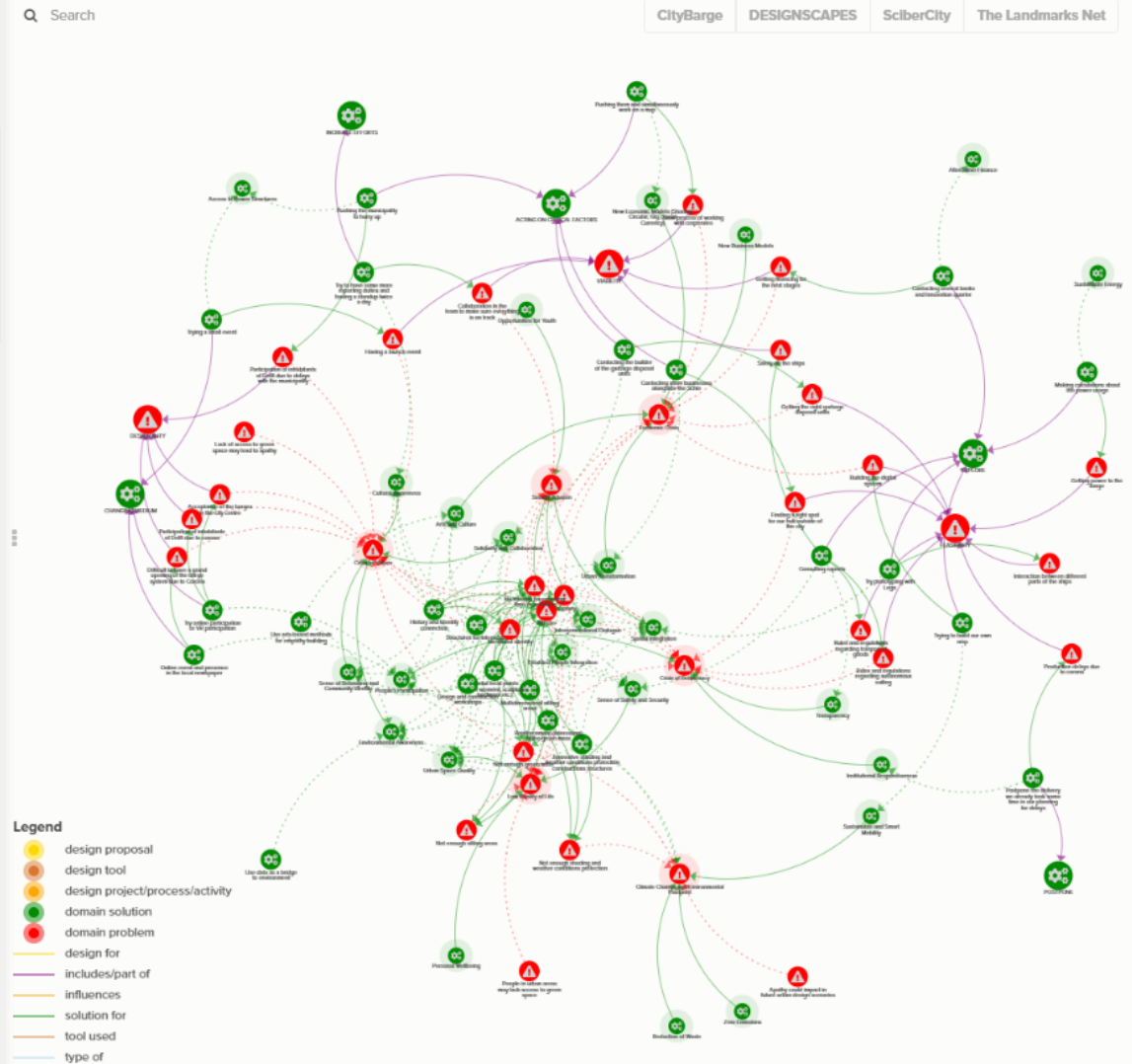
Cross-case map: Problem Domains



DOMAIN CONCEPTS

Local Problems

- [Acceptance of the barges in the city centre](#)
- [Apathy could impact in future urban design scenarios](#)
- [Building the digital system](#)
- [Collaboration in the team to make sure everything is on track](#)
- [DESIRABILITY](#)
- [Difficult to have a grand opening of the barge system due to Corona](#)
- [FEASIBILITY](#)
- [Finding a right spot for our hub outside of the city](#)
- [Getting financing for the next stages](#)
- [Getting power to the barge](#)
- [Getting the right garbage disposal units](#)
- [Having a launch event](#)
- [Interaction between different parts of the ships](#)
- [Lack of access to green space may lead to apathy](#)
- [No interest for spending time or activities](#)
- [No safety](#)
- [No spatial identity](#)
- [No use](#)
- [Not enough green mass](#)
- [Not enough shading and weather conditions protection](#)
- [Not enough sitting areas](#)
- [Participation of inhabitants of Delft due to corona](#)



Cross-case map: Designs



DESIGNSCAPES CROSS-CASE SENSEMAKING

PROJECT SCOPE

Design Projects

- [CityBarge Design Project](#)
- [SciberCity Design Project](#)
- [The Landmarks Net Design Project](#)

Project Focus

- *No matches found*

Innovation Targets

- *No matches found*

Project Orientation

- *No matches found*

Design Approaches

- *No matches found*

DOMAIN CONCEPTS

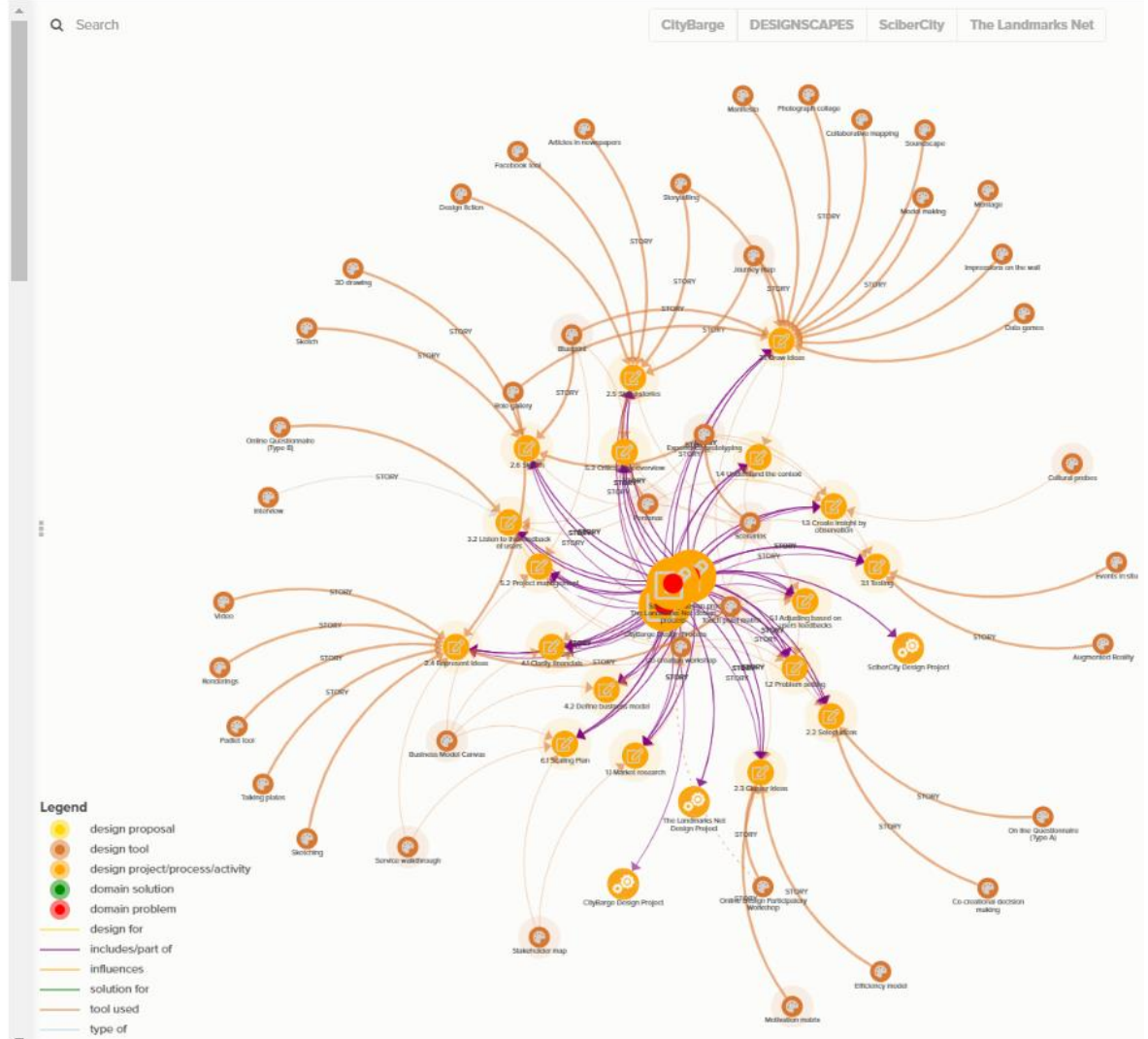
Local Problems

- *No matches found*

Local Solutions

- *No matches found*

DESIGNSCAPES Problems

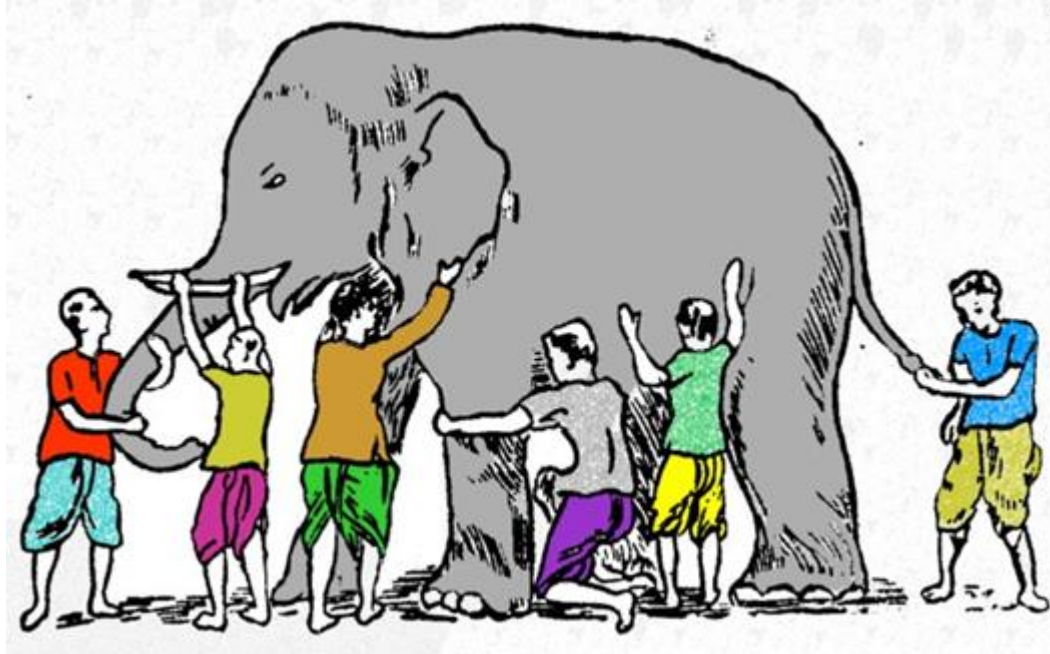


MappingDESIGNSCAPES approach: (2) sensemaking



- In 6 *joint online sensemaking sessions* we discussed the individual and cross-case maps
- *Distillation of collaboration patterns*, each leading to a set of *common perspectives*
- *Taking individual perspectives* within common perspectives by the case representatives
- Discussion of individual sensemaking stories in *final joint sensemaking session*
- Refinement of MappingDESIGNSCAPES *community network ontology*

Sensemaking



“To focus on sensemaking is to portray organizing as the experience of being thrown into an ongoing, unknowable, unpredictable streaming of experience in search of answers to the question, “what’s the story?””

Weick, Karl E., Kathleen M. Sutcliffe, and David Obstfeld. 'Organizing and the Process of Sensemaking'. *Organization Science* 16, no. 4 (2005): 409–21.

<https://doi.org/10.1287/orsc.1050.0133>.

Joint online sensemaking sessions

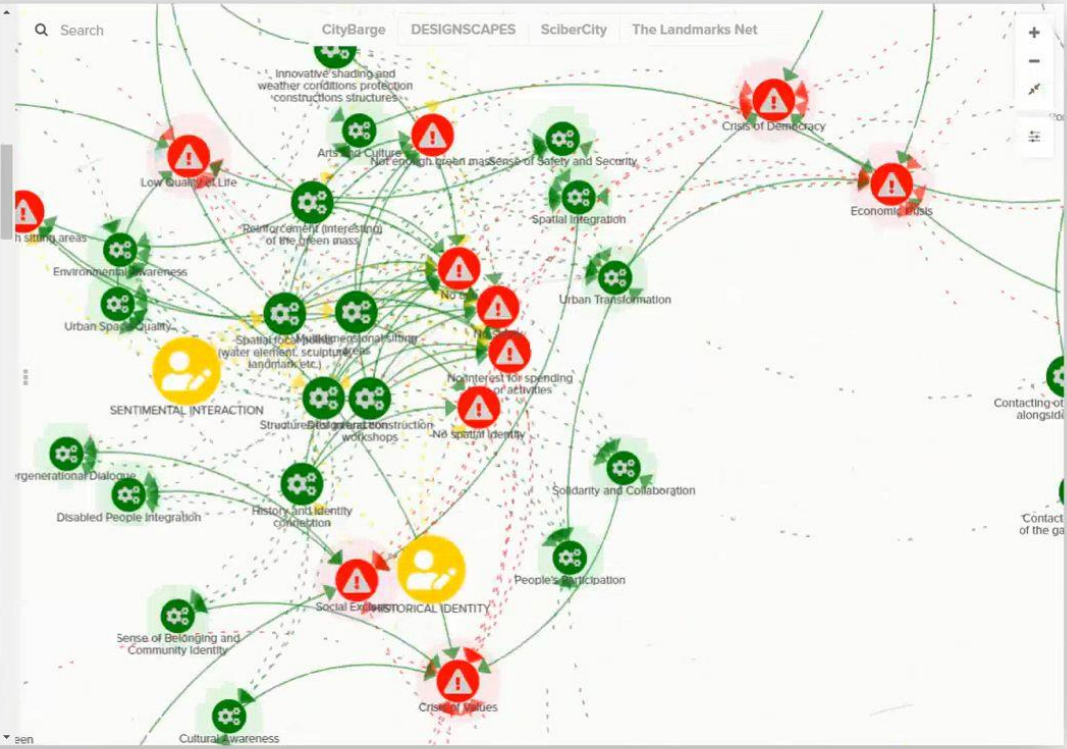


MappingDESIGNSCAPES Cross-Case Sensemaking Session 2: Domains Cross-Case Domain

ADEMOOR

FEASIBILITY

- Finding a right spot for our hub outside of the city
- Getting financing for the next stages
- Getting power to the barge
- Getting the right garbage disposal units
- Having a launch event
- Interaction between different parts of the ships
- Lack of access to green space may lead to apathy
- No interest for spending time or activities
- No safety
- No spatial identity
- No use
- Not enough green mass
- Not enough shading and weather conditions protection
- Not enough sitting areas
- Participation of inhabitants of Delft due to corona
- Participation of inhabitants of Delft due to delays with the municipality
- People in urban areas may lack access to green space



You edited map The Landmarks Net

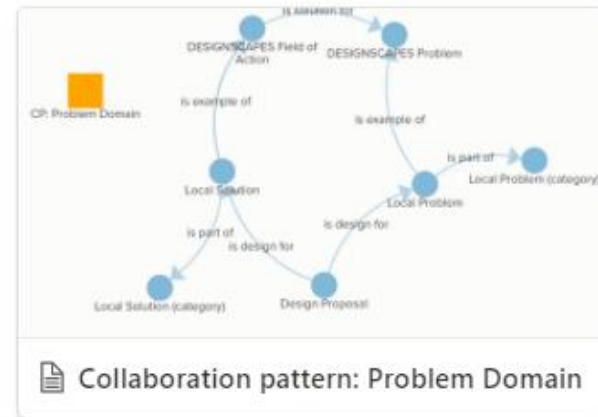
Core collaboration patterns



Collaboration pattern: Design Impacts



Collaboration pattern: Design Process



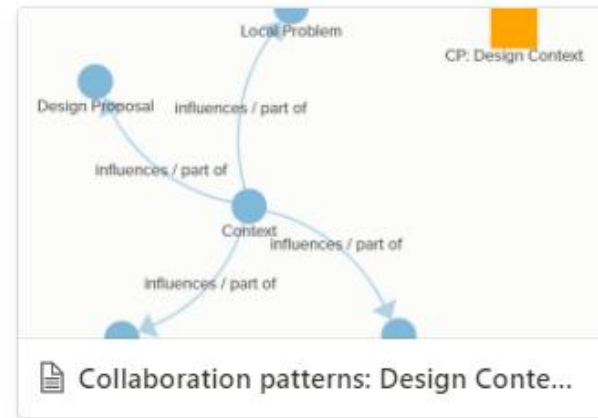
Collaboration pattern: Problem Domain



Collaboration pattern: Design Project ...



Collaboration pattern: Map Signatures



Collaboration patterns: Design Conte...



Common perspectives



- "Map Signatures"

Collaboration pattern: Map Signatures



- "Design Project Scopes"

Collaboration pattern: Design Project ...



- "Domain Problems"
- "Domain Solutions"
- "Domain Problems & Solutions"

Collaboration pattern: Problem Domain



- "Design Support"

Collaboration pattern: Design Process



- "Designs for Problems"
- "Designs for Solutions"
- "Designs for Problems & Solutions"

Collaboration pattern: Design Impacts

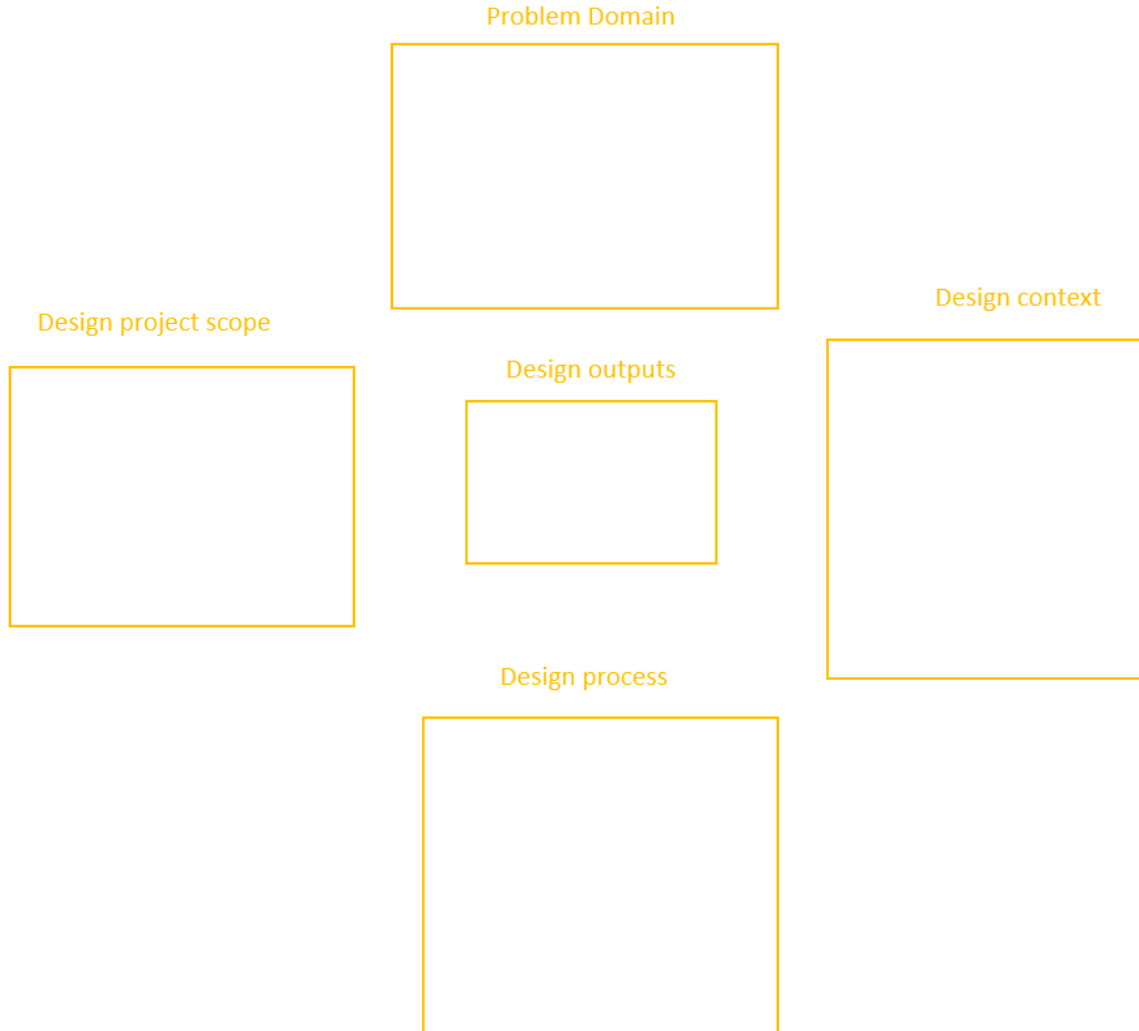


- "Anything Goes"

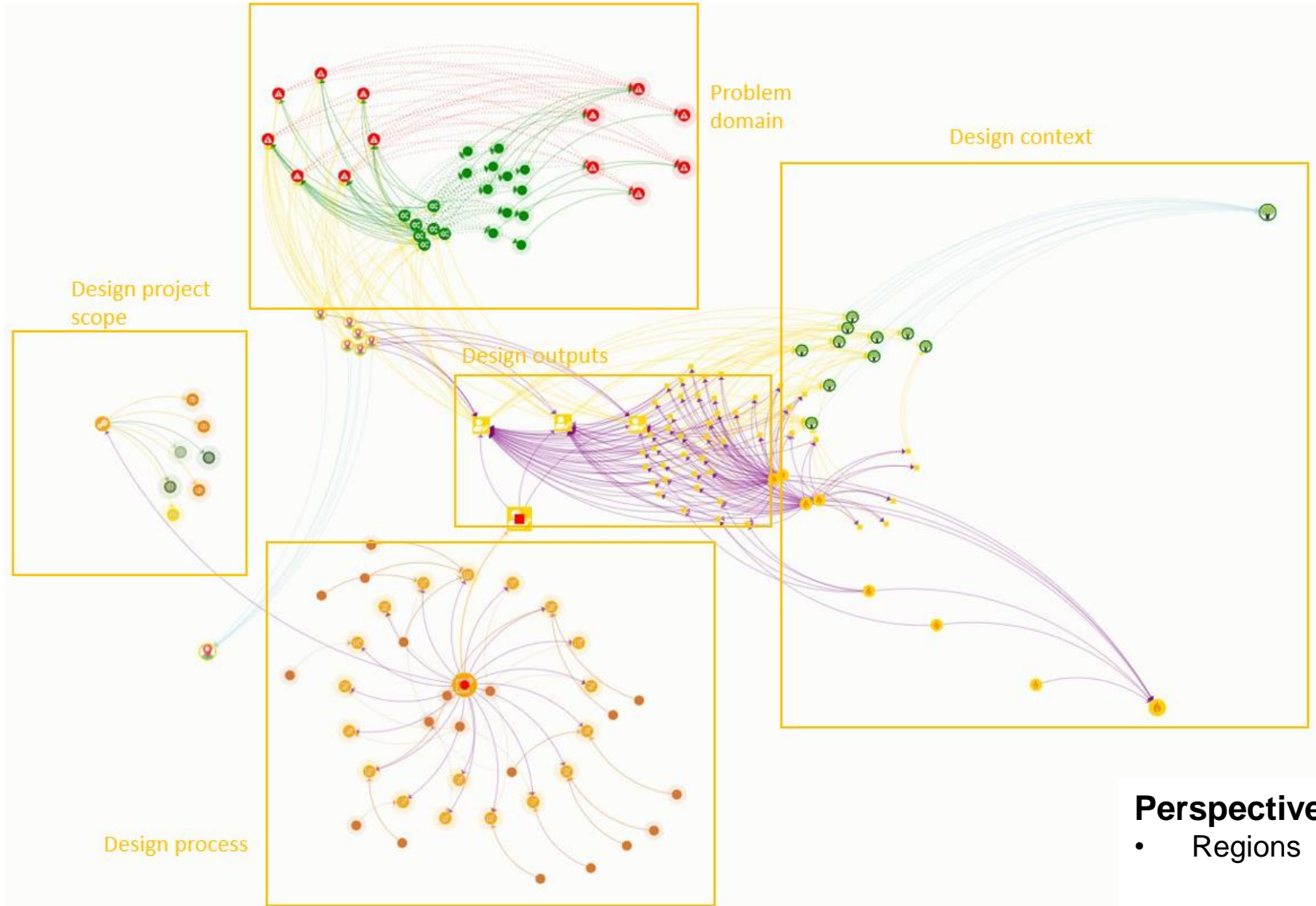
Collaboration patterns: Design Conte...

"The **common perspectives** help us to all look in the same direction, the **individual perspectives** are what each of us sees then."

Mapping discoveries: “Map Regions”



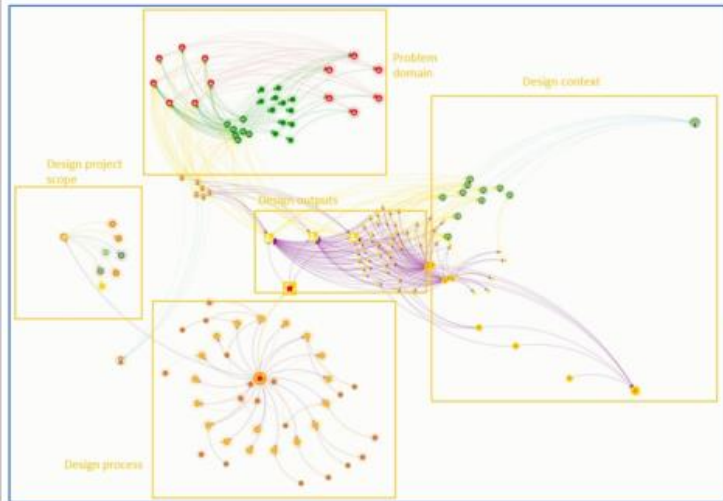
Common perspectives (1): “Map Signatures” → The Landmarks Net



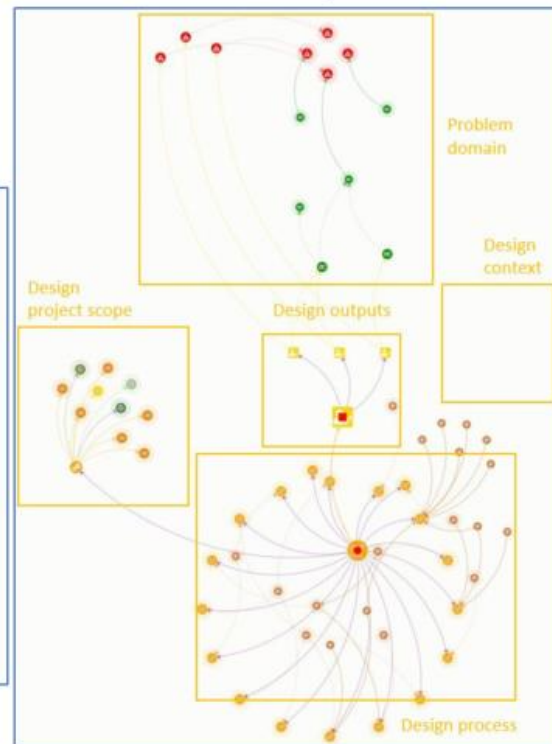
Common perspectives (1): “Map Signatures” → cross-case



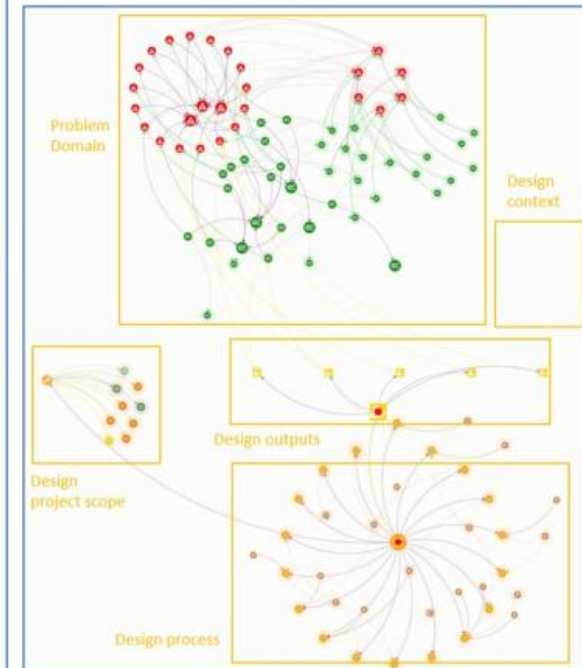
LMN



SciberCity



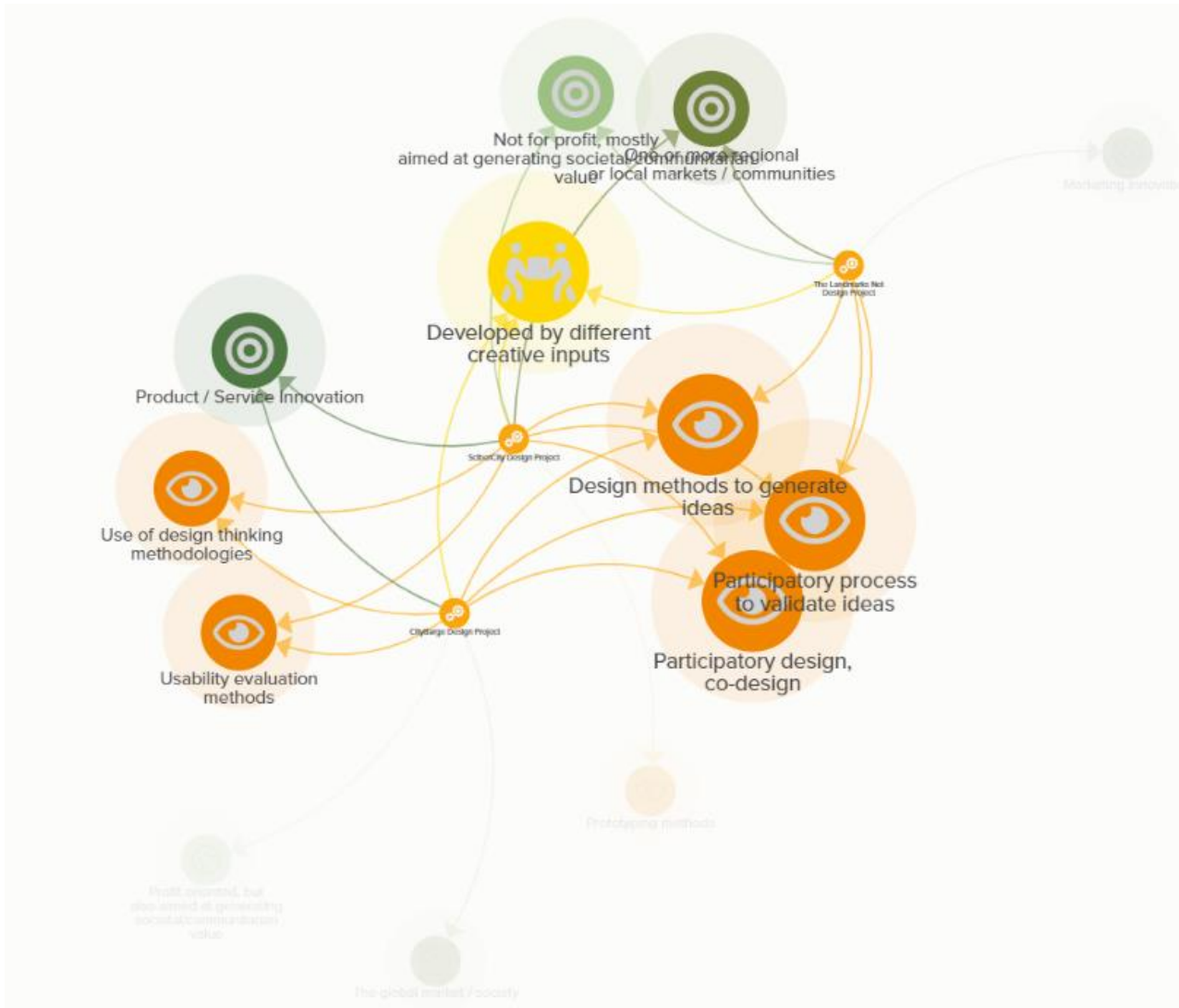
CityBarge



Perspective lens:

- Regions

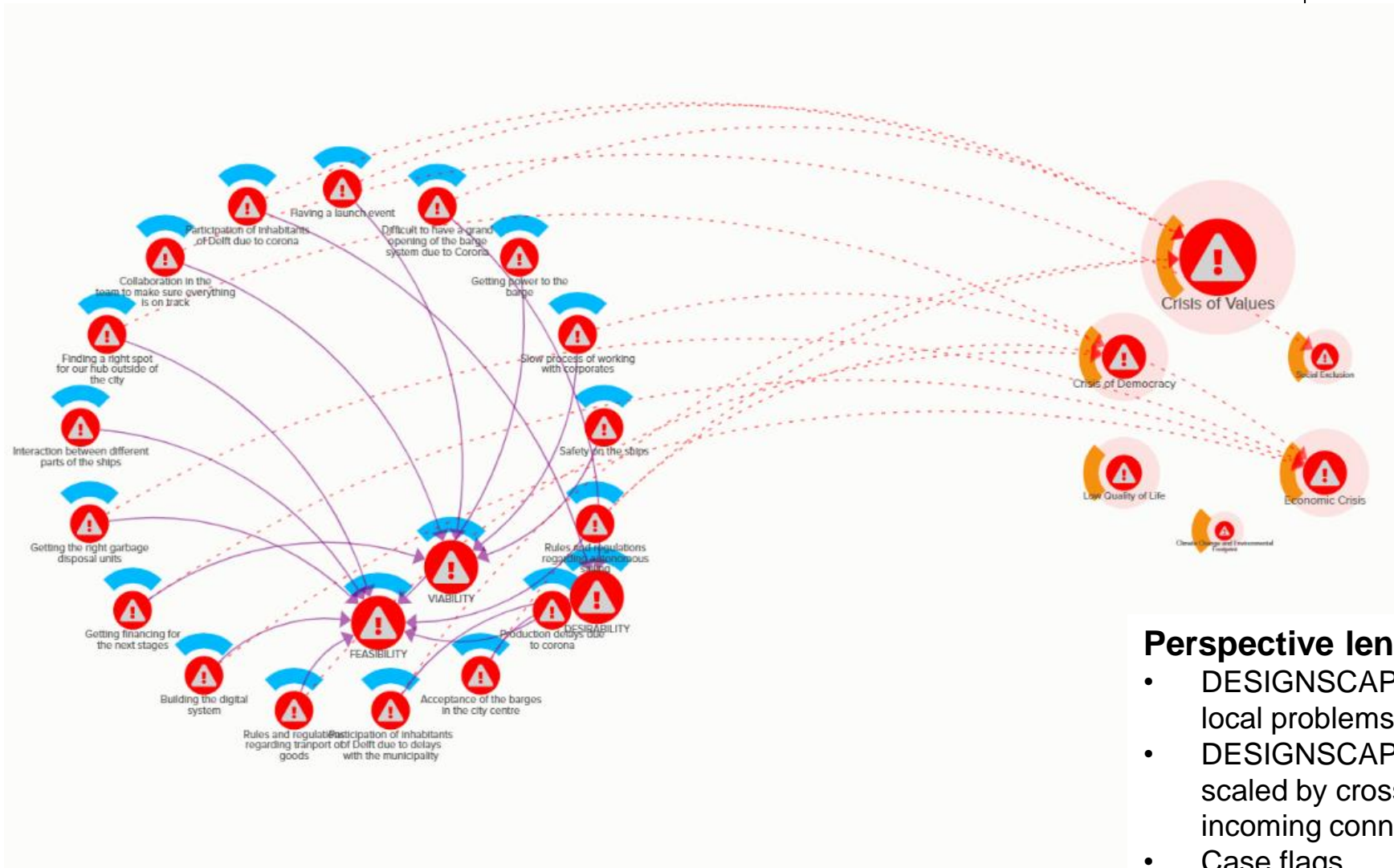
Common perspectives (2): “Design Project Scopes” → cross-case



Perspective lens:

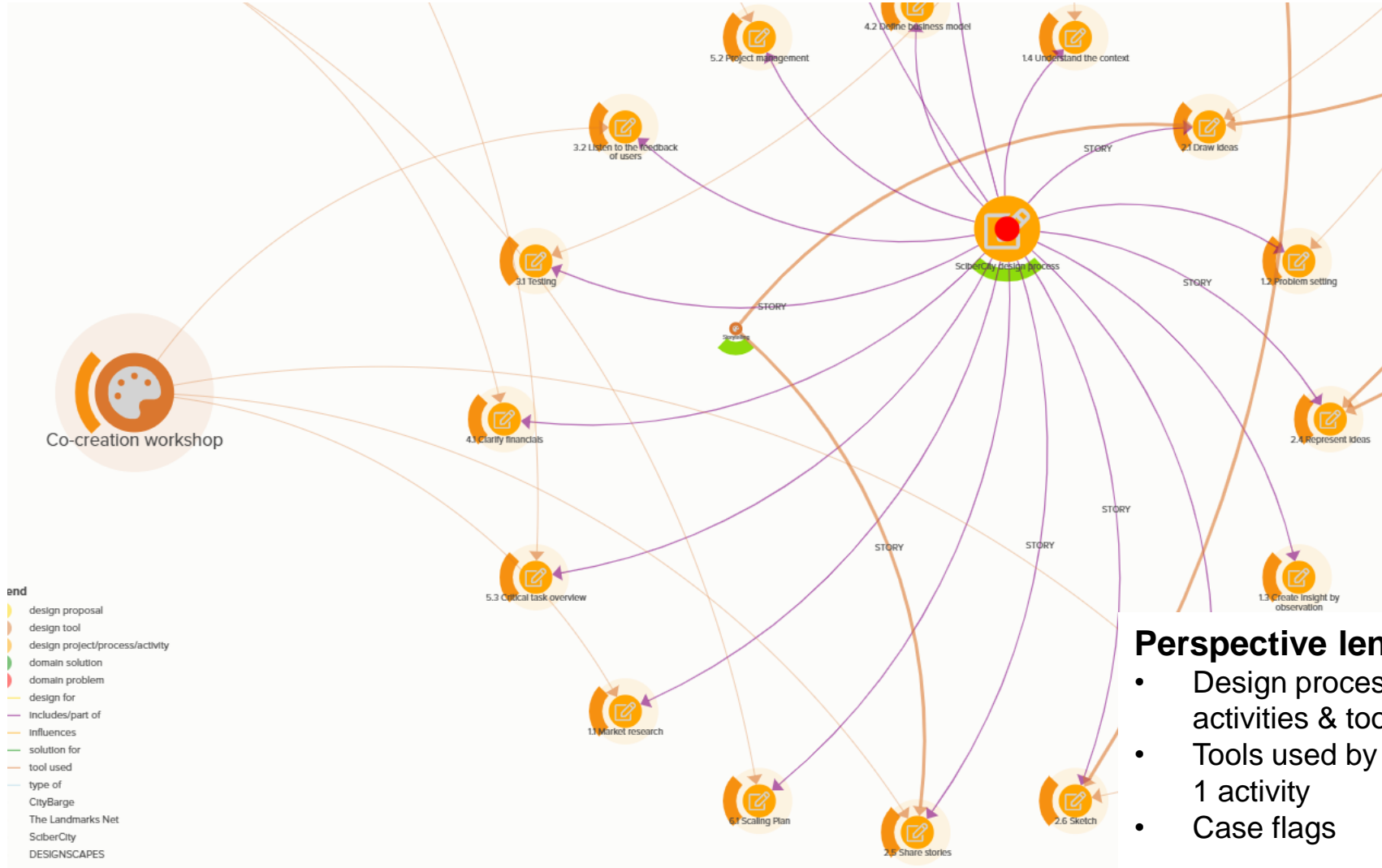
- Scale project scope elements by number of cases that reference them
- Showcase only shared elements (by at least two)

Common perspectives (3): “Domain Problems” → CityBarge

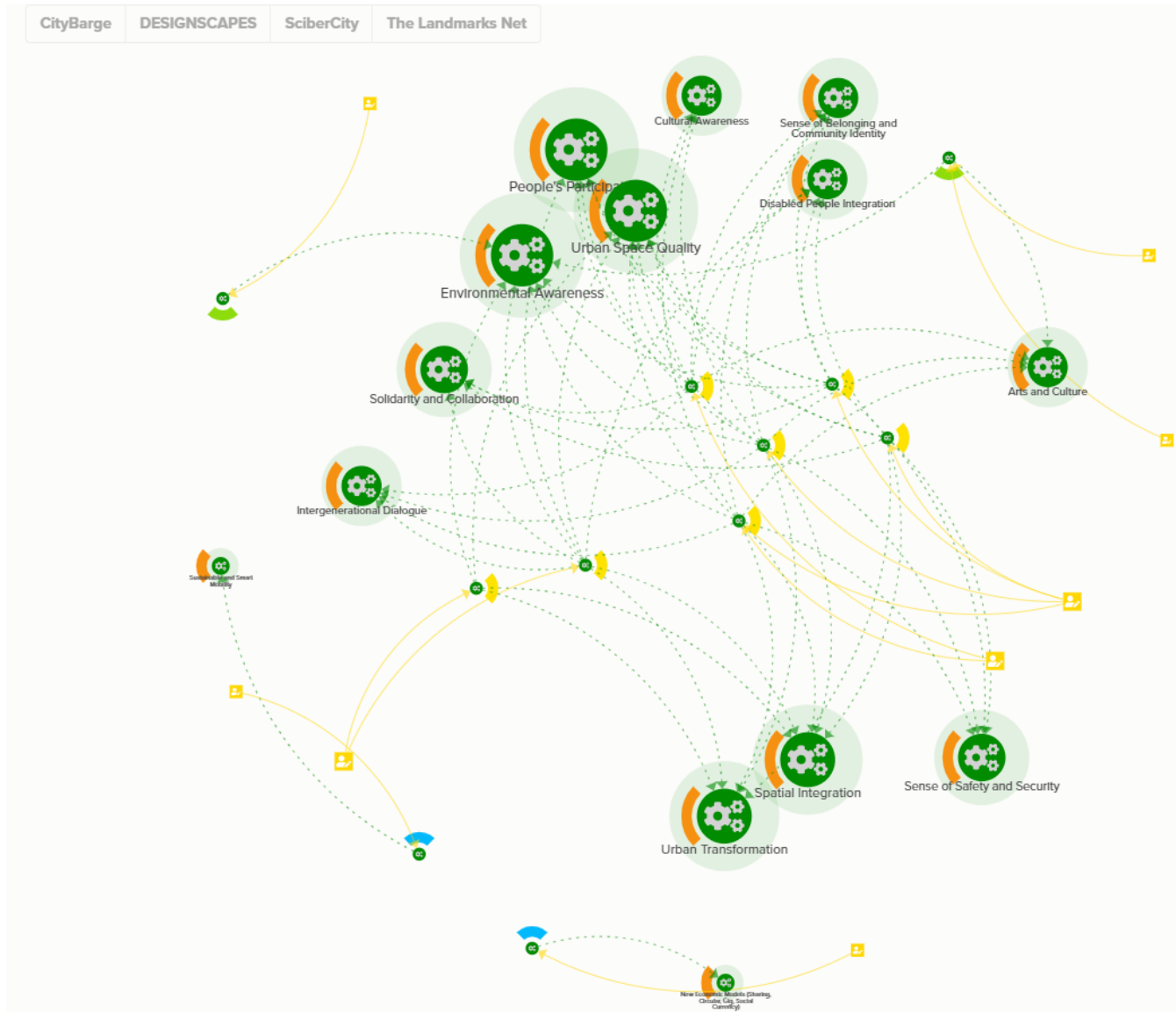


- Perspective lens:**
- DESIGNSCAPES vs local problems
 - DESIGNSCAPES scaled by cross-case incoming connections
 - Case flags

Common perspectives (4): “Design Support” → SciberCity



Common perspectives (5): “Designs for Solutions” → cross-case



Perspective lens:

- Design proposals, local solutions, DESIGNSCAPES Fields of Action
- Only show local solutions with proposals
- Removed Part Of-relations to focus on relations between proposals and solutions

Sensemaking story #1: Taking an individual perspective



Sensemaking story: “Democratic use of space”

Collaboration pattern: Design Impacts

Common perspective: Design for Problems & Solutions

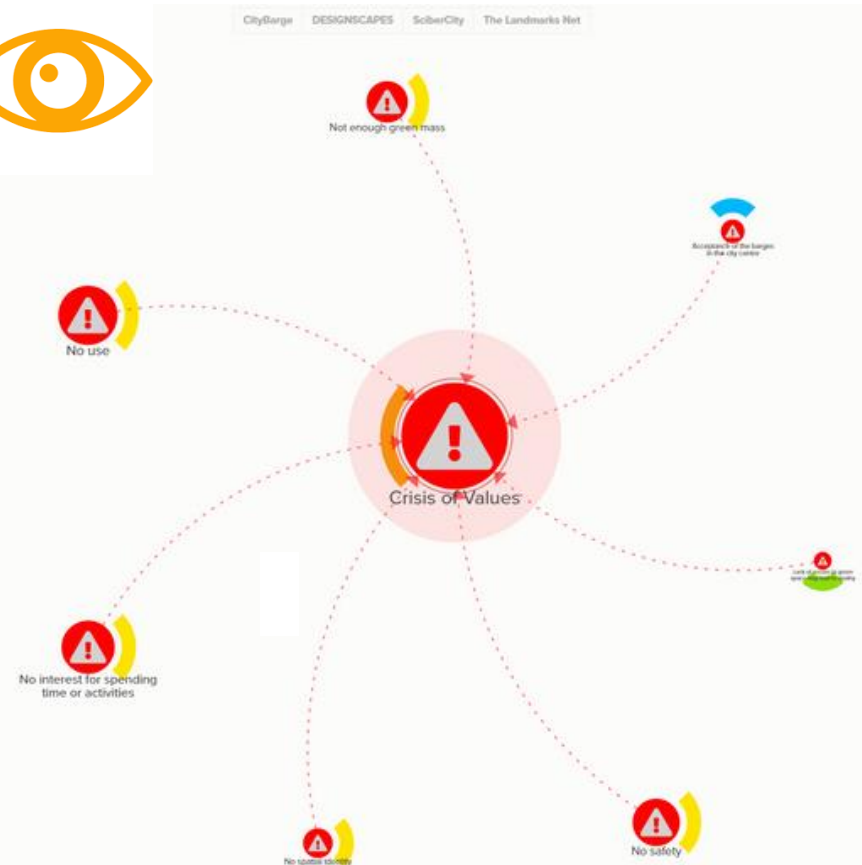
Case: Cross-case

Storytellers: SciberCity

Individual perspective →

Summary: All three projects are concerned about a crisis of values. Will lack of green space lead to apathy for the environment? Might this be manifested in a lack of interest in spending time or doing activities? Will it support or hinder acceptance of new, greener solutions to problems?

Interpretation: Values play a big role in driving our behaviour. For example, if the values of a society favour capitalism and money over environmental concerns then we get to situations where people are not interested in making positive actions towards climate change. If we are trying to design new urban solutions then we need to understand better the role of values and how they are shaped in determining behaviour.



Sensemaking story #2: Taking an individual perspective



Sensemaking story: “Democratic use of space”

Collaboration pattern: Design Impacts

Common perspective: Design for Problems

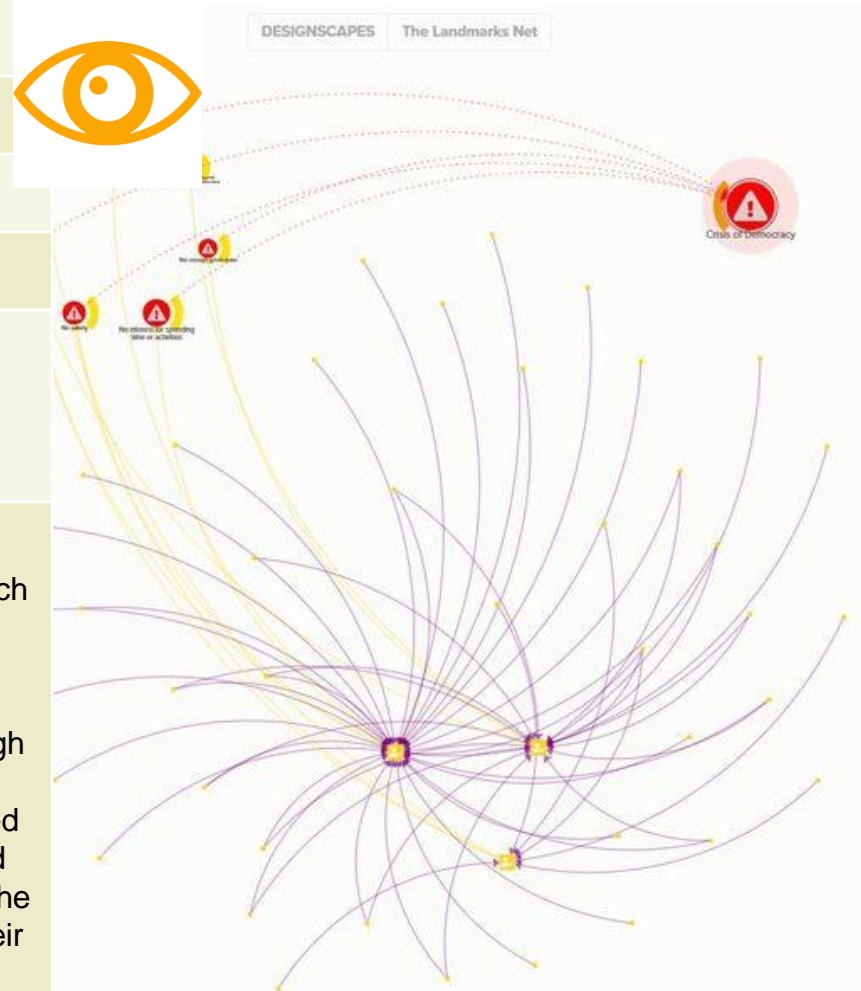
Case: The Landmarks Net

Storytellers: The Landmarks Net

Individual perspective →

Summary: For us, it is a great challenge to handle open spaces as neighborhood’s cohesive component and city’s comprehension asset in order to bring together all ages and help them interact in a constructive way.

Interpretation: The main impact, produced by our idea, is the democratic use of free space in a city. It refers to the right each citizen should have, thus is to use and enjoy the urban infrastructure, equally. In addition, on a social level, neighbourhood’s links will be strengthened. On environmental level, the microclimate of the project area will be upgraded through the enrichment of the existing green masses and the use of bioclimatic design and materials. On economic level, an enhanced civic landscape attracts people, thus commercial growth and land value raise. In the end, on political level, there will be change in the way people think and react, one to another and all together to their built environment.



Sensemaking story #2: Group discussion



Sensemaking story: "Democratic use of space"

Collaboration pattern: Design Impacts

Common perspective: Design for Problems

Case: The Landmarks Net

Storytellers: The Landmarks

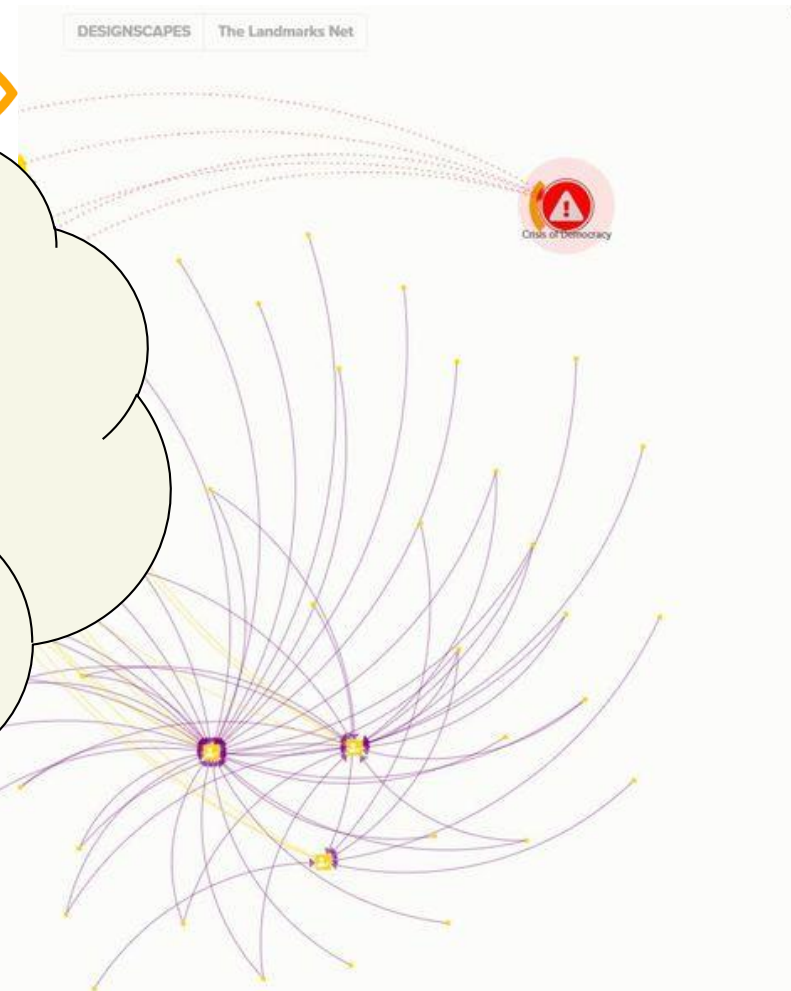
Individual perspective:

Summary: For us, if spaces as neighborhood comprehension as they interact in a

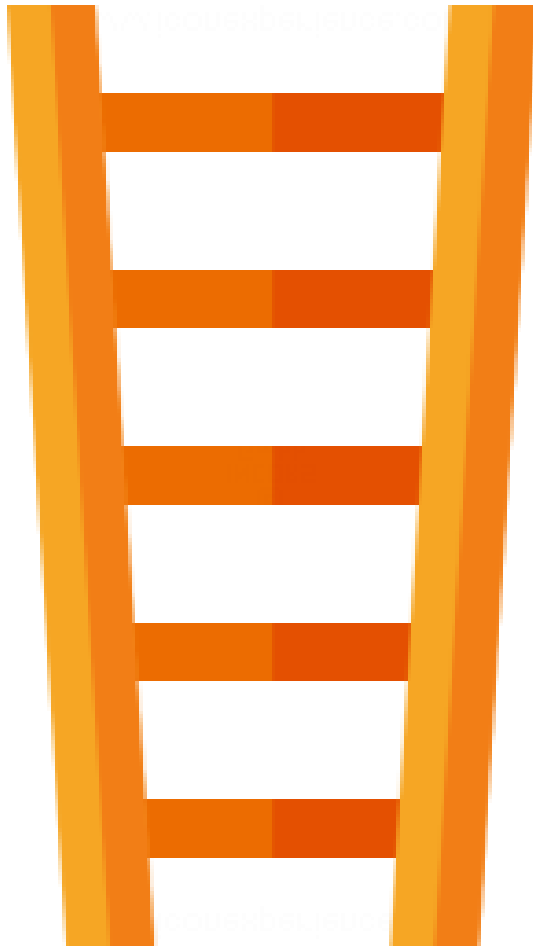
Interpretation:

the democratic use of citizen should have infrastructure, equal neighbourhood's links level, the microclimate of the the enrichment of the existing bioclimatic design and materials. On economic civic landscape attracts people, thus commercial growth and land value raise. In the end, on political level, there will be change in the way people think and react, one to another and all together to their built environment.

Landmarks are not just spaces to relax, but "empowerment spaces", making people feel happy, provoking reactions and interactions. Through the different functions - from mental state, climate, economics, people build the capacity to get involved. Connecting neighborhoods also increases the democratic potential at the collective instead of just the individual level.

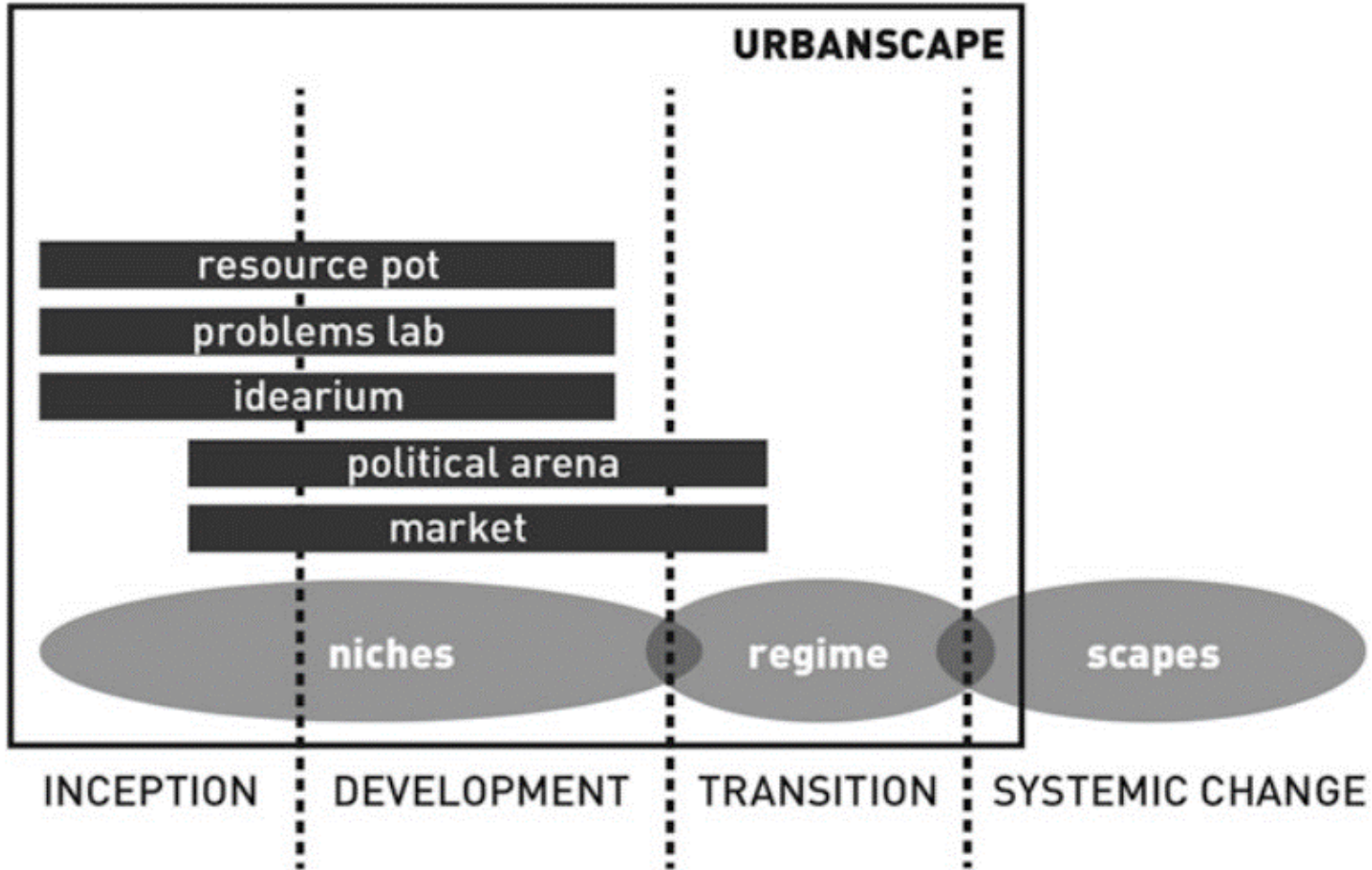


Towards a “sensemaking ladder” ...



- Collective impacts
- Common actions
- Common interpretations
- Individual interpretations
- Individual perspectives
- Common perspectives
- Collaboration patterns
- Cross-case maps
- Individual maps
- Conceptual framework

Supporting design-enabled innovation theory creation & testing...



Concilio, G., J. Cullen, and I. Tosoni. 'Design Enabled Innovation in Urban Environments'. In *Innovation Capacity and the City: The Enabling Role of Design*, edited by G. Concilio and I. Tosoni, 85–101. Springer Briefs in Applied Sciences and Technologies. Berlin: Springer, 2019.

Conclusion, for now...

- Created a foundational DESIGNSCAPES conceptual model
- Towards a “Sensemaking Ladder”
- A proof of concept-knowledge base (+ interactive demonstrator) with
 - Case maps / cross-case maps
 - Common/individual perspectives
 - Sensemaking stories
- A trusted MappingDESIGNSCAPES community

Next steps

Keep going with our great community!

Scaling up MappingDESIGNSCAPES



Legend

- proposal
- design tool
- design project/process/activity
- domain solution
- domain problem
- design for
- includes/part of
- influences
- solution for
- tool used
- type of