Making resilient research dissemination: the case of BOOST metadesign performing hybrids

Mathilda Tham, Åsa Ståhl, Sara Hyltén-Cavallius

Linnaeus University, Växjö, Sweden

mathilda.tham@lnu.se, asa.stahl@lnu.se, sara.hylten-cavallius@lnu.se

Abstract

This paper shares the process and insights from designing the dissemination of the development project BOOST metadesign. The three-year long project has developed housing proposals at the intersection of migrants, students and an ageing population, in a context of sustainability. We have been working through iterative processes of co-creation, with members from these three stakeholder groups, as well as representatives from the building sector and governance. The paper relates considerations in dissemination of the project to two principles of resilience: diversity and overlap in governance. It describes how we pursued resilience through a hybrid format of dissemination. The openness of this slideshow-performance-talkshow-exhibition-film-book has made it workable across a range of contexts and audiences. It also manifests the challenging of dominant power structures and epistemological hierarchies in design's meeting with other disciplines which the project has entailed. This has come to also include challenging the modernist legacy in design.

Author keywords

Resilience; metadesign; research dissemination; home making and housing; permaculture; co-creation, sustainability.

Introduction

This paper shares the process and insights from preparing the communication of the development project BOOST metadesign. The three-year long project has developed housing proposals at the intersection of migrants, students and an ageing population, in a context of sustainability. We have been working through iterative processes of co-creation, with members from these three stakeholder groups, as well as representatives from the building sector, local and regional governance. The work has resulted in a nuanced understanding of needs and cruxes, as well as ideas for new pathways for inhabiting and housing. This has found form through an overarching paradigm: Building and Home Making for Permaculture. (For introduction to permaculture, see e.g. Holmgren, 2000) This paradigm is exemplified through four more concrete scenarios for home making and housing: The Matching Agency, House-Human-Choreography, Trans-Port and Home Ecologics/Oikology. The scenarios provide both hands-on suggestions and perform possibilities, dreams, provocations for what it can mean, for individuals and communities, to have our homes on earth together with a multitude of species. Succinctly, our proposals take as their starting point *relationships* instead of the individual. BOOST metadesign forms part of a larger collaboration on housing, between design, business model innovation and technical prototyping, joining up several academic disciplines and research institutions. Resilience has constituted an implicit and important thread throughout this project, including the design of the dissemination of its results. This ended up a hybrid format: slideshow-performance-talk show-exhibition-film-book. Considerations of resilience have included:

- how dissemination can stay close to core values and interests even when they are in conflict with those of an audience;

- how dissemination can embrace many ways of knowing in relation to conventional knowledge hierarchies;

- how dissemination can be accessible, meaningful and agentic to diverse publics.

The paper contributes to the conference theme of resilience by relating concrete examples of how design can negotiate epistemological power structures to principles of resilience, and discussing how design for change can be resilient when facing dominant agendas and ontologies, including the growth paradigm. We hope that the paper and discussion can lend other researchers and educators in design confidence to keep opening the space of design, both pragmatically and paradigmatically. The paper specifically contributes with its focus on considerations of resilience in the design of <u>*dissemination*</u> of research.

The paper comprises a brief design research positioning, a description of considerations in the dissemination of the specific project BOOST metadesign, a discussion of how the dissemination was designed in relation to principles of resilience. Finally it offers a reflection and conclusion raising some wider points regarding dissemination of design research and working with resilience in design.

Note: The presentation of the paper will include a screening of part of the dissemination. This will also be made available online.

Design research positioning

The researchers of the project BOOST metadesign come from different design backgrounds, which means that different ontologies, epistemologies and methodologies have come into play. Most firmly, the project has grown in and with the field of metadesign, as emphasised in the title of the project. Metadesign has emerged with a need to address complex challenges where no individual or organisation alone can hold neither problems nor potential solutions. Metadesign, which therefore draws on collaborative and co-creative transdisciplinary processes, integrates questions and proposals at levels of products, systems and paradigms. It is an uncompromisingly systemic approach. In how it works synergistically informatively, transformatively and generatively, it has affinity with action research (e.g. Heron and Reason, 2001). (Giaccardi, 2005; Wood, 2007; Tham, 2014a) Architecture is an obvious entry point since the project deals with housing. The particular version that has been enacted here is one where architecture is understood as part of society building, with a bias towards shared resources. (E.g. Yaneva, 2017) Yet another important design reference point is Scandinavian participatory design (PD), which stems from an acknowledgement of the benefits of involving future users in the design process in order for those who have a stake to influence what is to come (see for example Robertson and Simonsen, 2012). In particular, the version of participatory design that has been enacted in BOOST metadesign rests on feminist technoscience (e.g. Suchman, 2007, Åsberg and Lykke, 2010, Lindström and Ståhl, 2014) which, in brief, can be described as approaches that are critical to binary divisions between nature and culture, human and technology and encourage creative means to investigate and intervene into entanglements of various actors. In addition, recent movements towards democratic (Binder et al., 2015) and caring design experiments (Lindström and Ståhl, forthcoming) are integral parts of BOOST metadesign. Finally, a key reference point has been Max Neef's framework of universal human needs. (Max Neef, 1991)

Considerations in the dissemination of project BOOST metadesign:

The project BOOST metadesign started in autumn 2016 and ends in autumn 2019. Although the efforts at dissemination became more concerted at the later stage of the project, in reality dissemination - in the sense of articulating the project to a range of stakeholders - has featured from day one. Here we therefore discuss considerations for communication during the process of the project and considerations in communicating its results.

Considerations in the communication of the project during the

process:

BOOST metadesign has been a communication intensive project. It was the first time the three project members worked together, necessitating continuous articulation of frameworks of reference. The meetings of the larger project group (comprising BOOST metadesign, technical prototypes and business model innovation teams) featured different agendas with the project, disciplinary and epistemological hierarchies. Most poignantly, the group also demonstrated different expectations of what design can and should do, as well as different

paradigmatic preferences, spanning from the growth critical to growth enthusiasm. Some of the points of contention were implicit and materialised over time. Some were explicit and voiced in a particular situation. For example, once a member from the technical prototypes asked of the metadesign team, to 'please be less wishy-washy at the next presentation'. This instance was ultimately helpful as it prompted us to make epistemological differences and understood hierarchies explicit, and to articulate how we saw our contribution to the project in more concrete terms. Over time, as the project teams got to know each other better, there was also – mostly – more respect for or at least tolerance of different positions. There were surprising affinities forming, such as the more easy comprehension between the business model team and metadesign team, than between the latter and the technical prototypes. In summary, disciplinary meetings have meant a continuous need for clarification of purpose, process, and contributions of the work in progress. Finally, the diversity of participants in the co-creation process - the target groups, older people, students, migrants, and the additional stakeholders from building sector and governance - necessitated careful and continuous communication. We needed to reach out, create trust, inspire confidence and commitment to take part in something which end-point was, too some, disturbingly open. For some participants, trusting authorities – which we as members of the university represented – did not come easy. (See also Agudelo et al., 2018). On the other hand, we were concerned about raising hopes that we might be able to affect individuals' housing situation.

Figures 1 and 2. Co-creation workshop with a transdisciplinary group. Kalmar Castle, 16 May, 2017. Project meeting with technical prototypes team and business model innovation team. Linnaeus University, 21 May, 2018. (Courtesy of BOOST/Träcentrum, 2019)

Altogether, this has meant that we have had plenty of opportunity to rehearse both the pragmatics and paradigmatics of the project. We have tested out verbal and visual narratives, drawn figures on white boards, found examples closer to collaborators' reference spheres. Most importantly, participants have lent us their reference points, stories, imagery and ideas. In hindsight, we can identify a certain itchiness characterising this process. We can also see that many of the cruxes that have arisen relate to the open-endedness of our field of design, and the critique of a growth paradigm. In response, we have become better at foregrounding communication with positioning metadesign as an uncompromisingly systemic approach, which does challenge conventional:

binaries, issues focus, solutions focus, and therefore by design can be experienced as unusually open. This constant rehearsal and refining of ideas with various audiences has also made us three design researchers more resilient, in the sense of being able to distil useful feedback from negative comments stemming from a different paradigm of research, being able to articulate epistemological difference when faced with epistemological hierarchies, and generally growing in confidence in terms of the appropriateness of 'staying with the trouble' of the complexity of housing needs converging with social, financial and ecological pressures, and abstaining from serving up succinct product level solutions - even when under pressure to do so.

In metadesign, we pay special attention to "languaging", a co-creative relation between articulation, conceptualisation, action and agency. (After Wood, 2005; Maturana and Varela, 1984) In this project languaging, through wording, drawing, making, enacting, cooking, has played a central role in the researchers and the participants' sense making, idea generation as well as sharing with an expanding community. The weaving together of action, reflection, articulation is intrinsic to action oriented research and co-creation. (E.g Heron and Reason, 2001) The many contact points with different audiences and groups have given us the opportunity to rehearse, try out ideas, and put ourselves in the way of "presentational knowing", the knowing that comes from articulating. (Heron and Reason, 2001) This means that communication per se has functioned as a research method. Sometimes this has been very generative and captured in notes or sketches.

Considerations in the communication of the project's results

Already from the start we knew that the generated material would be funnelled into an exhibition and a book, since this had been written into the funding application. The motivation was to reach out broadly, both to those who make decisions in their everyday mundane lives as laypersons, and those who do so professionally as part of their power positions in, for example, the housing industry, in governance, in research, as well as other epistemic and practice communities. Importantly we also wanted to give back to those who had so generously shared their time, lives and thoughts with us in the co-creation sessions. Perhaps the participants would not recognise the particularities of what they had contributed with. However, it was of significance that our interpretations and further generation of the material they had been part of making, was recognisable and in line with what had happened in the co-creation sessions. In addition, we set out to allow the new paradigm of permaculture to flourish in our dissemination, partly including the caring approach that all kinds of growing demands.

Our brief for the dissemination/exhibition and book was therefore that:

- it would be accessible, meaningful and, ideally, agentic to many different audiences;
- be possible to perform in many different spaces, indoors and outdoors, from city to countryside;

▪ have the possibility to be shortened and prolonged depending on the given situation.

Designing dissemination with resilience

Figures 3 and 4. In the secret house/the outhouse and swimming to the kitchen island. Performance at Stockholm Furniture Fair, 5 February, 2019.

To arrive at a suitable dissemination format, we collaborated with a graphic designer, a curator and an exhibition designer (which meant positioning us again in languaging). We settled on a hybrid format: a slideshow-performance-talk show-exhibition-film-book. The transition from the book and exhibition to the multimedia format can be explained by a resistance of our material to stay still. It demanded movement and interaction, spontaneity, humour and risk-taking – certainly in line with the project's process. We affectionately called the dissemination hybrid our 'skvader', a Swedish fictional creature which is a hybrid of a wood-grouse and hare. We also see the hybrid format as a Cat's Cradle, or string figure in constant becoming. (See Haraway, 1994) The constant becoming between humans, architecture, housing policies, and other actors has been emphasised throughout our dissemination, partly with reference to the following quote from Donna Haraway:

"The partners do not precede the meeting; species of all kinds, living and not, are consequent on a subject- and object-shaping dance of encounters". (Haraway 2007:4)

The form of the skvader is a set-design which doubles as a pop-up exhibition, a projected presentation with imagery, video and sound, a script performed by the three researchers, and a book prototype. The forty minutes long performance continues in a talk show with invited guests - local decision makers and local residents, followed by the opening of the exhibition to the whole audience. In spring 2019, the show tours sites where co-creation took place.

The talk show and the exhibition invite local feedback, interpretations and contributions which feed into subsequent performances and the book, launched autumn 2019. The talk show and interactive exhibition are important in:

- situating the result of the project Boost metadesign back in the contexts where co-creation took place;
- from the material prospecting concrete steps forwards according to local needs, interests and conditions.

Again, the book is designed to have agency rather than be a conventional project report. It is designed in the form of a book of Home Ecologics/Oikology, inspired by home economics. It features guidelines, discussion points, provocations, examples.

In the performance, we - the three researchers - take the role of the Matching Agency (Förmedlingsbyrån). The Matching Agency is one of the scenarios that the project has generated, and a result of the project. The Matching Agency is a speculation of an independent organisation which matches needs with resources in a situated and fluid way. Matching can take place at the local micro level as well as macro level. Matching can take place across individuals and communities and across temporalities. In the performance, we, in the guise of matching agents, match an audience with the knowledge that we have generated in co-creation with our target groups and other key stakeholders. In this way, the skvader is a speculative enactment where we materialise a new role according to needs that arise. The matching agents bring to life the target groups - migrants, students, older population - by receiving requests from them in the form of emails. The emails are texts created from the material generated in the co-creation process. During the course of the performance, we gradually populate the set-design with fictional and factual materialisations of the narrative. We hang stories on a time line and unpack scenario drawers, revealing speculative artefacts, such as a social contract. Central to the set-design is a kitchen island. It is a devise in a story about a housing trajectory from poverty to a certain freedom and comfort, to life in an exclusive resource fiction. As we engage with futures scenarios of housing and home making, a kitchen bridge folds out to more relational, resilient – permaculture oriented – housing. The bridge is a narrative devise to support the discussion in the local setting. What might be the bridge – in terms of new artefacts, technologies, practices, regulations, infrastructures, cultures and languages to good home making within earth's limits in this particular site?

Discussion

The strangeness, imperfection and awkwardness (which we will describe) of this hybrid makes it resilient. Here we discuss how two principles of resilience (from Walker and Salt, 2006) are manifest in the skvader.

Diversity

Diversity is one of the pillars of resilience theory as it distributes risk (not putting all eggs in one basket) and ensures complementary and overlapping functions, as well as a plurality of perspectives. Diversity also has value in its own right. The skvader has followed the principle of diversity by using a range of different languages, media, messages – from the concrete to the paradigmatic, and the roles we take – as humans who dwell, women, designers researchers and matching agents. The skvader, understood as a string figure, presents shifting narratives at different occasions. It becomes with the local context, residents and decision makers. It also moves with our growing understandings during the tour.

Figures 5, 6, 7. Diversity of explorations. Enactment. Cooking. BOOST Symposium, Linnaeus University, 15 December, 2017. Spatial mapping. Småland Food Lab event, Linnaeus University, 6 September, 2018.

Although diversity is a celebrated quality, for example in the Western academic institution and in Western mainstream politics, it also (as political developments in many European countries only show too well) causes tensions. The practical manifestation of diversity, as exemplified by the skvader, presents a break with modernist design ideas of unified message and form, finished objects, solutions, perfection, clarity of authorship. The modernist project is in turn entangled with the growth paradigm, a Western hegemony, patriarchy. In hindsight, we see the discomfort at the open-endedness of our project in our collaborators as very much originating in the opening up of categories. We have experienced versions of this discomfort ourselves, such as when we found it difficult to leave the familiarity of modernist icons in terms of, for example, the look of workwear and coherent typography. During the process, our awareness has grown in terms of

the omnipresence of implicit design rules – such as unified message and language of form - which perpetuate even radical projects' entanglement in paradigms they seek to challenge.

The range of roles we present in the skvader contributes to diversity and also awkwardness. An example is a passage where we switch from matching agents to lay people with the cue "I need a wee, I do too, me too". We step behind the green screen entering the Secret House, in Swedish Hemlighuset – Outhouse. Here we can discuss the lack of references to body fluids and intimacy in the material, as well as the project's short comings in honouring, for example diversity, as well as the shame of a housing system that thrives on investments at the same time as homelessness is on the increase. It was important for us to present this diversity of roles, to make ourselves vulnerable in this way. To us it is consonant with feminist ways of knowing, and it contributes to making the skvader porous. By porous, we mean offering many doors to engagement (Tham, 2008) and the space for different publics to complete the, by design, unfinished product we offer. In the project, we refer to this agentic openness as 'Trans-Port'. Trans-Port is a scenario that discusses needs, dreams, proposals for accessibility and voluntary withdrawal. Yet, the most significant dimension of transportation is to us the doors to learning, transgression entailed, hence the hyphen.

Overlap in governance

Economic Nobel laureate Ostrom has described how less authorative systems can demonstrate a greater flexibility in responses. (Ostrom, 1999) A benefit of a decentralized governance is that it can be more resilient in the face of sudden changes in conditions, but it can also be perceived as messy. (Pisano, 2012; Tham, 2014a) The resilience theme of overlap in governance is played out in our strategies to challenge dominant power relations. Power relations has featured a strong theme from writing the funding application to planning and conducting the dissemination of the project BOOST metadesign. For example, we regard the identification of target groups – older people, migrants and students – as problematic; it homogenises heterogenous groups that are artificial constructs, in reality comprising many overlaps as well and diversity within each 'group'. (Ståhl et al., 2017) Through the process, we have therefore positioned the citizen participants as guides towards new housing possibilities and paradigms rather than receivers of solutions. By concertedly valuing decision making in a range of sites, the domestic, the formal political, industry, academia; we have further tried to disturb dominant power structures. The loosening up of our roles, as evidenced in the performance, is a way to decentralise our power privilege in a conventional knowledge hierarchy. Again, this way of presenting ourselves as fallible, human, women, and incomplete – i.e. in need of contributions, is in conflict with a dominant design narrative of the guru. Power relations has presented awkwardness also in the internal process, as described before, in the meeting with the other project teams, but also in the relations between the three researchers, as we have intermittently adhered to formal structures, for example a project leader, academic rank, and sought to ignore or treat them lightly. We have also experienced a sense of

powerlessness in the face of dominant housing strategies, but also felt empowered in the response from participants valuing the, at least temporary, voice the project has made space for. We have sought to shift power, for example at a housing gala where we asked workshop participants to consider what they personally would be able to forego in order to address power and resource imbalances in the housing system.

Conclusion

This paper has described and reflected on the dissemination of the co-creative project BOOST metadesign which has developed proposals for housing at the intersection of migrants, students and an ageing population, in the context of sustainability. The paper has related the hybrid dissemination format that we have developed to two principles of resilience: diversity and overlap in governance. We argue that while we perceive the hybrid dissemination to, in the specific context, perform resilience, this simultaneously challenges dominant pillars of design. While the project has from the start challenged the dominant system and paradigm of housing development and therefore staged conflicts and negotiations with other perspectives and other disciplines, during the project's course, the tension with our own design heritage has also become explicit.

It has been a privilege to work in co-creation sessions and in other ways with the various stakeholders that have contributed to and troubled this work on housing and housing development. On the one hand, resilience and permaculture thinking have been integral to this process, informing, for example, methodological choices implicitly and explicitly. On the other hand, they have emerged as overarching frameworks that have been articulated in various ways, for example through four concrete scenarios, and therefore become headlines in the dissemination of the project's results. This reflects our growing boldness in challenging dominant paradigms in the housing sector.

The ways in which we have been disseminating our research since the start of the process, including co-creation sessions and the communication of project results, have all been an entangled part of our design approach. We write this since, for example, the enactments of scenarios such as the Matching Agency should not be confused with other forms of creative expressions, such as theatre. Instead, they constitute an extension of design. Although we do not want to claim or name a new design field, we notice that there is an emergent line of design (research) projects that work with performances of various kinds. Moving forward, we suggest that performative design, building on design scenarios, enacted by the researchers themselves merit more exploration.

As researchers based in the academic system, we are expected to publish through recognised academic channels. Currently, the dissemination format that we have experimented with is not rewarded within the conventional system. We would like to raise the discussion of how design for resilience, which may in its pursuits to be agentic take alternative pathways of dissemination, can be recognised in academia. Moreover, we would like to discuss to what extent academia, entangled in the modernist project, growth logic, competition, is

equipped for complex global challenges which require resilience thinking. (See also Tham, 2014b)

Finally, we would like to continue a discussion on what resilience profoundly means for design ontologies, epistemologies and methodologies. To us, the skvader is one answer to a need for resilience research dissemination. It might come across as not strong enough since there is not one key message, a unity of form and language, a finished project, and because authorship is distributed. Yet, due to its unfinished quality and variability, it has many openings for participation and contribution. We hope to inspire confidence to open up design throughout the design and research process, and dialogue on how such openings can be manifest in design education and at design conferences.

References

Agudelo, L.P., Choi, J.H., Foth, M. and Estrada, C. (2018). Creativity and design to articulate difference in the conflicted city: collective intelligence in Bogota's grassroots organisations. *AI Soc.*, vol. 33, no. 1.147-158.

Binder, T., Brandt, E., Ehn, P. & Halse J. 2015. Democratic design experiments: between parliament and laboratory. *CoDesign*: *International Journal of CoCreation in Design and the Arts*, 11, (3-4). 152-165.

Giaccardi, E. (2005). Metadesign as an Emergent Design Culture. *Leonardo* 38 (4): 342-349.

Haraway, D. (1994). A Game of Cat's Cradle: Science Studies, Feminist Theory, Cultural Studies. *Configurations*, 2(1), 59-71.

Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene.* Durham and London: Duke University Press.

Heron, J. and Reason. P. (2001). The Practice of Co-operative Inquiry: Research with rather than on people in Reason, P & Bradbury, H (eds). *Handbook of Action Research: Participative Inquiry and Practice*. Sage Publications: London.

Holmgren, D. (2000). Permaculture Principles and Other Ideas. Hepburn, VIC: Holmgren Design Service.

Lindström, K. & Ståhl, Å. (2014). *Patchworking Publics-in-the-Making: Design, Media and Public Engagement*. Malmö University. Doctoral thesis. Dissertation series in New Media, Public Spheres, and Forms of Expressions.

Lindström, K. & Ståhl, Å. (forthcoming). "Liv-*ing* with". In K. Jungnickel (ed). *Transmissions: critical tactics for making and communicating research*. Cambridge: MIT Press.

Maturana, H. and Varela, F. J. (1987). *The Tree of Knowledge: The biological roots of human understanding*. New Science Library, Boston.

Max-Neef, M. (1991). *Human Scale Development: Conception, Application and Further Development*. London, The Apex Press.

Ostrom, E. (1999). Coping with the tragedies of the commons. *Annual Review of Political Science,* 2:493–535.

Pisano, U. (2012). Resilience and *Sustainable Development: Theory of Resilience, Systems Thinking and Adaptive Governance. ESDN Quarterly Report* N26. Vienna: European Sustainable Development Network. September 2012. Available at: www.sd network.eu/quarterly%20reports/ report%20files/pdf/2012-September Resilience_and_Sustainable_ Development.pdf (accessed June 4, 2014)

Robertson, T. & Simonsen, J. (2012). Participatory Design. An introduction. In J. Simonsen & T. Robertson (Eds.), *Routledge International Handbook of Participatory Design*. New York: Routledge.

Ståhl, Å., Tham, M., Hyltén-Cavallius, S. (2017). How can we creatively & critically engage with power relations in collaborative design research? Workshop at Nordes 2017; Design + Power, Oslo.

Suchman, L. (2007). *Human-machine Reconfigurations*. Cambridge: Cambridge University Press.

Tham, M. (2014a). Creative Resilience Thinking in Textiles and Fashion. In Jefferies, J., Clark*,* H. and Wood Conroy, D. (eds.) *The Handbook of Textile Culture*. London/New York/Sydney: Bloomsbury.

Tham, M. (2014b). Off-centre - a call for humble lessons for design. How can metadesign perspectives support education for design for sustainability?, *Proceedings of Cumulus Johannesburg, Design with the Other 90%,* pp 329-335. www.cumulusjohannesburg.co.za/files/9014/1810/ 6622/CumulusJoburgProceedings_Sep14.pdf

Tham, M. (2008). *Lucky People Forecast – A systemic futures perspective on fashion and sustainability.* Goldsmiths, University of London. Doctoral Thesis.

Walker, B. and Salt, D. (2006). *Resilience Thinking: Sustaining Ecosystems and People in a Changing World*. London: Island Press.

Wood, J. (2007). *Design for MicroUtopias: Making the Unthinkable Possible, Design for Social Responsibility*. London: Ashgate.

Yaneva. A. (2017). *Five Ways to Make Architecture Political: An Introduction to the Politics of Design Practice*. London: Bloomsbury.

Åsberg, C. and Lykke, N. (2010). Feminist technoscience studies. European *Journal of Women's Studies* 17(4) 299–305.