

Design Facilitation As Emerging Practice: Analyzing How Designers Support Multi-stakeholder Co-creation

Manuela Aguirre, The Oslo School of Architecture and Design (AHO), Norway

Natalia Agudelo, The Oslo School of Architecture and Design (AHO), Norway

Jonathan Romm, The Oslo School of Architecture and Design (AHO), Norway

Abstract

Designers increasingly find themselves facilitating large-scale design events. Yet few have explored design facilitation as an emerging practice. This article examines the design facilitation practices used in two Norwegian case studies of multi-stakeholder events. We focus on the contextually designed tools designers create to help them facilitate. We then explore some critical dimensions of design facilitation. When used as visual overlays, facilitators' explicit knowledge of these dimensions can improve their capacity to analyze, evaluate, and plan how to design and use contextual tools during design events. By plotting how designers use facilitation tools sequentially during events, we render the flow of design facilitation practice visible and accessible. We suggest that an explicit awareness of these dimensions and flows can enable designers to build more inclusive and inspiring tools, orchestrate the flow of long-term participatory processes more deliberately, and better equip participants to work with complex systemic change.

Keywords

Design facilitation

Systemic design practice

Multi-stakeholder co-creation

Participatory events

Received June 15, 2017

Accepted November 7, 2017

Emails

Manuela Aguirre

(corresponding author)

Manuela.Aguirre@aho.no

Natalia Agudelo

Natalia.Lucia.Agudelo.Alvarez@aho.no

Jonathan Romm

Jonathan.Romm@aho.no

Highlights

- A new perspective on design facilitation practice associated with real and complex cases of multi-stakeholder participatory processes.
- Contextually designed tools for facilitation play an important role in design facilitation practices.
- There are three core and three designerly dimensions of contextually designed tools for facilitation.
- We propose an analytical model to evaluate the designerly dimensions of design facilitation practice.
- The analytical model makes the flows of design facilitation explicit, which can better support the deliberate orchestration of multi-stakeholder events.

DOI

<https://doi.org/10.1016/j.sheji.2017.11.003>

Introduction

As the field of design moves into the higher order, complex domains of organizational and social transformation, designers are increasingly obtaining input from a wide variety of stakeholders.¹ When designers and diverse stakeholders take on large-scale processes of change together, design facilitation plays an important role.² Facilitation is especially vital to the emerging fields of systems and service design, as the practice enables teams to “dive into the ecologies of services, into the world of needs and experiences of users and providers . . . [and] visualize, formulate, and choreograph solutions to problems that do not necessarily exist.”³ Service design must be coupled with design approaches⁴ if designers are to cope with the intricacies of service ecologies. Facilitation has been studied in soft systems thinking⁵ and operations research,⁶ but when it comes to systemic service design, few understand the importance of design facilitation. According to Lauren Tan, design facilitation is one of the seven emerging roles for designers working for the social good.⁷ However, as Tan also points out, “in the field of design, the role of the designer as facilitator is commonly acknowledged; but the limitations of the design literature are that they do not elaborate on this role, nor explore its practices.”⁸ Some key questions arise when designers approach their role as facilitators: Where and how to start? How should we plan and execute stakeholder meetings? What kind of facilitation tools—props, activities, and content, for example—should we use? How can we sustain momentum over long-lasting design processes? What can we design, and what is emergent?

The last question merits closer scrutiny. Emergence, as a phenomenon, is present in most systems, be they biological, social, or technological. Simply put, emergence is higher-order novelty that results from interacting, lower-order parts.⁹ Consider the synchronized flocking of birds: the interaction between the birds in motion creates emergent compositions, and no single bird orchestrates the flock’s movements independently. In social systems, “large social

¹ Richard Buchanan, “Worlds in the Making: Design, Management, and the Reform of Organizational Culture,” *She Ji: The Journal of Design, Economics, and Innovation* 1, no. 1 (2015): 5–21, DOI: <https://doi.org/10.1016/j.sheji.2015.09.003>; Peter Jones and GK van Patter, “Design 1.0, 2.0, 3.0, 4.0: The Rise of Visual SenseMaking,” *NextD Journal*, special issue (March 2009): 1–12, available at http://humantific.com/wp-content/uploads/2009/03/NextD_Design_4.0.pdf.

² John Body, Nina Terrey, and Leslie Tergas, “Design Facilitation as an Emerging Design Skill: A Practical Approach,” in *DTRS8: Interpreting Design Thinking*, ed. Kees Dorst et al. (Sydney: DAB Documents, 2010), 61–70; Pamela Napier and Terri Wada, “Co-designing for Healthcare: Visual Designers as Researchers and Facilitators,” *Visible Language* 49, no. 1/2 (2015): 128–43, available at <http://visiblelanguagejournal.com/issue/161/article/961>; Lauren Tan, “Understanding the Different Roles of the Designer in Design for Social Good: A Study of Design Methodology in the DOTT 07 (Designs of the Time 2007) Projects” (PhD dissertation, University of Northumbria, 2012), available at

<http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.555582>; Daniel Christian Wahl and Seaton Baxter, “The Designer’s Role in Facilitating Sustainable Solutions,” *Design Issues* 24, no. 2 (2008): 72–83, DOI: <http://doi.org/10.1162/desi.2008.24.2.72>.

³ Birgit Mager, “From the Editor: Health and Service Design,” *Touchpoint: The Journal of Service Design* 1, no. 2 (2009): 6–7, available at <https://www.service-design-network.org/touchpoint/touchpoint-1-2-health-and-service-design/letter-from-the-editors>.

⁴ Peter H. Jones, “Systemic Design Principles for Complex Social Systems,” in *Social Systems and Design*, vol. 1, ed. Gary S. Metcalf (Japan: Springer Verlag, 2014), 91–128, DOI: https://doi.org/10.1007/978-4-431-54478-4_4.

⁵ Annemarie Groot and Marleen Maarleveld, “Demystifying Facilitation in Participatory Development,” (working paper, International Institute for Environment and Development (IIED), Gatekeeper Series, no. 89, London), <http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/6163/Demystifying.pdf>.

⁶ Ann Taket, “Facilitation: Some Contributions to Theorising the Practice of Operational Research,” *Journal of the Operational Research Society* 53, no. 2 (2002): 126–36, DOI: <https://doi.org/10.1057/sj/jors/2601209>.

⁷ Tan, “Understanding the Different Roles.”

⁸ *Ibid.*, 180.

⁹ Benyamin B. Lichtenstein, *Generative Emergence: A New Discipline of Organizational Entrepreneurial, and Social Innovation* (New York City: Oxford University Press, 2014), DOI: <https://doi.org/10.1093/acprof:oso/9780199933594.001.0001>.

networks display emergent qualities that cannot be designed or planned in the absence of large numbers of active participants.”¹⁰ When a large number of people with varying responsibilities and concerns gather, the designer/facilitator becomes one more flocking bird. However, designers fly in complex patterns—they act as both participants and facilitators. In the latter role, they must foster participant interactions that generate emergent material. Such emergence is “brought into existence by the way a whole [event] is bound together by substance and order through relationships and connections.”¹¹ The focus of this study is design practice wherein the designer performs as a participant-facilitator. In this context, how can designers facilitate participatory, multi-stakeholder sessions in ways that foster co-creative emergence among fellow participants? In this article, we will explore the practice of design facilitation through two research-by-design case studies, and propose an analytical model to assess the facilitation tools designers develop across six dimensions.

Methods

Research by Design

Research by design is the foundation of our methodological approach. According to Birger Sevaldson, research by design is “a special research mode where the explorative, generative and innovative aspects of design are engaged and aligned in a systematic research inquiry.”¹² An inquiry is reflexive—it takes a first-person viewpoint—and is usually supported by a blend of methods for systematic data collection, synthesis, and analysis that builds new and robust knowledge.¹³ We three co-authors all acted as co-designers, co-facilitators, and co-participants, and the research by design approach allowed us to “access the deeper layers of interpretation that would be inaccessible to distant observation.”¹⁴ The study presented here examines two research by design case studies, as it would be nearly impossible to investigate the phenomena associated with design facilitation in practice independent of a context.¹⁵ Also, case studies are appropriate when blending diverse methods during study of complex and contemporary phenomena.¹⁶ The two cases helped us to cover the contextual conditions of facilitation in practice, and enabled us to understand how design facilitators orchestrate participatory events more generally.¹⁷

The first case illustrates design facilitation practices among participants of a Norwegian network of hospitals and academic, public, and private actors that make up the Centre for Connected Care (C3). C3 is a center for innovation founded by the Research Council of Norway. C3’s primary mission is to adapt and diffuse patient-centric innovations in the

¹⁰ Jones, “Systemic Design Principles,” 117.

¹¹ Harold G. Nelson and Erik Stolterman, *The Design Way: Intentional Change in an Unpredictable World*, 2nd ed. (Cambridge, MA: MIT Press, 2014), 97.

¹² Birger Sevaldson, “Discussions & Movements in Design Research,” *Form Akademisk—Research Journal of Design and Design Education* 3, no. 1 (2010): 11, DOI: <https://doi.org/10.7577/formakademisk.137>.

¹³ Andrew Morrison and Birger Sevaldson, “‘Getting Going’—Research by Design,” *Form Akademisk—Research Journal of Design and Design Education* 3, no. 1 (2010): 1–7, DOI: <https://doi.org/10.7577/formakademisk.136>.

¹⁴ Sevaldson, “Discussions & Movements in Design Research,” 16.

¹⁵ Pamela Baxter and Susan Jack, “Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers,” *The Qualitative Report* 13, no. 4 (2008): 544–59, available at http://nsuworks.nova.edu/tqr/vol13/iss4/2/?utm_source=nsuworks.nova.edu%2Ftqr.

¹⁶ Robert K. Yin, *Case Study Research: Design and Methods*, 5th ed. (Thousand Oaks: Sage Publications, 2014).

¹⁷ Baxter and Jack, “Qualitative Case Study Methodology,” 544–59.

Norwegian healthcare system. In total, this study involved individuals from seventeen organizations who engaged in four events over a ten-month period.

The second case involves design facilitation practices among the participants of a design-driven migration activist movement supported by the Norwegian Parliament. The purpose was to explore potential changes to welfare programs and opportunities for asylum seekers to contribute meaningfully to Norwegian society. The activist network, called Guts to Change, joined participants from the public and private sectors together with asylum seekers. In total, this practice study included two hundred volunteers who took part in four events over six months.

We chose these two cases for the advanced systemic design practices they followed. Even though they are different, both involved designers facilitating large-scale events for multiple stakeholders. To understand the transferable aspects of design facilitation practice, we studied two case studies as opposed to focusing solely on one.

Table 1. Two cases of socially-complex design facilitation practice.

	Case 1: Centre for Connected Care (C3)	Case 2: Guts to Change
Network type	Formal network for healthcare innovation	Informal network for social self-mobilization
Partners	17 institutions (public, private, and academic, bounded to healthcare service design and innovation)	200 individuals (mixed sectors, unbounded boundaries)
Duration	10 months	6 months
Purpose	Diffuse; adopt patient-centric innovations	Reframe a “crisis” into an opportunity for welfare transformation
Event Scope	4 participatory events (January–September 2016)	4 participatory events (November 2015–May 2016)

Case 1: Imagining the Patient of the Future: A Formal Network for Healthcare Innovation

Our study focuses on the design facilitation practices employed during four large-scale events organized by researchers, teachers, and master’s students from the Oslo School of Architecture and Design (AHO). The participants were mainly from Norway’s Centre for Connected Care (C3), but the group also included healthcare professionals and patient representatives. We invited the participants to exchange viewpoints, discuss trends, identify future drivers, review scenarios, experience future healthcare services, and evaluate how these shared future visions could affect the current work at C3. The four C3 events this study examines are 1) Future drivers, in January 2016; 2) Scenarios, in February 2016; 3) Experimentarium, in April 2016, and 4) Closure, in September 2016.

These four events took place to facilitate early-stage formation of the C3 network as a research and development center. No formal organizational structures were in place, nor partnerships and representatives yet settled when planning for the events began in the fall of 2015. Participants were unfamiliar with each other. We developed the events successively through iterative discussions with the leadership at the center, academic staff, and students. We used generic facilitation tools—rolls of paper, sticky notes, whiteboards, and the like—to plan events. We carefully designed each event to offer space for inspiration, social interaction, and exchange among the participants. We created a detailed facilitation plan for each event outlining the schedule and responsibilities of fellow facilitators. We also designed some

tailor-made tools to break the ice among the participants, create a shared identity, and support the overall goal of creating a shared vision for patient-centric future projects.

Case 2: An Informal Network for Social Self-Mobilization Identifying Collective Opportunities

The second case studied the design facilitation practices deployed across four large-scale events organized by design volunteers from a collective called Guts to Change. Participants at these events were mostly professionals addressing migration from the public, private, and academic sectors, together with asylum seekers and members of Parliament. We invited them to detect opportunity areas that they had identified after collaborating with multiple actors and then transform these opportunities into collective actions. The four Guts to Change events this study examines are 1) Design-driven volunteer events, November–December 2015; 2) Collective opportunities: The Parliament event, January 2016; 3) a Co-design event with asylum seekers, May 2016; and 4) Co-creation of possibilities: the Follow-up Parliament event, May 2016.

As this was an emergent, self-organizing network whose reputation was being spread mainly through word of mouth, we convened in impromptu meeting spaces such as an unoccupied Kindergarten during weekend hours. Under these conditions, we used readymade tools—big paper rolls, sticky notes, and marker pens—to facilitate the conversations and structure the output of the collective dialogue. When we were planning large-scale events, we integrated the contextual knowledge we had into the activities. We always knew who was participating, had details about the physical space, and—ideally—had visited the space before the event. We paid particular attention to the details—everything from the way we grouped the participants to the smooth transitions we orchestrated between event phases. For each of these considerations, contextual tools were developed by several individuals—the participatory design facilitators—to combine and coordinate multiple ideas and expectations.

Tools as Units of Analysis

When analyzing the design facilitation practices employed in both case studies, our focus was on what Kimbell¹⁸ describes as design-as-practice, which she grounds on a practice theory perspective.¹⁹ Design-as-practice relates what designers think, say, and do by looking holistically at their bodies, minds, routines, and embodied and situated patterns of behavior. According to Kimbell,²⁰ artifacts play an essential role in the study of how designers work. As we were all involved in both case studies—we took turns as co-facilitators, co-designers, and co-participants—we were mainly preoccupied with what Kimbell²¹ calls designs-in-practice, and thus the organic enactment of design while designing.

To address the complexity that designing-in-practice entails, we limited the unit of analysis to the material practices of design, and, more specifically, to the tangible tools designers create and use dynamically while facilitating. We adopted a broad understanding of

¹⁸ Lucy Kimbell, “Design Practices in Design Thinking,” paper presented at the European Academy of Management, Liverpool, UK, 2009: 1–24, available at <http://www.lucykimbell.com/stuff/Practicedesignthinking.pdf>

¹⁹ Andreas Reckwitz, “Toward a Theory of Social Practices: A Development in Culturalist Theorizing,” *European Journal of Social Theory* 5, no. 2 (2002): 243–63, DOI: <https://doi.org/10.1177/1368431022225432>.

²⁰ Kimbell, “Design Practices in Design Thinking,” 1–7.

²¹ Ibid.

what a tool could be, based on Elizabeth Sanders, Eva Brandt, and Thomas Binder,²² who define tools as “material components used in PD [participatory design] activities.” By this definition, components are any kind of physical element—the physical space, props, visual language, narrative, and tone of voice, for example. At their core, tools for design facilitation are aesthetic experiences intentionally crafted by design facilitators that can be seen, smelled, touched, heard, or tasted by participants.

We collected, organized and analyzed the data we gathered using six key methods: documentation, participatory observation, qualitative interviews, photographic storyboarding, data visualization, and evaluation criteria. Figure 1 shows an example combining photographic storyboarding and data visualization.

- **Documentation:** sixty core photos and twenty-six contextual videos shot during the events
- **Participatory observation:** Each of the authors was either a co-designer, co-facilitator, or co-participant during the eight large-scale events studied. We coordinated and contacted the stakeholders for each event, which included more than one hundred and fifty individuals in each case study. We also co-designed the general intent of each event, including relevant activities, tools, and facilitation guidelines for fellow facilitators.
- **Qualitative interviews:** We interviewed twenty-six design facilitators about their roles at the events.
- **Photographic storyboarding:** We sequenced photographs of the sixty facilitation tools we used during the events chronologically. Then we reflected upon each tool’s design intent, how it was used, and the effect it had had on the participants.
- **Data visualization:** Once we had defined several key design facilitation dimensions—after several rounds of iterations—we developed a model to visually overlap these three dimensions over each tool for facilitation.
- **Evaluation criteria:** We developed a set of criteria to evaluate the degree—high, medium, low, or no—to which a tool satisfies the definition of each dimension.



Figure 1. Analyzing both cases using a blend of photographic storyboarding and data visualization methods. These methods helped overlay key design facilitation dimensions by sequentially highlighting individual tools for facilitation in their context of use. Copyright © 2017 by TBC.

²² Elizabeth B.-N. Sanders, Eva Brandt, and Thomas Binder, “A Framework for Organizing the Tools and Techniques of Participatory Design,” in *PDC '10: Proceedings of the 11th Biennial Participatory Design Conference* (New York: ACM, 2010), 196, DOI: <https://doi.org/10.1145/1900441.1900476>.

We used these methods to cluster the tools by context and by the effect they had on participants. From these clusters, design facilitation patterns began to emerge. After sharing our reflections, we created a preliminary set of design facilitation dimensions. We then iterated upon these in relation to the photographic storyboards—our conversation with the materials of the situation.²³ We further validated the refined dimensions during two workshops with designers and design researchers. Furthermore, the photographic storyboard and the evaluation criteria allowed us to overlap the intensity of the design facilitation dimensions of each individual tool sequentially over time.

Analysis

Contextually Designed Facilitation Tools

We identified three types of facilitation tools: *readymade*, *templated*, and *contextually designed*. Readymade facilitation tools are material components used in participatory design activities that lack specificity and are typically off-the-shelf products—sticky notes, big paper rolls, permanent markers, whiteboards, and flipcharts. Design facilitators mainly use these tools either to plan and analyze events, or spontaneously during events. Templated facilitation tools are also material components used in participatory design activities. Their predefined formats enable users to organize information in useful ways—business model canvases, service blueprints, or SWOT analyses, for example. Contextually designed facilitation tools are uniquely tailor-made activities—they are ultimate particulars²⁴ that pay careful attention to the holistic orchestration of participants in time and space. The designers mainly made use of contextually designed facilitation tools in the large-scale events we studied. We have chosen to make contextually designed tools our focus in this article.

Core and Designerly Facilitation Tools, and Their Characteristic Dimensions

Core facilitation entails explicitly considering the participants attending the event and any operational and functional logistics. Without core facilitation tools in place—things like scheduling, site logistics, lists of invitees, and so on—designerly facilitation can rarely occur. For example, it would make no sense to discuss ways to enable participants to share diverse real-life stories during an event without first defining a clear intent for that event, allocating a suitable space, and fixing the number and type of participants. Once the facilitation core is secured, *designerly facilitation* tools can create contextual experiences, make use of the diverse human perspectives the participants bring along with them, and elicit participants' creative potential. Core facilitation tools (PIF) have three dimensions: participatory (P), intentional (I), and functional (F). Designerly²⁵ facilitation tools (HEC) have three dimensions: human-perspective (H), experiential (E), and creative (C) (Figure 2). In this study, we focus primarily on designerly facilitation tools, as these were the kind that the designer facilitators used in the cases we studied.

²³ Donald A. Schön, "Designing as Reflective Conversation with the Materials of a Design Situation," *Knowledge-Based Systems* 5, no. 1 (1992): 3–14, DOI: [https://doi.org/10.1016/0950-7051\(92\)90020-G](https://doi.org/10.1016/0950-7051(92)90020-G).

²⁴ Nelson and Stolterman, *The Design Way*.

²⁵ We borrowed the term "designerly" from Nigel Cross, "Designerly Ways of Knowing," *Design Studies* 3, no. 4 (1982): 221–27, DOI: [https://doi.org/10.1016/0142-694X\(82\)90040-0](https://doi.org/10.1016/0142-694X(82)90040-0).

The H dimension of designerly facilitation is concerned with exposing and valuing diverse human perspectives. Although they may seem similar, it differs from the P (participatory) dimension in PIF as it does not deal with the politics of whom to invite—it empathizes with the diversity of existing participants. The H dimension has its roots in human dignity as the pillar of human-centered design (HCD), and facilitators mediate human perspectives during design-related activities. To emphasize its systemic-relational nature, we refer to H as human-perspective dimension rather than human-centered.

The E dimension is about creating and using immersive, extraordinary, and multi-sensorial interactions that participants can see, feel, hear, taste, and smell. Such interactions may involve facilitation tools that deploy emotional experiences, humor, playfulness, symbols, metaphors, and surprises. These aesthetic experiences are culturally and socially sensitive, and designers are professionally trained to develop them.

Finally, the C dimension represents activities intended to inspire the kinds of abductive and lateral thinking needed to create to novel design ideas and materials.

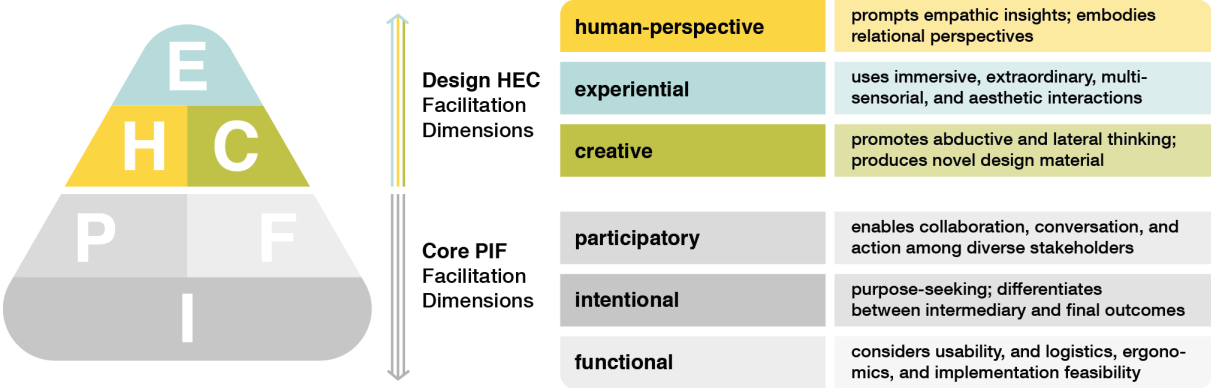


Figure 1. The six dimensions of design facilitation tools. Left: the hierarchical dependency between the core PIF dimensions and the designerly HEC dimensions. Right: descriptions of the dimensions as they relate to facilitation. HEC dimensions are represented in color. Copyright ©TBC.

The HEC Analytical Model

Practicing a designerly approach towards facilitation means crafting immersive, multi-sensorial experiences that bring out the creative potential of diverse human perspectives. We developed an analytical model (Figure 3, right) that visualizes the degree to which a designerly facilitation tool covers each HEC dimension.

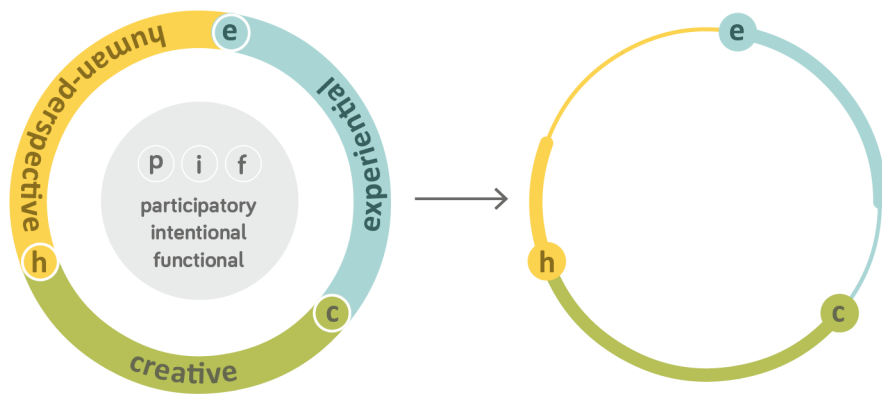


Figure 2. Left: The core PIF and designerly HEC dimensions in relation to each other. Right: The HEC analytical model visualizing the extent to which HEC dimensions are represented in an activity. In the model shown, the tool is low in H qualities, medium in E, and high in C. Copyright ©TBC.

Degrees of HEC Dimension Coverage

Is the facilitation high in human-perspective-building qualities? Is it low in experiential attributes? Does it elicit a medium degree of creativity—or no creativity?

Because contextually designed facilitation tools can cover the HEC dimensions to varying degrees, to further define their qualities we developed a set of criteria designers can use to classify and describe the degree—high, medium, low, or no—to which the tool covers or elicits the qualities we associate with that dimension. Figure 4 details these criteria.

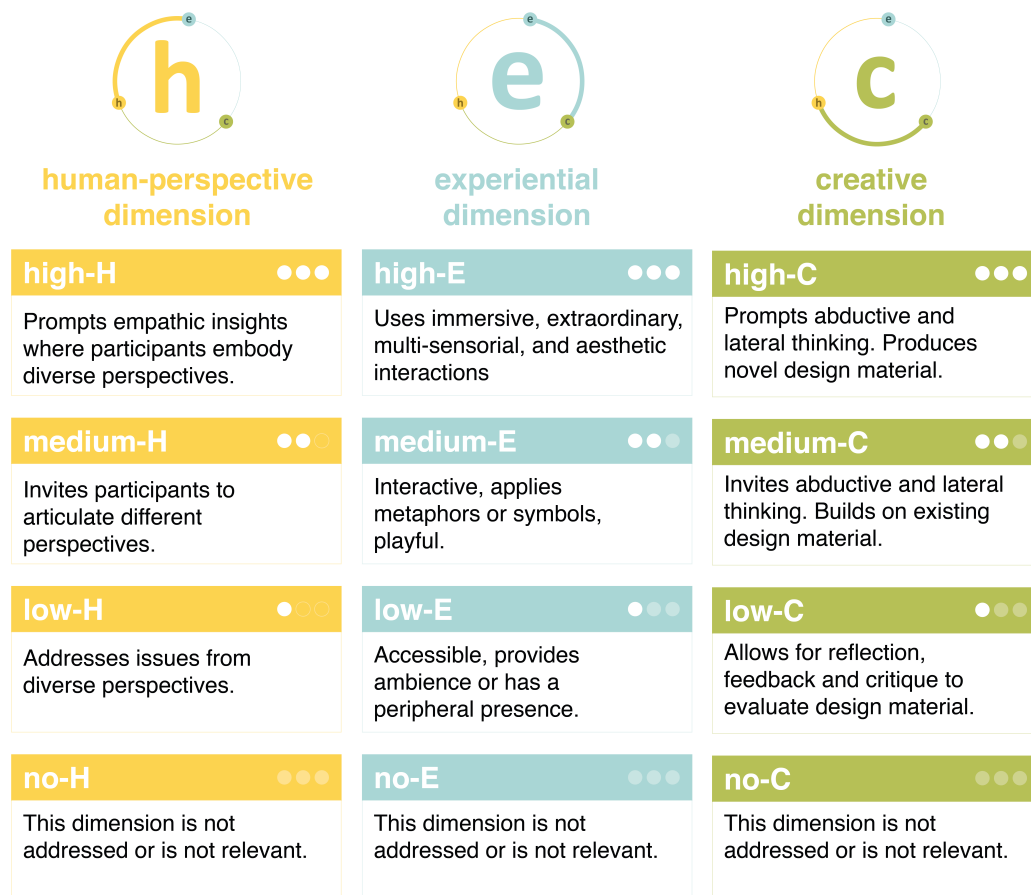


Figure 3. Criteria to evaluate the degree to which a dimension is exploited by HEC facilitation tools. Copyright ©TBC.

To illustrate, we have selected two HEC facilitation tools from each case study and applied the criteria to assess them (Figure 5). All four of these tools were contextually designed.²⁸

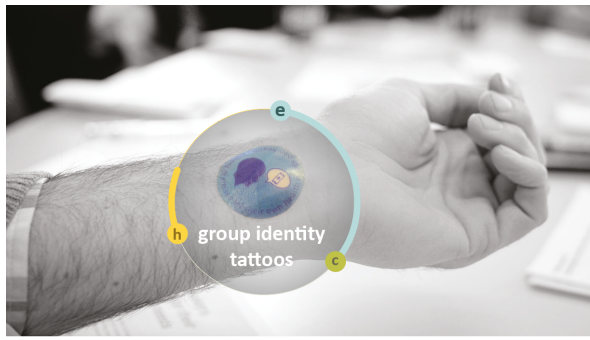
Group identity tattoos were rub-on tattoos that each participant in a group received. This highly experiential tool facilitated identity formation among participants that were new to each other. This tool ranked low in human-perspective as it clustered participants into pre-defined themes that did not necessarily represent the diversity of the group. The creative dimension was not present, as this tool did not prompt participants to generate ideas nor any novel design material.

The *reflection room* was also a highly experiential tool that facilitated slow thinking and informal reflection. The reflection room immersed participants in an extraordinary, candlelit sensorial space dotted with comfortable beanbags for participants to nap on. The facilitator, dressed in a beautiful Japanese robe, invited participants to relax and close their eyes in a soft voice. As a facilitation tool, the reflective room was low in human-perspective qualities, as it did not prompt empathic insights. This tool also demanded little in the way of creativity, despite the calm yet structured post-relaxation reflection session (prompted by the facilitator) that generated rich, respectful dialogue.

²⁸ The *group identity tattoos* and *reflection room* tools were created for the Centre for Connected Care case, and the *superpowers* and *journey map* tools were created for the Guts to Change case.

The *superpower tool* helped participants get to know each other in a playful, informal way. Instead of their profession, participants were invited to invent a secret superpower and write it on their nametags. This tool represents the human-perspective dimension to a medium degree, as it encouraged participants to display their diversity and be empathic towards others. The superpower tool was low in experiential qualities—it used humor, playfulness, and the superpower metaphor to invite discussion about the participant’s intrinsic motivations and under-utilized skills. It was also low in creativity, as this tool did little to facilitate creative insights that led to new design material.

The *journey map* tool asked participants to think about an asylum seeker’s journey from multiple perspectives. This designerly facilitation tool represented both the human-perspective and creative dimensions to a medium extent. It asked participants to look at a very complex situation, over time, from the perspective of the person most affected by it—the asylum seeker. It also allowed participants to synthesize opportunity areas grounded in a more holistic understanding of the situation at hand. The journey map tool was not very experiential. We asked participants to map the journey on a large canvas that covered the whole table, and invited them to write down their insights in a horizontal, non-hierarchical way.



Group identity tattoos (C3)

We designed and produced a set of water tattoos for each C3 theme group. Each member was asked to wear the tattoo as a symbol of group membership and the identity associated with each theme.

Human-perspect. ●●●
The different tattoos bring diverse identities and perspectives to life.

Experiential ●●●
Immersive use of the tattoo metaphor - rooted in gang identity - in a novel context.

Creative ●●●
This dimension is not addressed, however new groups were formed.



Reflection room (C3)

The reflection room was designed for slow thinking. This was prompted by the use of candles, big pillows to sit on the floor, and the soft, slowly-paced voice of the facilitator inviting participants to close their eyes. Then everybody discussed C3 issues in a relaxed and informal way.

Human-perspect. ●●●
Different perspectives are elicited in real-time, in a reflective way.

Experiential ●●●
Highly immersive, extraordinary, sensorial, and aesthetic.

Creative ●●●
Creates the headspace that may lead to abductive and lateral thinking.



Superpowers (GtC)

The superpowers were ice-breakers that replaced name-tags. As participants joined the workshop, they had to individually reflect and name their superpower, what motivates them as human beings. This shifted the conversation away from formal roles as stakeholders and towards personal competencies and aspirations.

Human-perspect. ●●●
Brings diverse human sensibilities forward equally.

Experiential ●●●
An immersive and playful way to get to know new people as 'heroes'.

Creative ●●●
Invites abductive thinking in regards to personal abilities and potentials.



Journey map (GtC)

The journey map allowed participants to individually reflect and collectively map an asylum seeker's journey through various systems. This was an opportunity to dive into the subject matter in an empathetic way, by looking at the situation from the perspective of the person who is most affected.

Human-perspect. ●●●
The 'user' perspective invites empathic insights from multiple points of view.

Experiential ●●●
The large canvas allows multiple stakeholders to interact altogether.

Creative ●●●
Forges connections and allows to synthesize opportunity areas.

Figure 4. Four contextually designed facilitation tools that exemplify how the HEC evaluation criteria can be applied in practice. Copyright ©TBC.

We have only described and analyzed the human, experiential, and creative dimensions of isolated tools up to this point. However, because facilitators use different tools during an event, we wanted to explore the flows of these dimensions—via the sequences of activities facilitated by the tools—during the various events we studied. Next, we will review a conceptual understanding of HEC dimensional flows.

The Flow of Design Facilitation

Plotting the human-perspective, experiential, and creative dimensions of an event's contextually designed facilitation tools reveal the flow of design facilitation practice (Figure 6). Looking back on a particular event from the Guts to Change case, we identified an experiential rise at the beginning and end of the event, and two creative peaks. The initial intent was that the output from the first creative peak would serve as input for the second creative session. In reality, the timing did not allow for both tasks to be carried out, and proposing two creative activities in quick succession proved to be cognitively overwhelming. Most of the event facilitation we analyzed had a similar flow—they were high in experiential qualities at their start and finish. At the beginning of these events, experiential facilitation tools may have been used to create momentum among participants. And when events were close to finishing, experiential tools were likely used to support the participants' collective memory and shared sense of accomplishment. We believe that plotting the dimensional flows of an event can provide facilitators with a useful, informative perspective on their planning. Visualizing the flow of design practice in terms of the three core and three designerly dimensions can help facilitators adapt, improve, or streamline the overall flow of an event in ways that foster emergent material.

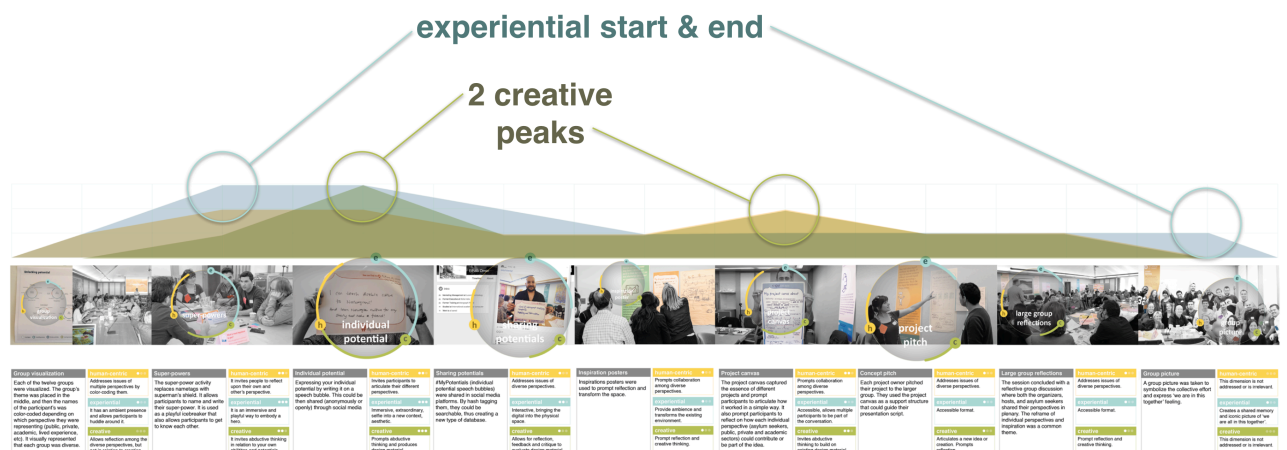


Figure 5. A design facilitation flow can become visible by plotting the HEC designerly dimensions of each contextually designed facilitation tool sequentially. In this particular event, the design facilitation flow shows an experiential start and end and two creative peaks. Copyright © TBC

Discussion

The Emergent Practice of Facilitation

Let us return now to our central research question. From a service systems design perspective, how can designers facilitate participatory, multi-stakeholder sessions that support co-creative emergence among fellow participants? Design event facilitators act primarily as participatory orchestrators. They orchestrate diverse participants (P), intents (I), functions (F), human-perspectives (H), and experiences (E) in ways that they expect will stimulate co-creative emergence (C). They do this by designing specific facilitation tools. In terms of our earlier bird flocking metaphor, design facilitators are not just flying alongside fellow participants. Before they join the flock, they carefully anticipate the detailed patterns of the flock's movements during the upcoming event. They also materialize their intent through

contextually designed facilitation tools. But during the event, the earlier intentions implicit in their pre-crafted facilitation tools meet the different interpretations of their fellow participants in real-time. This dynamic allows for the kind of emergent co-creation that characterizes systemic service design facilitation practice. Analyzing dimensional flows before or after events may offers designers a gateway into a deeper understanding of the emergent practice of facilitation, and, possibly, into emergence itself

Core and Designerly Dimensions: Planning and Evaluation

Revealing how the core and designerly dimensions interrelate and play out over time during events may allow design facilitators to more effectively catalyze emergent material from interacting participants.²⁹ After sharing and refining the qualities of these dimensions with senior designers from two notable Norwegian design agencies,³⁰ one team used the PIF/HEC dimensions to inform a planning session. Here is how one team member described their use of the dimensions:

“[We used them] to rethink how to make [the event] slightly more experiential, and sense-check that ‘low to medium creativity’ was in fact what we wanted to achieve. However, we spent most of the sixty minutes tweaking the functional setup, and ensuring we had a realistic plan with a small number of rewarding tasks.”³¹

These insights suggest that design facilitators can become better at orchestrating design events if they keep the core and designerly facilitation dimensions in mind before an event takes place. However, it is important to note that plotting HEC dimensions alone may mask other important facilitation considerations. The main contribution of our approach is that we have made the dimensions of design facilitation practice explicit, and provided an evaluative tool that can help design facilitators orchestrate events more deliberately.

Future Research

When examining more closely at the relationship between individual contextually designed facilitation tools and the flow of an entire design facilitation event, we realized that there could be similar degrees of designerly craft involved both at the micro-tool level and at the macro-event level. To understand the interdependencies between these levels, we have conceptualized a five-level typology (Figure 7). This typology relates tools (level 1), activities (level 2), event phase (level 3), event (level 4), and series of events (level 5). *Tools* are material components used in participatory design activities. *Activities* are individual and collective exercises that support an event phase. *Event phase* is the overarching theme of a series of activities. An *event* is an entire participatory session. A *series of events* is the sequence of multiple events over time.

²⁹ Jones, “Systemic Design Principles,” 91–128.

³⁰ Livework Studio and Designit (Norway).

³¹ This quotation was taken from the feedback given by Anders Kjeseth-Valdersnes, who works at Livework Studio, Oslo.

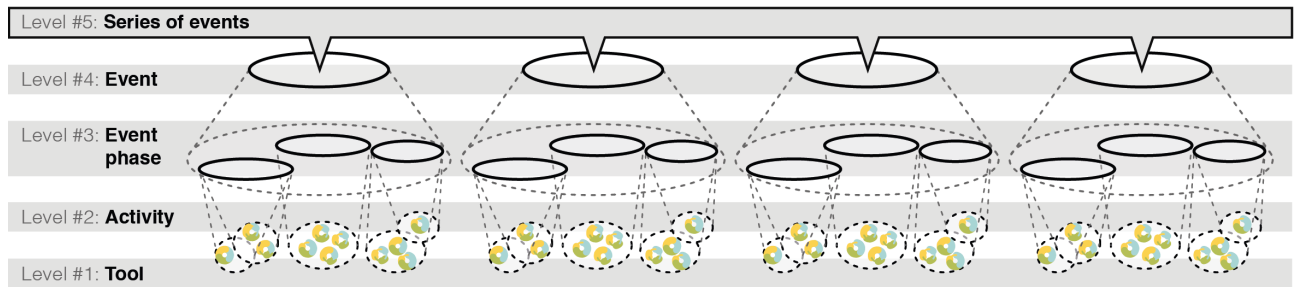


Figure 6. The five-level typology that relates tool (level 1), activity (level 2), event phase (level 3), event (level 4), and series of events (level 5).

The typology itself requires further detail; more research is needed to understand better how the different levels of the typology interrelate, for example. We believe that more research is also necessary to understand better the spaces “in-between” events in a series—contextually designed facilitation tools could potentially be used to invite participants and sustain momentum among participants between events, for example—and across large-scale change processes more generally.

We argue that making these six key dimensions explicit will advance designers’ understanding of design facilitation practice. We also submit that making use of this awareness can contribute positively to the planning and orchestration of complex events.

Conclusion

Even though service designers are increasingly acting as design facilitators, design facilitation practices remain largely unexamined. This practice-based study focused on systemic service design facilitation and identified six key dimensions to event facilitation. These dimensions offer a new, more explicit perspective on design facilitation that captures the importance of contextually designed facilitation tools. Contextually designed tools are different from generic readymade and templated tools in that they are instances of the designer’s unique approach to facilitating emergence. After examining our experiences of complex participatory event facilitation, we proposed a new analytical model that makes design facilitation visible and accessible in a way that it has not been before. We indicate that visualizing event facilitation dimensional flows over time can enable designers to orchestrate complex events and series of events more efficiently, and plan for co-creative emergence among multiple stakeholders more deliberately. These findings position facilitation as a critical part of designers’ overall ability to address participatory and systemic processes of change.

Acknowledgements

Funding for this research was provided by the Centre for Design Research of the Oslo School of Architecture and Design (AHO). Our gratitude (in alphabetical order) goes to Simon Clatworthy, Kaja Misvær Kistorp, Andrew Morrison, Kjetil Nordby, Ove Kenneth Nodland, Anders Kjeseth-Valdersnes, Birger Sevaldson, Erik Stolterman, and Josina Vink. We also want to especially acknowledge all the contributors to the case studies, in particular the Guts to Change volunteers/change makers and the Centre for Connected Care participants. Also, we appreciate the support from the Norwegian Parliament and the students from AHO’s Service Design MA Studio (Spring 2016). We would also like to thank Niklas Schmidt, Alex

Asensi, and Liz LeBlanc for photographing and filming the events. Finally, we thank the anonymous reviewers for their careful reading of our manuscript and their insightful suggestions.