



Aalto University
School of Arts, Design
and Architecture

Design Approaches to Sustainable Consumption

**Session 9 (9:15-12:00):
Communicating and scaling-up sustainability**

Tatu Marttila & Shreya Sood

8.2.2022

Agenda today

9:15–9:45 Status check round and discussing deliverables

- *Course progress? Case work status? Other issues?*
- *Next sessions: Tutoring on Thursday; Final presentations next week!*

9:45–10:30 Lecture: Communicating and scaling-up sustainability by design

10:30–10:40 Break

10:40–11:15 Exercise in breakout rooms (in case groups)

11:15–12:00 Present and discussing results

Status check round...



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Course and case work deliverables & evaluation



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Course and case work schedule

Working days	Tuesdays	Thursdays
Week 1	Introduction to course; DfS introduction (11.1.)	Case introduction: Food system sustainability (13.1.)
Week 2	Sustainable PSS design & servicization; Nudging (18.1.)	Multi-level perspective in design; Design for sufficiency (20.1.)
Week 3	Assessing and communicating impacts (25.1.)	Present case ideas (27.1.)
Week 4	Taking it into action (1.2.)	One planet lifestyle (3.2.)
Week 5	Communicating and scaling-up sustainability transitions (8.2.)	Case work tutoring (10.2.)
Week 6	Final presentations #1 (15.2.)	Final presentations #2 (17.2.)

Completing the course and grading

To pass, the students are required to attend the lectures (80%) and perform all the assigned exercises, readings and written tasks given each week.

Assessment methods and criteria:

- Individual writing task: Learning diary = 30%
- Active presence at the course (eg. discussion, chats) = 20%
- Case work, inc. presentations & final report = 40%
- Peer evaluation in groups = 10%

Learning diary

During the course students will write a learning diary, which is also one main component in grading. The learning diary consists of weekly reflection on readings, lecture contents, and also your case work progress.

Learning diary (10-12 pages or 5000 words) – For each week, write:

- A brief summary of the readings and reflection on selected topics
- Reflect on the session: What was most interesting?
- Case work: How is it progressing? Challenges, reflection? -
- Add also a short introduction on your motivations and yourself as a sustainable designer, and reflections to the course as a whole to the end

Will be submitted via MyCourses; Deadline after the end of course (27.2.)

Case work

Besides lectures, there is a case assignment in which the students work in 5-6 person teams. Teams work independently but in contact with dedicated tutors, and produce design concepts that are communicated in presentations and project reports.

Case presentation days:

- Idea presentations on 27.1. (short pitches)
- Final presentations on 15.2. and 17.2. (5 groups each day)

Deliverables:

- Presentation materials (e.g., PPT-slideset or PDF)
- Project report (see next slide)

Project report

As a part of the case work, besides presentations you produce a project report as a team. The project report is in a way an expanded version of the final presentation, and could even be based on the same layout, but should probably include more details as a text.

The project report should cover:

- Original brief and research, its potential challenges and iteration
- Initial ideation and its results; potential redirection of work
- Design process (including possible interactions with stakeholders)
- Outcomes (could be a product concept, visualisation of space, draft of a materials package, service blueprint, PSS description, depending on the final orientation)
- Reflection on your process and outcomes

Will be submitted via MyCourses; Deadline at the end of course (20.2.)

Final presentations next week

Next week we will have final presentations. The format for the presentation is quite free (PPT, video + talk, combination) and each team has a 15-minute slot to use, followed by 15 minutes of feedback.

Final presentation should cover:

- Original brief and research, its potential challenges and iteration
- Initial ideation and its results; potential redirection of work
- Design process
- Outcomes
- Reflection on the process

Final presentations schedule (Tue 15.2. & Thu 17.2.)

Schedule for the teams' presentation slots is suggested to be the following:

Tuesday (15.2. 9:15–12:00):

9:15 Team 1
9:45 Team 2
10:15 Team 5
11:00 Team 9
11:30 Team 10

Thursday (17.2. 9:15–12:00):

9:15 Team 7
9:45 Team 8
10:15 Team 3
11:00 Team 4
11:30 Team 6

Please upload your final presentation materials to MyCourses before presentation day!

Those teams that present already on Tuesday have a bit less to finalize presentation, but more time to finalize report and individual diaries...

Tutoring sessions on this Thursday (10.2.)

We will organize tutoring sessions on this Thursday (no class otherwise):

9:15–9:45 Theme 1: Teams 1 & 2

9:45–10:15 Theme 2: Teams 3 & 4

10:15–10:45 Theme 3: Teams 5 & 6

11:00–11:30 Theme 4: Teams 7 & 8

11:30–12:00 Theme 5: Teams 9 & 10

We will use the same session Zoom-link, with theme based breakout rooms (x 5) for you to go to, and I'll come visit rooms during the scheduled time.

Continuing case work after course ends...

Showcasing DASC results at Sustainability Science Days in May 2022:

- Orsi-project with Michael Lettenmeyer, Sanna Tiilikainen, and Mikko Jalas, is participating to Sustainability Science Days in May 2022 to showcase design solutions around food sustainability, and DASC course outcomes are a part of this (more information will follow)

Possible competitions to continue work with concept if you feel like it:

- German Ecodesign Award: Call for entries 2022 – submit entry by 18 April
- Cumulus Green 2022: Nurturing Our Planet – submit entry by 15 March

...Also thesis topics can be found through case work contacts and focus area!

Please, note that you can discuss with Mikko Jalas of extra credits if you continue work...

Allwell survey in Spring 2022

The coronavirus situation has limited contact teaching seriously in the past years.

With the help of the spring 2022 Allwell? study wellbeing questionnaire, we aim to find out how students are now doing and how the coronavirus situation has affected their study experience.

This page includes a video and other information about the questionnaire.

<https://www.aalto.fi/en/services/allwell-questionnaire>

This year, the questionnaire is available for second-year bachelor's and first-year master's students, and it will be open 16.2.-2.3.2022!

Design and sustainability transitions



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Socio-technical systems and sustainability transitions

Transition Management (TM) methodology is based on a *multi-level perspective* on sustainability transitions within the socio-technical system context, with focus on:

- **Macro-level (landscape)**
- **Meso-level (regimes)**
- **Micro-level (niches)**

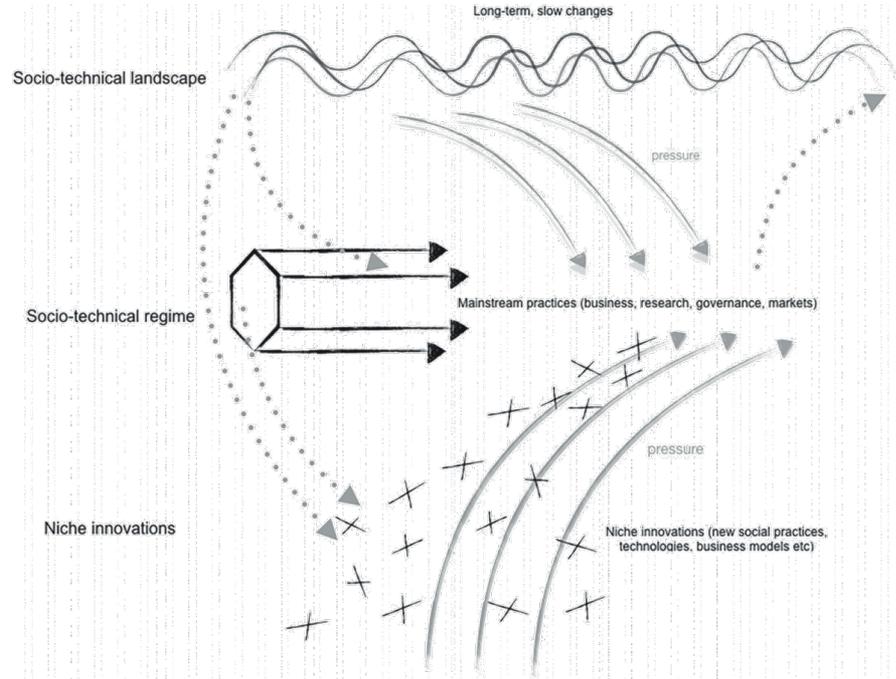
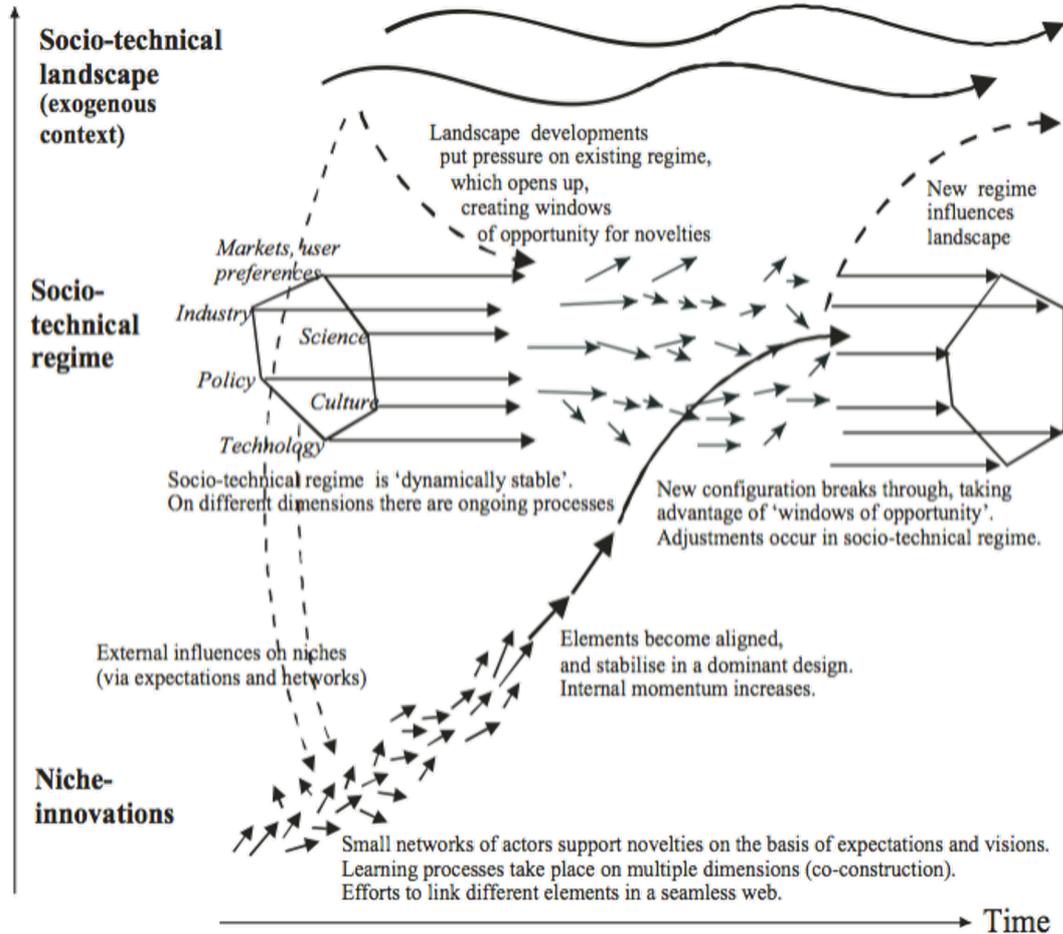


Figure 11.1 The MLP of system innovations model

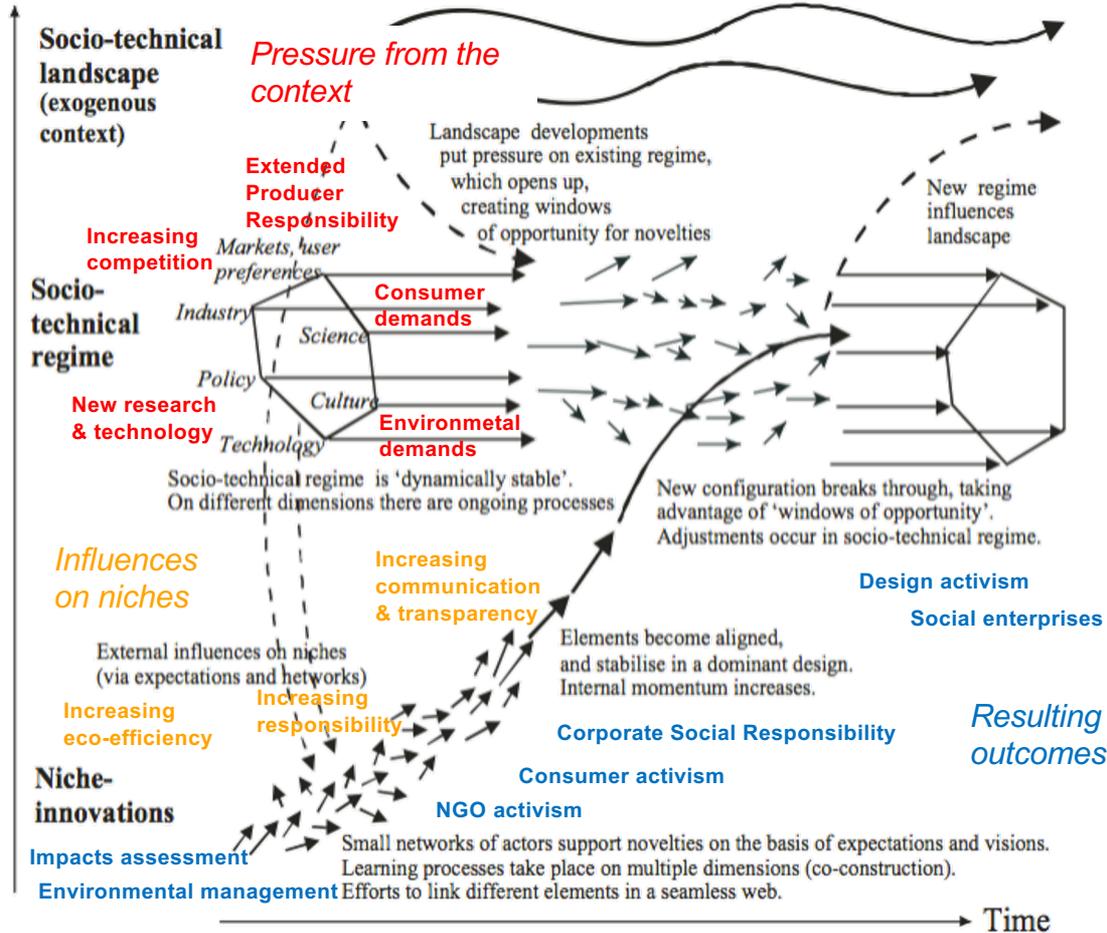
Source: Adapted from Geels (2005a, 2005b) and Geels & Schot (2007).

TM & MLP view: Socio-technical dynamics of transitions:



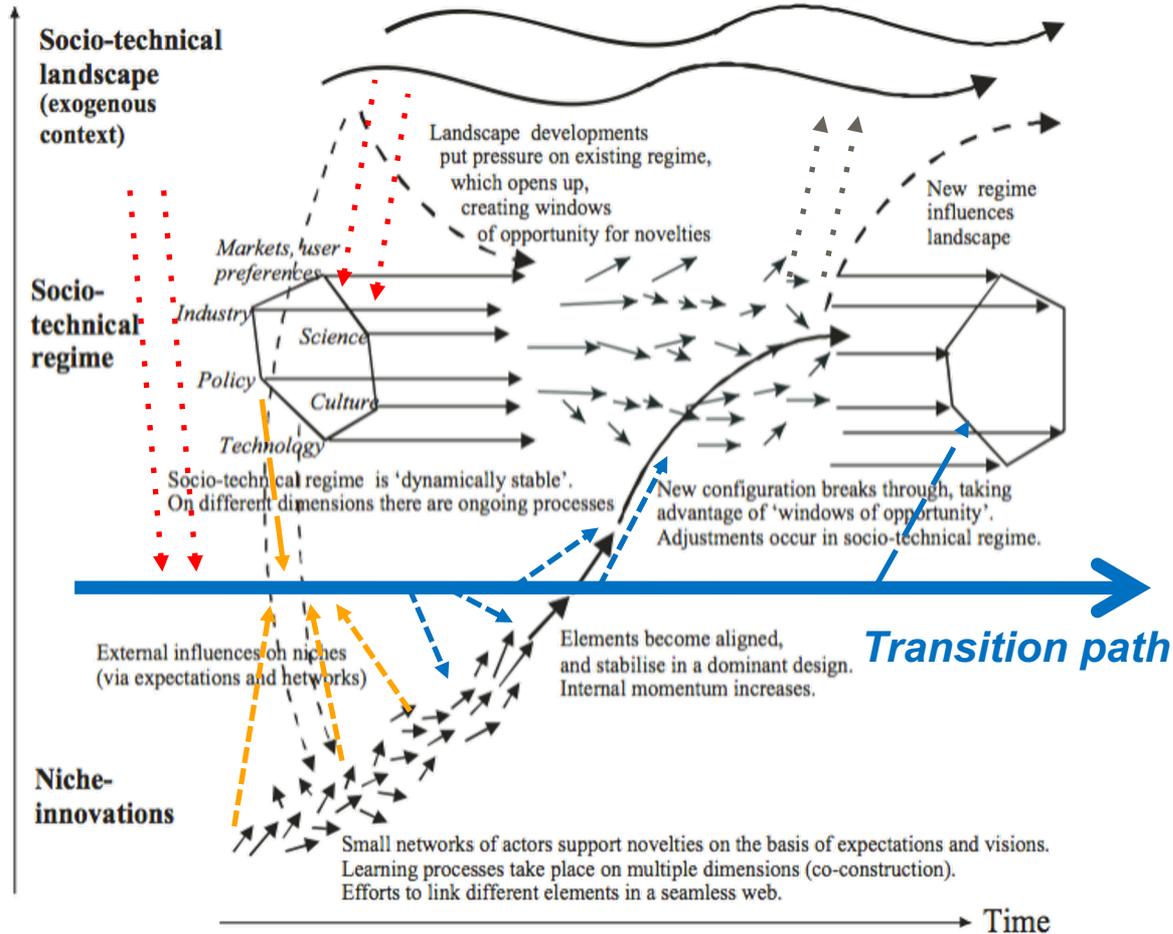
Source: Geels (2011)

Socio-technical context for *sustainable design* action:



Source: Author;
Developed from
Geels (2011)

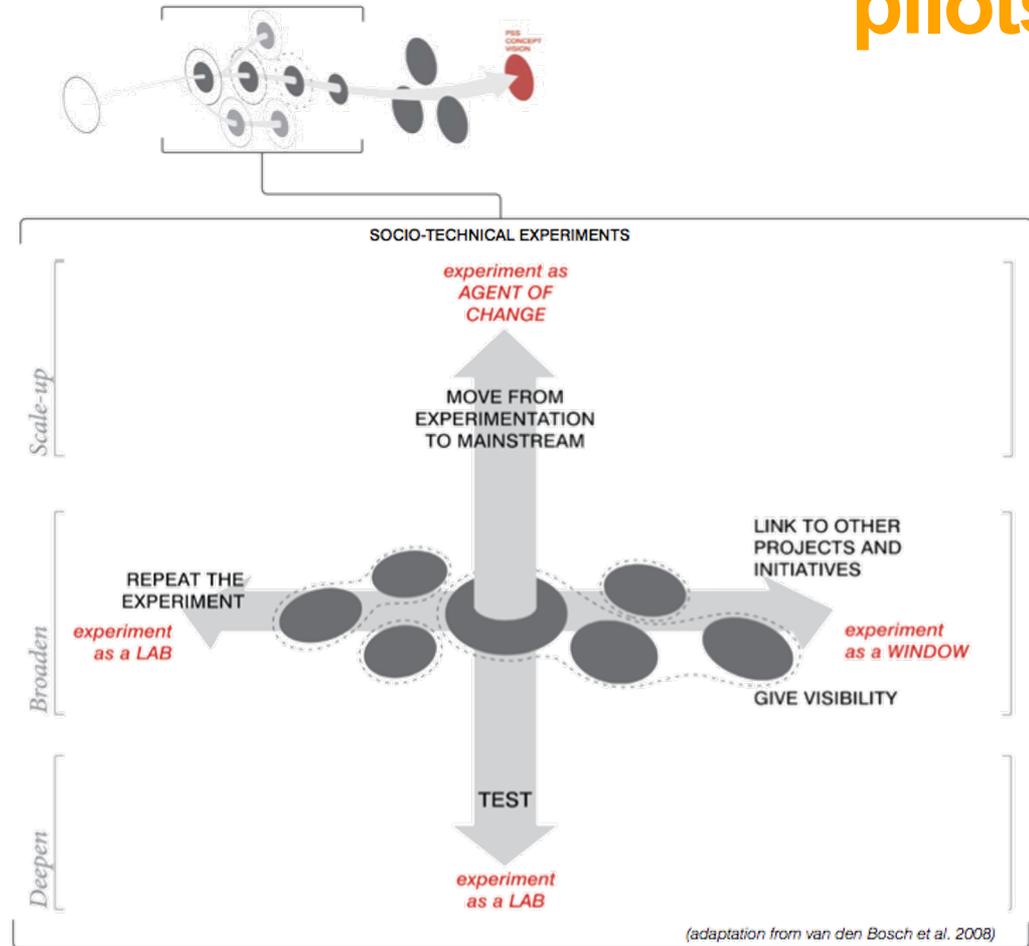
Design connecting levels of inquiry and action:



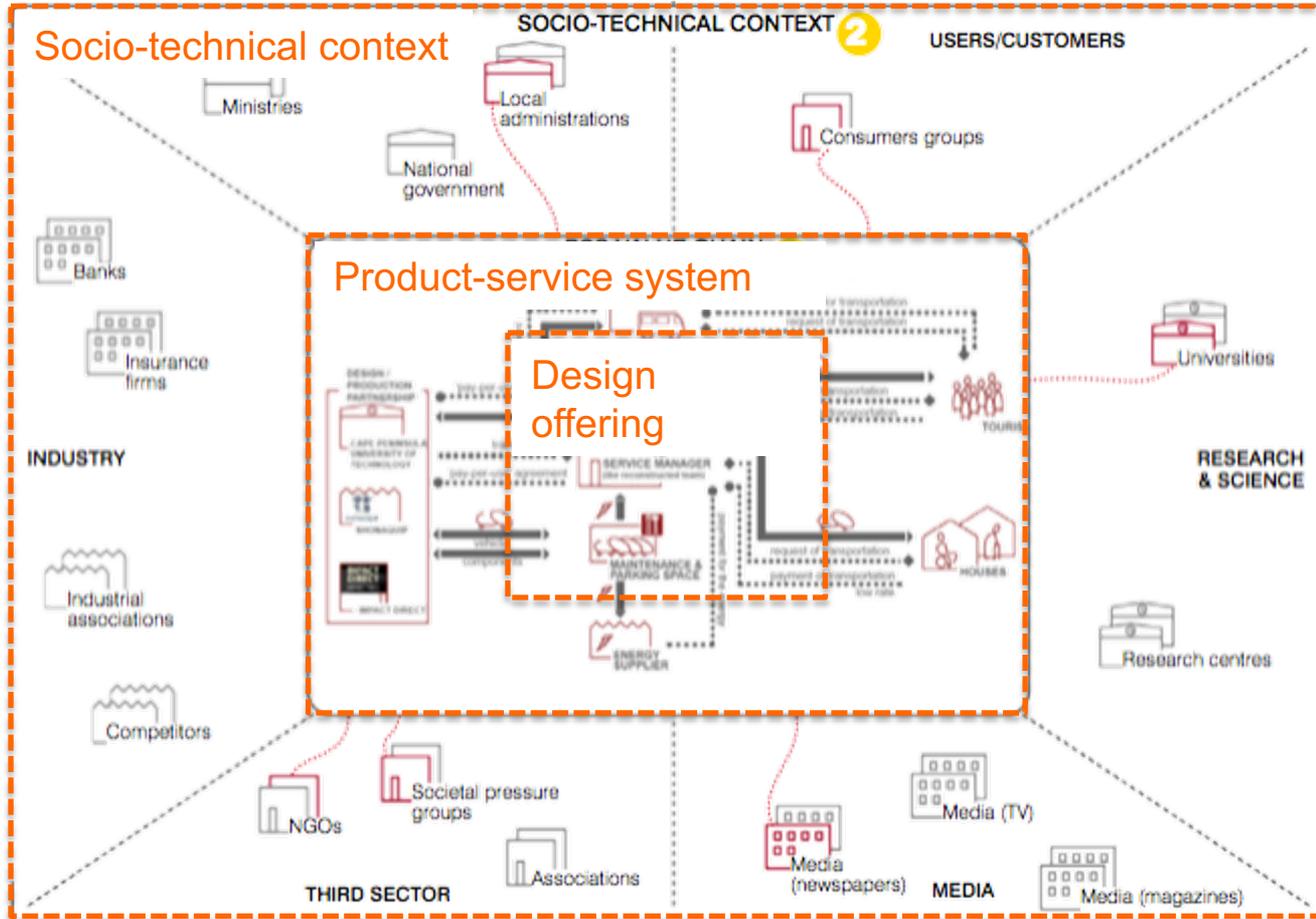
Source: Author;
Developed from
Geels (2011)

Designing socio-technical experiments and pilots

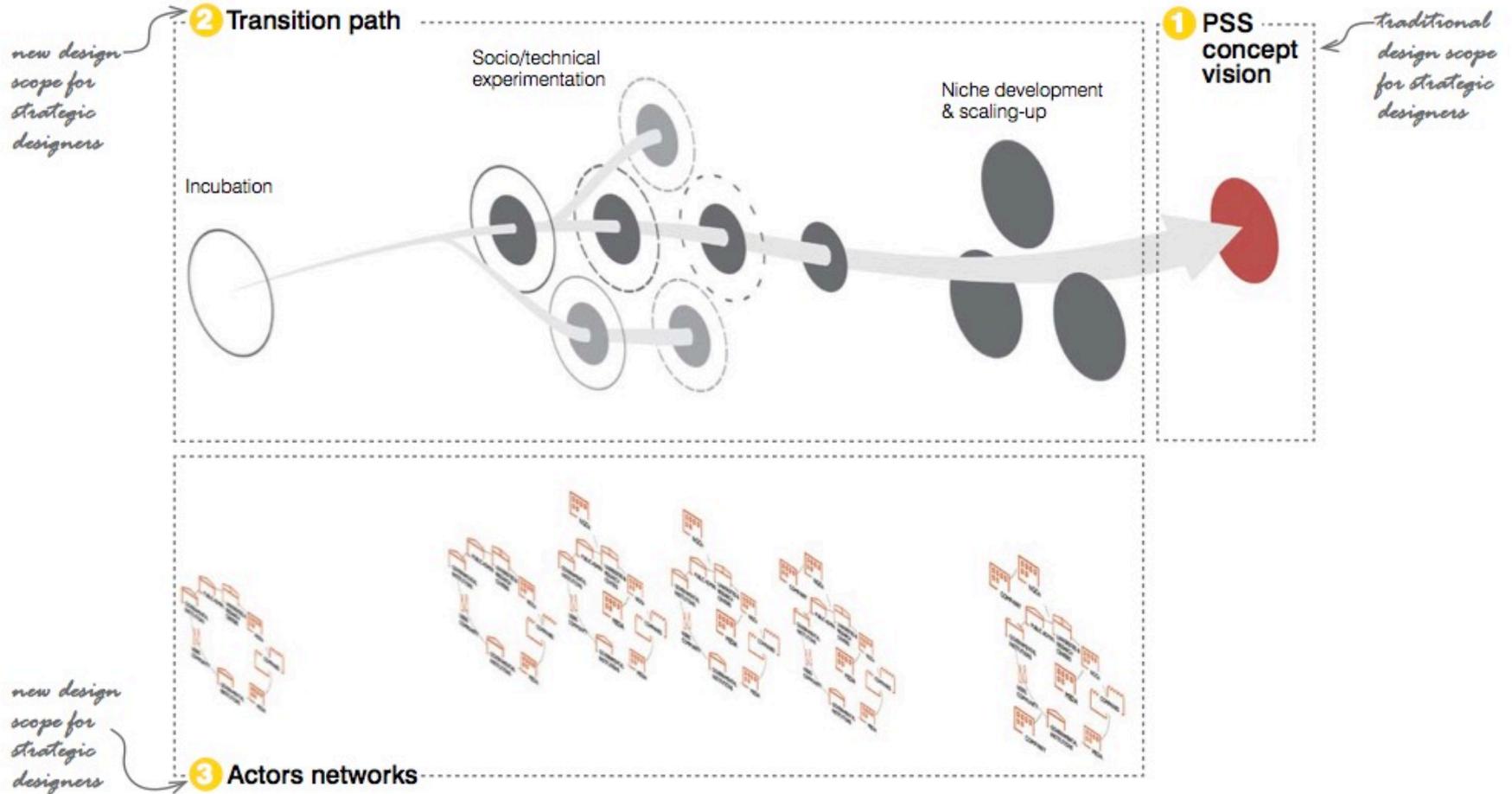
In the testing, piloting and scaling-up phase the design process has an emphasis on creating **socio-technical experiments** that help to *test* and *link* the design idea and to *move it towards the mainstream*.



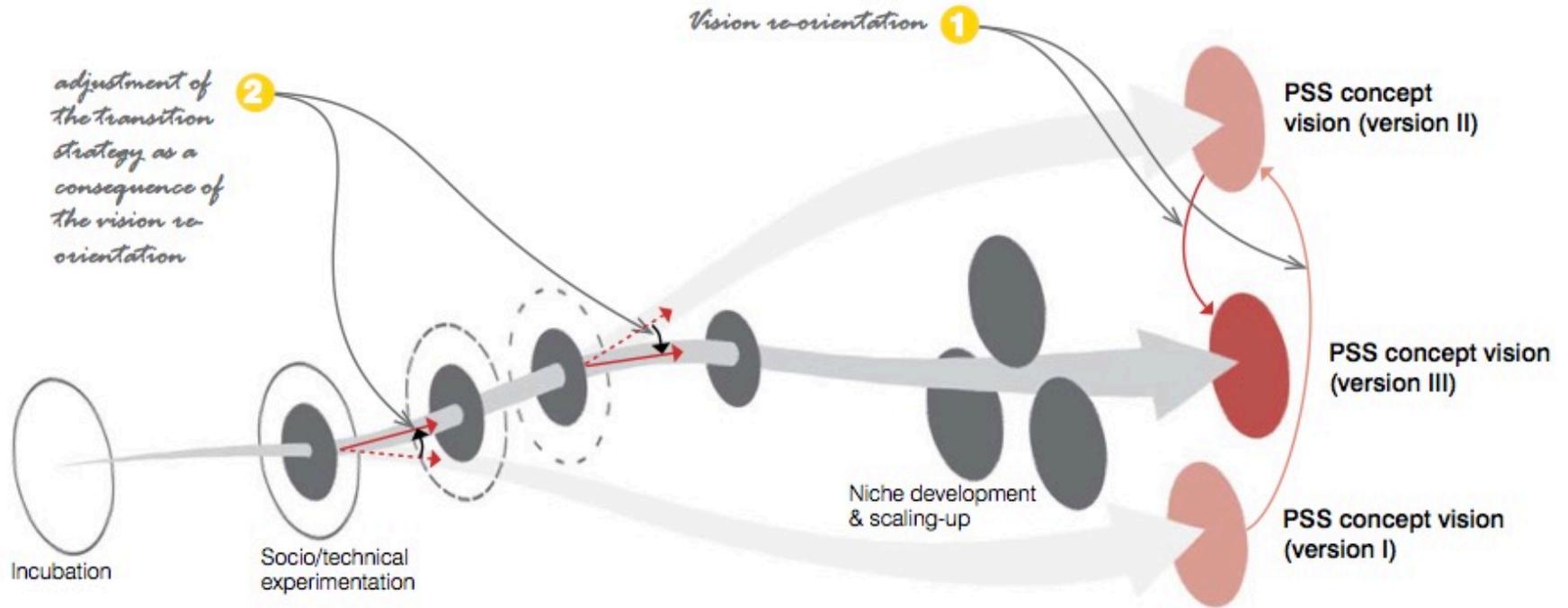
Working with system level to redesign *system interactions* and the *design offering*:



Designing the *transition path*:



Adjusting concept vision *iteratively and collaboratively*:



Catalyzing the co-creation of sustainable *futures*:

HOME + ABOUT NEWS & EVENTS + PROJECTS PROCESS AND TOOLS BLOG



CATALYSING THE RAPID TRANSFORMATION OF CITIES - FOR LOW-CARBON RESILIENT FUTURES.

<http://www.ecoacupuncture.com/>

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ON SUOMEN
ENSIMMÄINEN
VASTIKEPOHJAINEN
YHTEISÖRAHOITUS-
PALVELU



Yhteismaa ry:n ja Mesenaatti.me-joukkorahoituspalvelun perustajajäsenelle Tanja Jänickelle myönnettiin tänään 24.11.2020 muotoilun valtionpalkinto.

Ainutlaatuisen palkinnosta tekee se, että muotoilun valtionpalkinto myönnettiin koko Suomen historian aikana ensimmäistä kertaa palvelumuotoilijalle!



Tuomariston perustelut

Palvelumuotoilija, sisustusarkkitehti Tanja Jänicke (s. 1968) on yhteiskunnallisesti merkityksellisiin hankkeisiin erikoistuneen [Yhteismaa ry:n](#) ja [Mesenaatti.me-joukkorahoituspalvelun](#) yksi perustajajäsenistä.

Hän on yhdessä kollegoidensa kanssa kehittänyt mm. yhteisölliset Siivouspäivä- ja Illallinen Helsingin taivaan alla -kaupunkitapahtumat sekä Nappi Naapuri ja Kokeilun paikka -verkkopalvelut. Jänicke toimii myös luovien alojen yritysten ja tekijöiden sekä näiden palveluita hyödyntävien julkisen sektorin toimijoiden kouluttajana, konsulttina ja sparraajana.

Hankkeet joita Jänicke on ollut toteuttamassa ovat innostavia esimerkkejä uudenaikaisesta, perinteisiä raja-aitoja rikkovasta luovasta työstä, joka etsii vastauksia yhteiskunnallisiin kysymyksiin muotoilun menetelmiä hyödyntäen. Niiden yhteisenä nimittäjänä on osallisuus – jokaisen oikeus elää itsensä näköistä elämää, vaikuttaa itselleen tärkeisiin asioihin ja osallistua yhteisen hyvän tuottamiseen ja jakamiseen.

Palkinto on kunnianosoitus kaikille meille

Koko Yhteismaan ja Mesenaatin tiimi on innoissaan asiasta. Vaikka palkinto myönnettiin Jänickelle henkilökohtaisesti, niin pitää Jänicke sitä kunnianosoituksena koko perustajatiimin yhteiselle 7-vuotiselle ponnistukselle:

Tämä kalustesuunnittelijana, sisustusarkkitehtina ja rakennuttajakonsulttina 20-vuotta toimineen Jänicken ja yhteiskuntatieteilijä Pauliina Seppälän sekä yhteiskuntatieteilijä ja WEB-kehittäjä Marko Tannisen kolmikko on tehnyt urauurtavaa palvelumuotoilutyötä Suomessa.

"Olemme yhdessä hypänneet muotoilemaan jotakin, mitä ei vielä edes ollut olemassa; tunnistaneeet yhteiskunnassa puutteita tai tarpeita ja lähteneet pelottomasti ratkomaan niitä", toteaa Jänicke.

Tämänkaltaista yhteiskunnallista palvelumuotoilua on aivan mahdotonta toteuttaa yksin.

Scaling-up sustainability



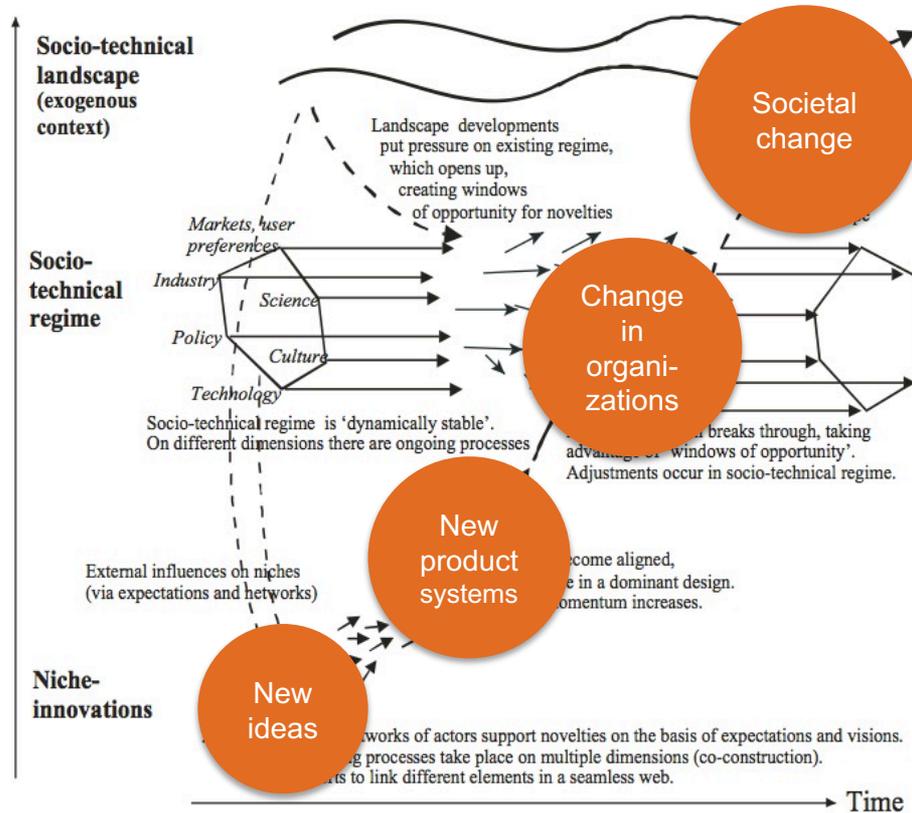
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Design action on several levels

Multi-level perspective on sustainability transitions within the socio-technical context (Geels 2011).

Design actions take place on all levels, and can be connected together

Source: Geels, F. (2011) Multi-level perspective on sustainability transitions

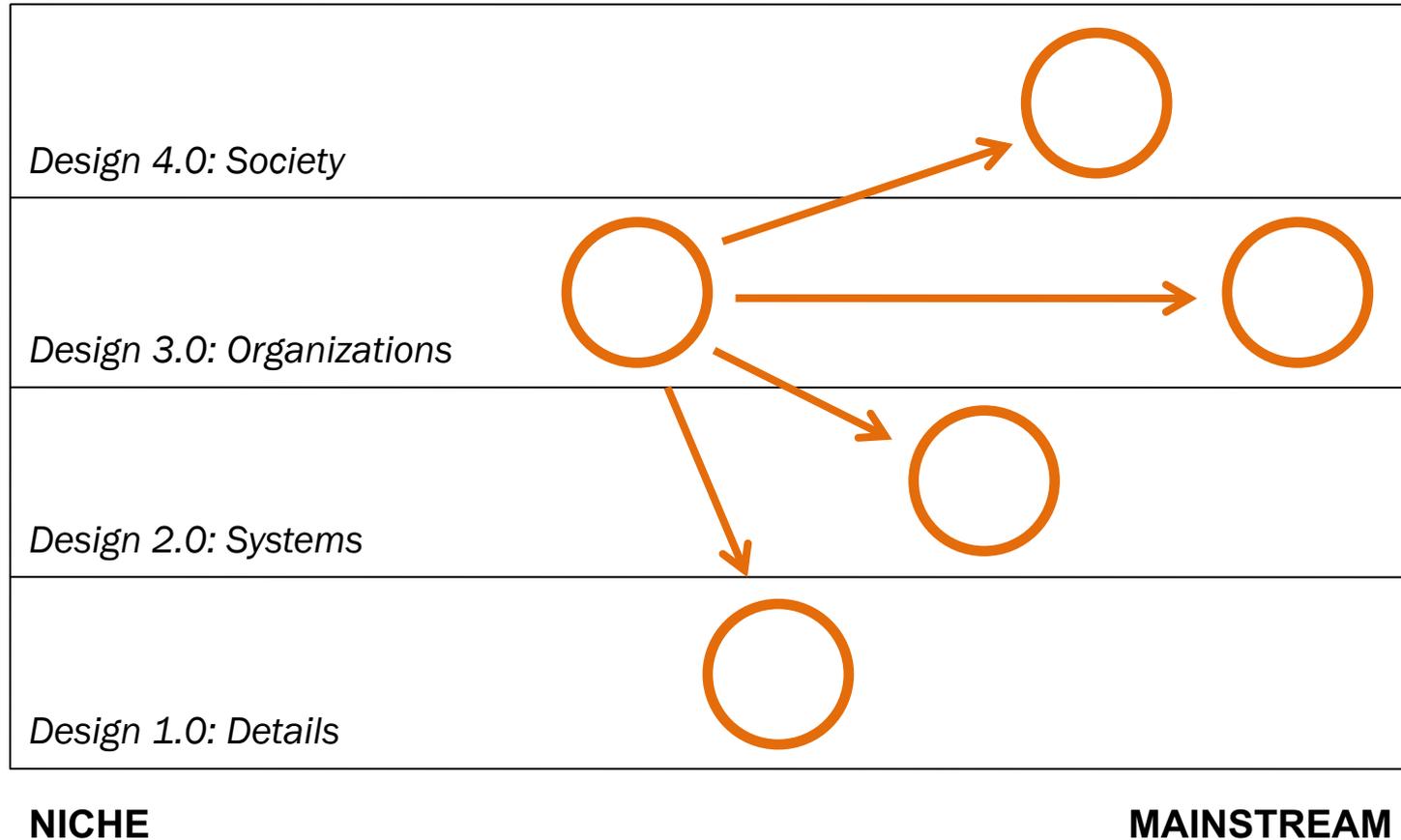


Vision-building as a part of co-design process:

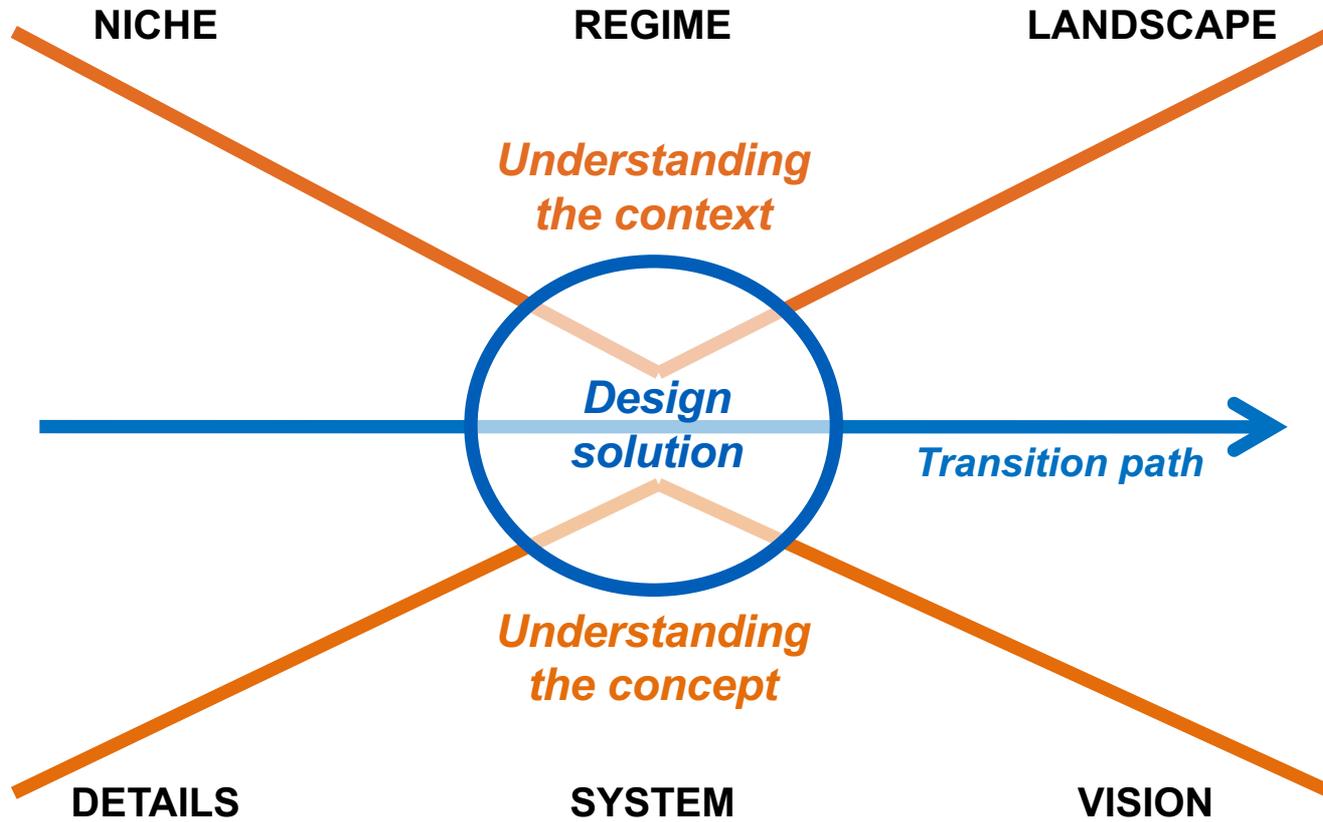


See: <http://visionsandpathways.com/>

Sustainable design connecting several levels of design action:

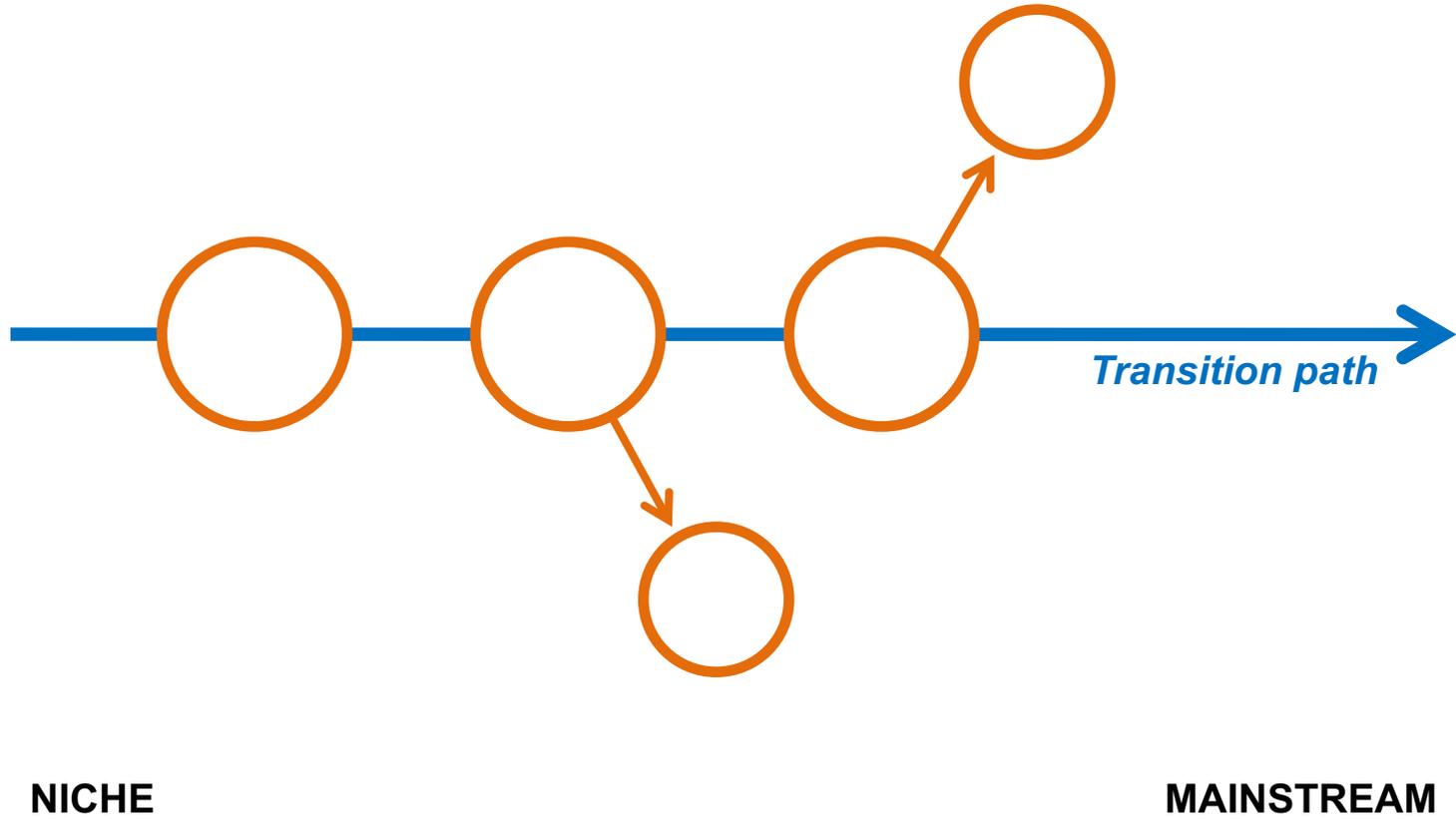


Design solution connecting different contextual dimensions:



Source: Author

Designing transition paths, working with contextual pathways:



Backcasting and scaling-up design ideas

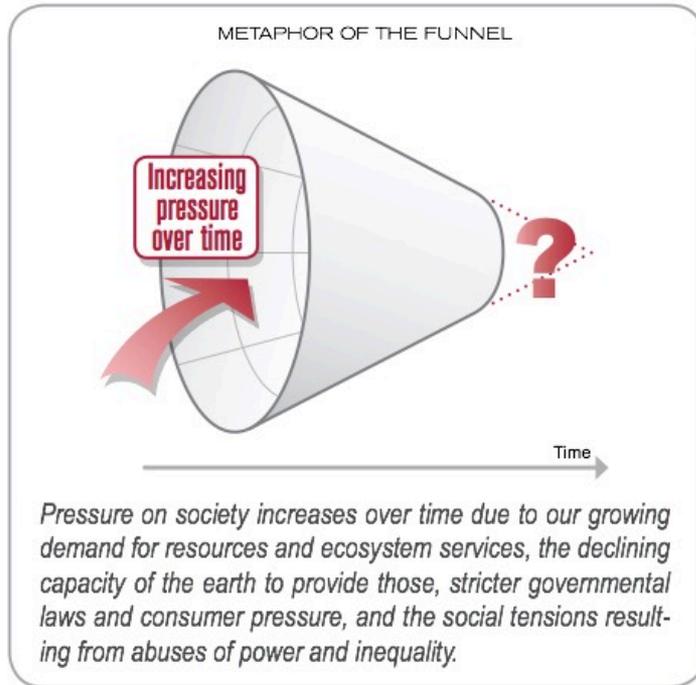
Sustainable development (and also progressing unsustainability!) results in changes in future policies, markets and consumption

Design involves future, so its relation to future setting should be addressed in the design process

Backcasting as a method for futures design:

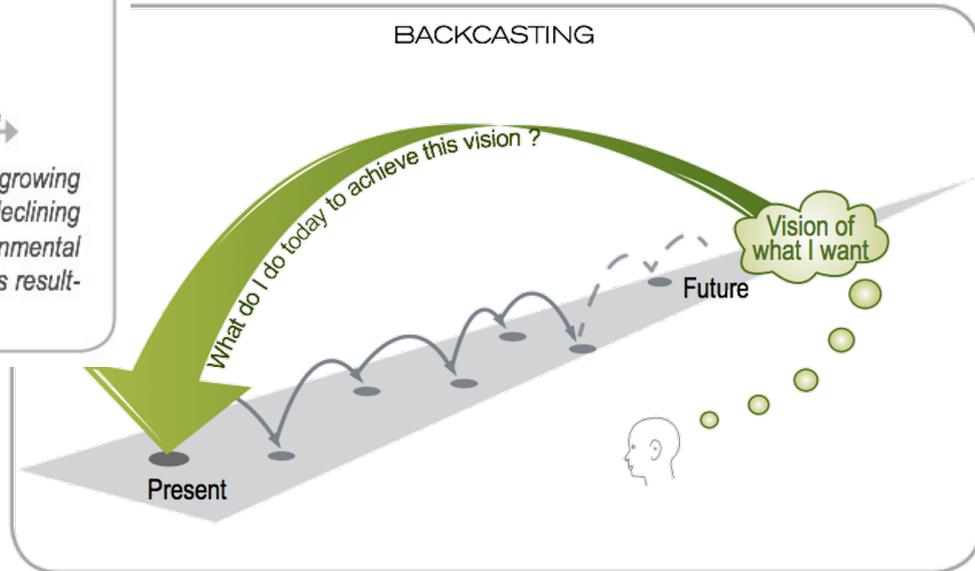
- Identify future vision; Iterate on progress from present state; identify next steps to proceed towards strategic vision
- Future vision versus the current state: Decide on creative solutions (redesigned system, new actors & interaction), priorities

Backcasting (from The Natural Step framework):

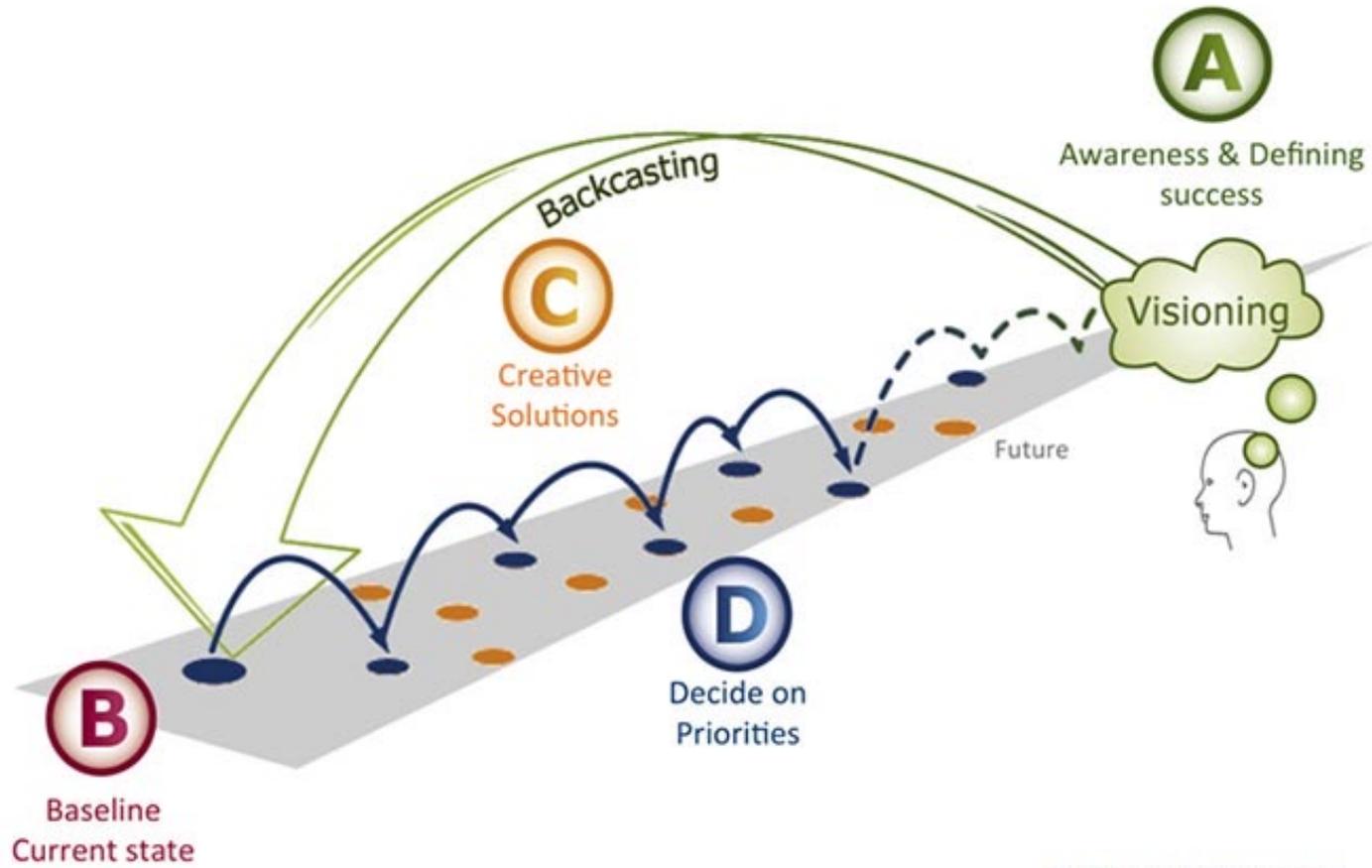


See for more info:
www.naturalstep.org

Sustainability pressure on society creates growing demand for sustainable services. Backcasting can help to plan steps to achieve future vision.

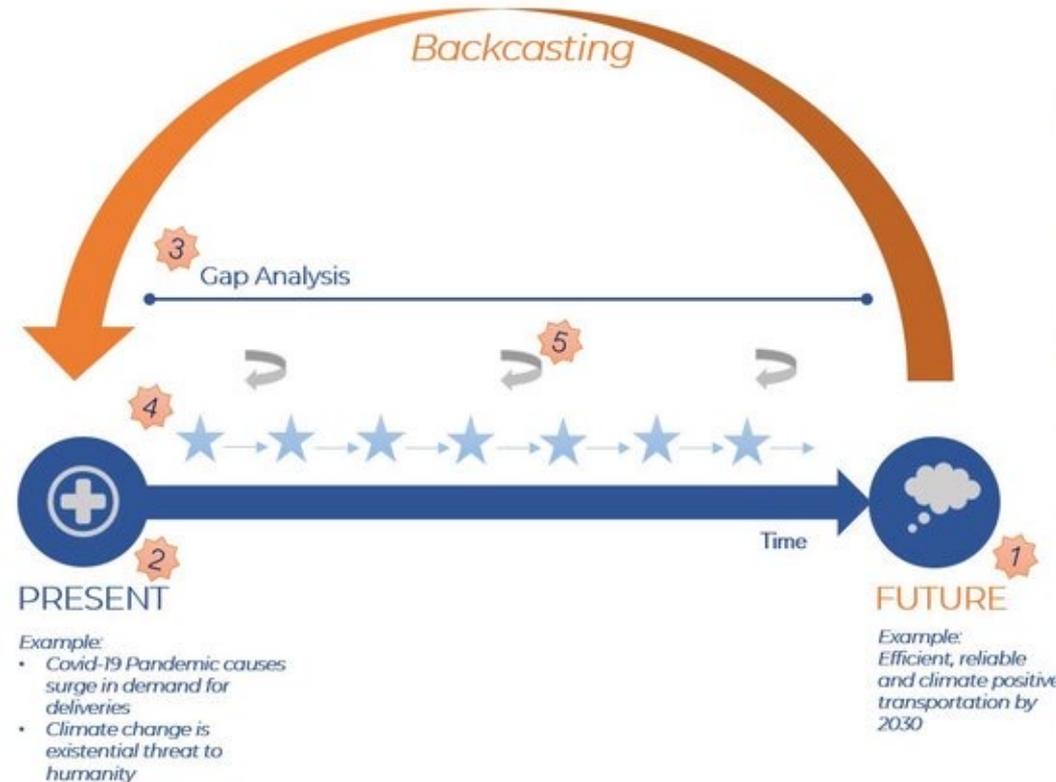


Backcasting (from The Natural Step framework):



Example – Backcasting process by KKS consultants – Sustainable logistics:

The Backcasting Process



1. Future Vision: Definition of desired future scenario – Be creative!

- What does sustainability mean to your organisation?
- How can your organisation contribute to achieving global sustainability?
- What is your vision for: technologies, products, services, and policies?
- *Logistics Example*: Vision - Efficient, reliable and climate positive transportation by 2030.*

2. Present: Assessment of present circumstances

- How is your organisation responding to (the effects of) the Covid-19-pandemic?
- What is your organisation's current strategy?
- Which technologies, products, and services are currently available?
- Which policies is your organisation currently guided by?
- *Logistics Example: Pandemic causes surge in delivery tasks due to boom in online orders → negative environmental impact might increase as deliveries increase.*

3. Gap-Analysis: Identification of required setting for achieving the desired future

- How are the present technologies, products, services, and policies aligned with the future vision?
- How do these need to be developed further?
- *Logistics Example: Product innovation - affordable carbon neutral transportation methods, e.g. delivery drones.*

4. Action Plan: Development of actionable steps for achieving the future vision

- How can the ultimate goal be broken down into specific targets to be achieved over time?
- Who within your organisation is responsible for achieving the specific targets?
- *Logistics example: 50% of fleet replaced with carbon neutral transportation methods by 2025.*

5. Revision: Continuous revision of action plan

- Have the circumstances of the broader system that you operate in changed?
- How is the action plan affected as a result?
- Does the action plan need to be revised to ensure achieving future vision?

*) The example firm is a nationally operating logistics firm. As part of a broader sustainable strategy, the management team defines a vision on climate action.

Summing up previous weeks...



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Multilevel focus for design

Multilevel perspective adapted to design:

“The role of designers is broadening, from the creators of physical arte-facts to the potential role of facilitators of complex societal change processes. To support the widening role of the designer, there is a need for a design supportive model.”

Multilevel Design Model (MDM) by Joore & Brezet (2014)



A?

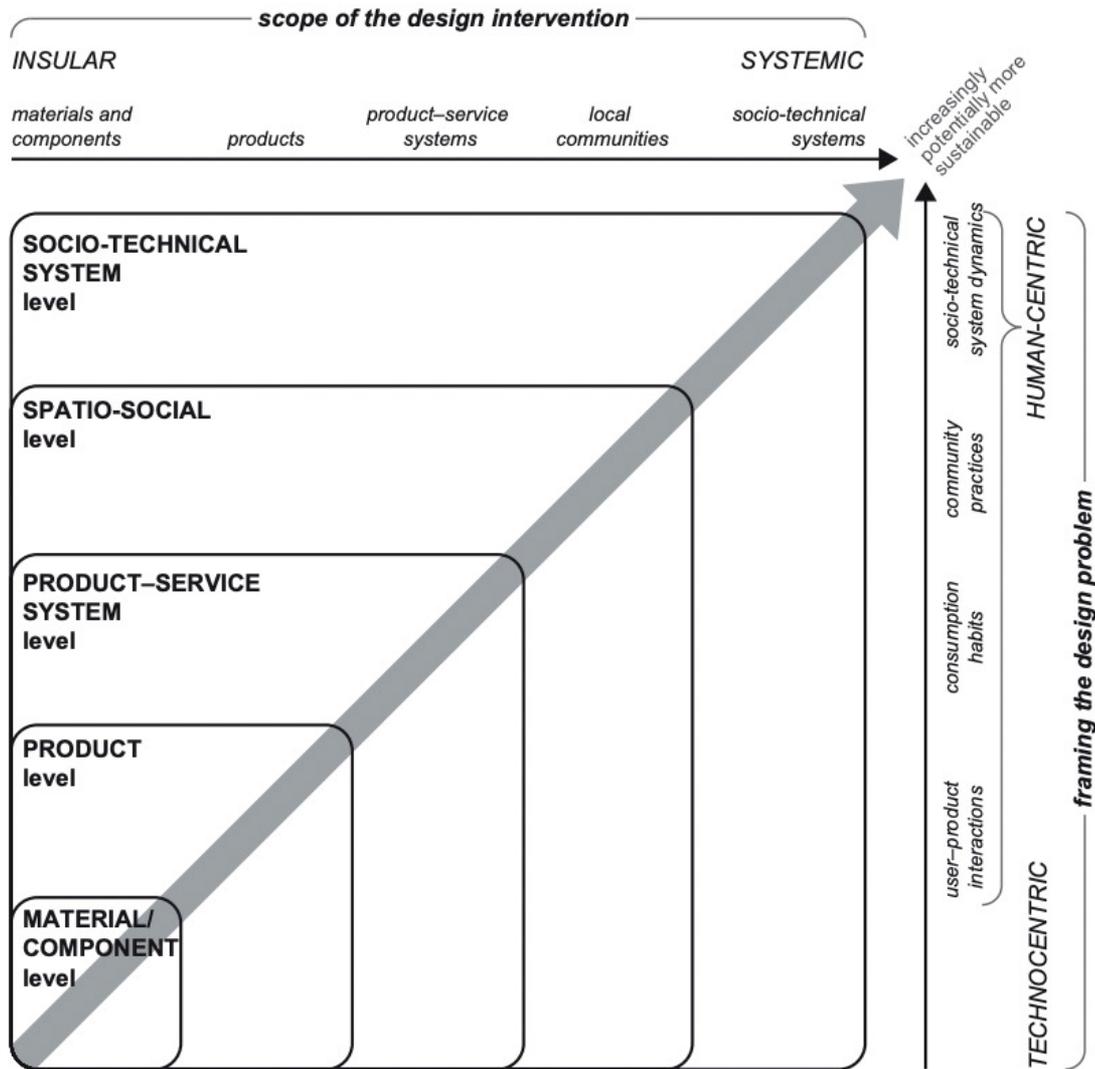
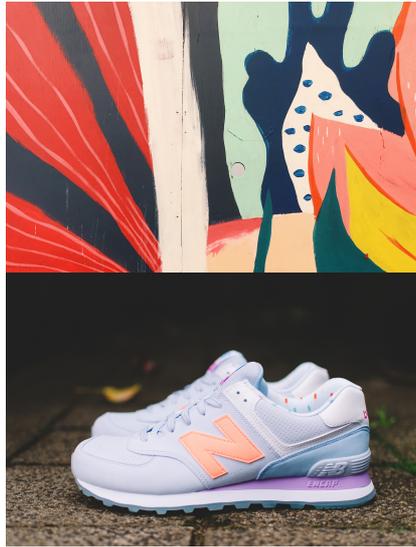


Figure 12.1 The DfS innovation framework

Connecting design action on several levels:



Product level:
*Green design,
 ecodesign, etc.*



Lighting-as-a-Service Value Capture



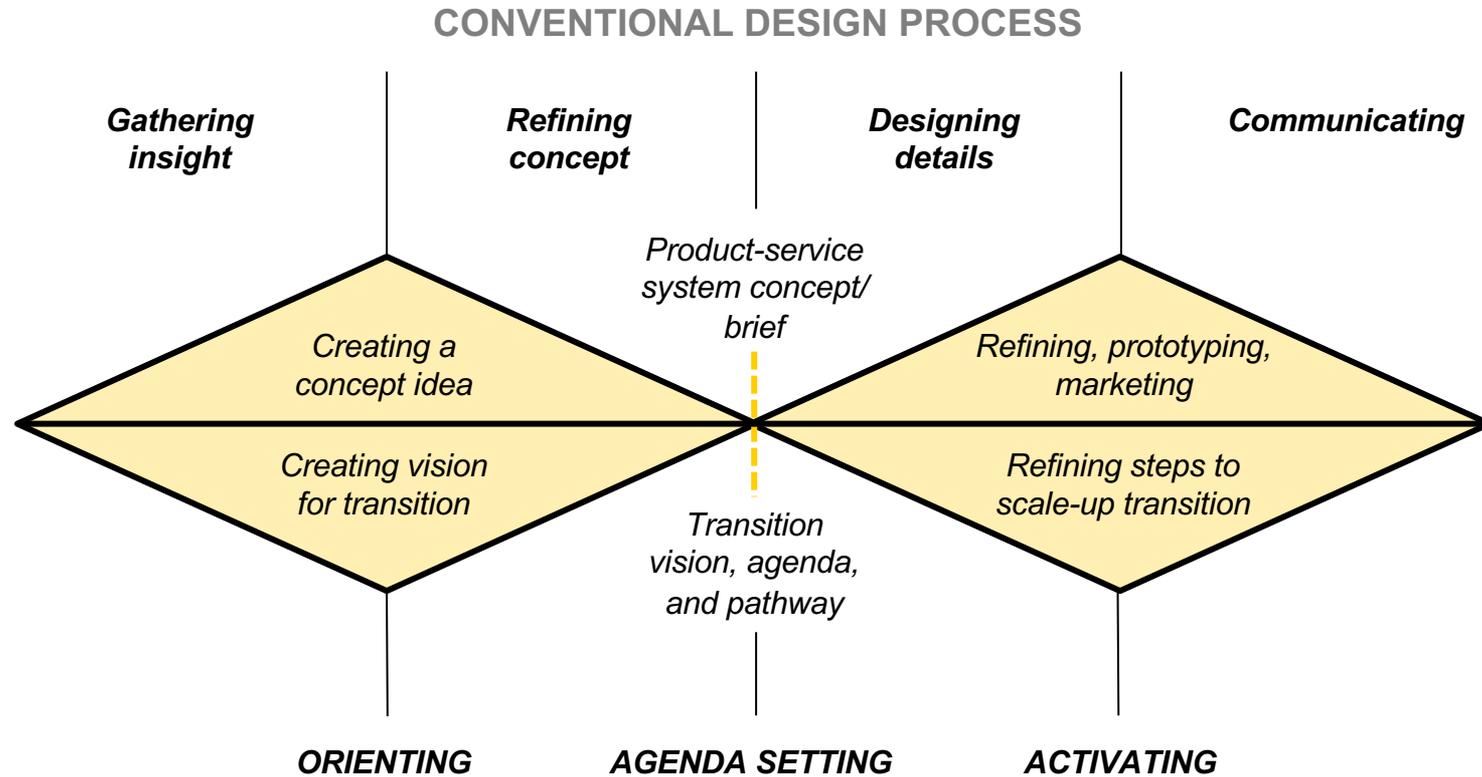
couchsurfing

Product-service-system level:
*Servicization, functional
 approach to products*

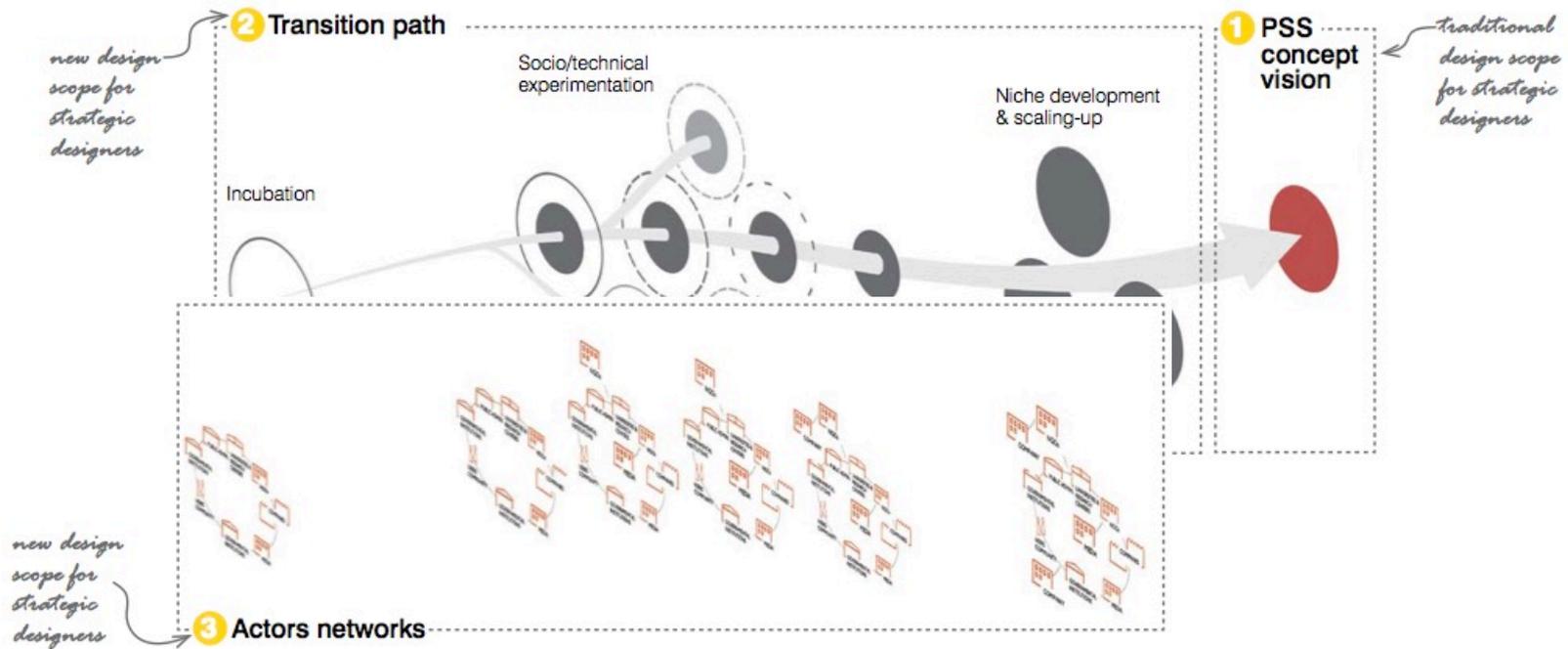


Societal level:
*Transitions design &
 management*

Sustainability transitions and design process



Designing the transition phases, experiments, and steps:



Transition management process:

*Initiate
Transition
arena*

*Discuss starting
points: Current
situation, drivers,
and first steps*

*Develop vision and
its elements:
Transition targets
and goals*

*Design and prioritize different
steps on the timeline:
Actor networks, interactions,
connections to further action*

*Getting into
action*

Break



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Breakout room activity: Backcast & timeline design exercise

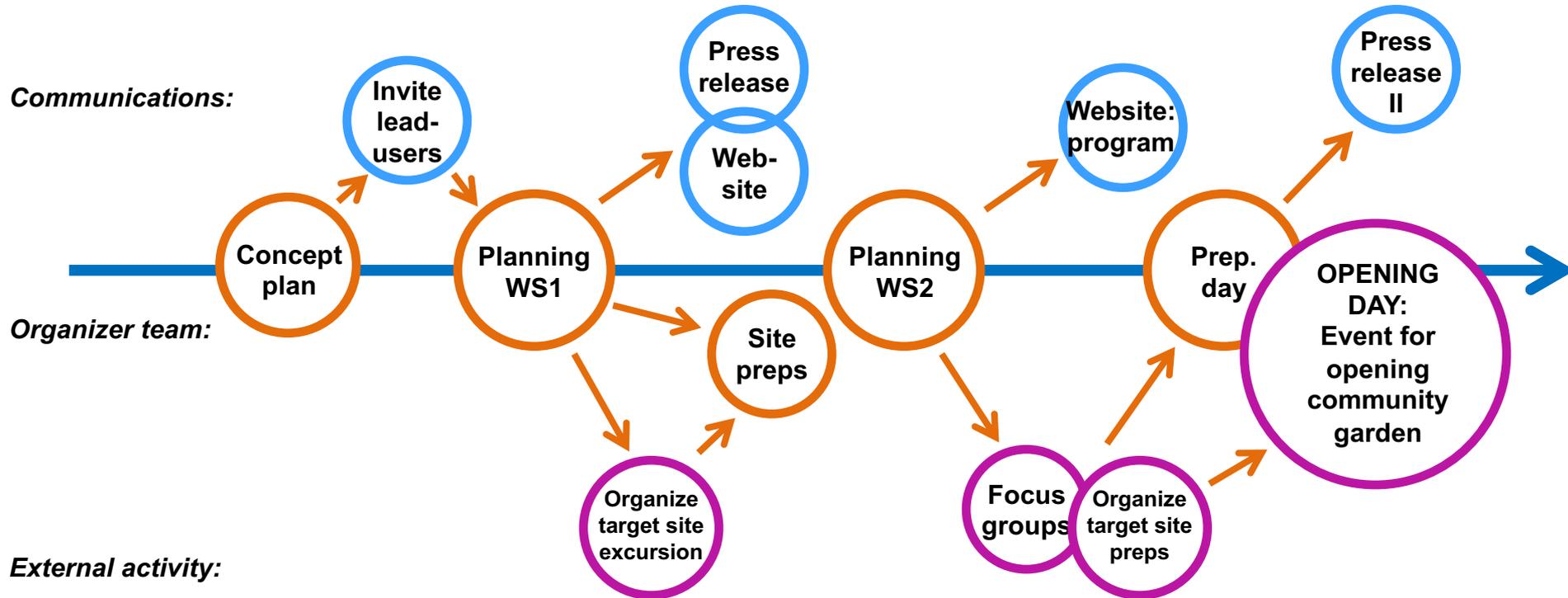
Create a timeline that relates to some dimension of your case work:

- Timeline can concern your overall project or then some component of it, eg. campaign, annual process, use of toolkit/materials, development project etc.
- Work with a horizontal timeline (see example on next slide)
- Consider the vision you pursue towards
- Discuss together and ideate main steps; Discuss also who are the involved stakeholders (break 10 min + ~30 mins work)
- Present results very shortly (30 min; 3 min each team)

Link to Google slides working canvas: <https://t.ly/zWOs>

Timeline design exercise

Example timeline: *Developing urban garden site with local community*



Thanks!



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