Considerations for (Teaching) Facilitator Roles for Movement-Based Design

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ABSTRACT

Given the emergence of many new movement-based design methods, our work explores the problem of *facilitating* the activities and sessions that are part of these methods. We look at literature as well as our own experiences with facilitating movement-based design sessions, draw lessons regarding the various important facets of this facilitation, and present first thoughts regarding how to make competencies in that type of facilitation transferable in teaching.

CCS CONCEPTS

• **Human-centered computing → HCI design and evaluation methods**; **Interaction design process and methods**.

KEYWORDS

Facilitation, Movement-based design, Teaching design

1 INTRODUCTION

Research in the CHI PLAY community includes a very active strand on movement centric and embodied playful applications, such as exergaming [8], active immersive VR applications [35], sports and sportful applications [9, 23], rehabilitation [24], dance and circus

[15], and many others; movement is seen as a vital material for games and play (cf. [6]). Designing and building this type of application requires new design concepts, guidelines, and lenses [18, 22, 27]. For example, Mueller and Young [18] describe how sportsHCI can benefit from designing for facets such as humility, the sublime, or for sacrifice. In addition, though, this type of design work requires different design *activities*. In design for movement (to facilitate movement) and design of movement (movement improvisation), designers are recommended to design with or through movement (the body as a creative resource), that is, use movement as a medium or instrument in the design activity and build awareness of the silent, fleeting and immediate movement experience [5, 14, 26]. Current activities for movement-based design (MBD) include body storming, embodied sketching, experience prototyping, and others [e.g., 3, 13, 19, 33]. The role of body movement as a source of creativity has been explored [14, 26, 34], pointing at methods and outcomes as well as the importance of facilitating the right mindset and way of acting through activities and environmental stimuli. In particular, play can open up creative potential "silently hidden" in the body; Börghall [2] describes that the courage to play and be playful is the entrance to being creative.

To make the growing collection of methods and approaches accessible to a broader audience, the Erasmus+ project "Method Cards for Movement-based Interaction Design" (MeCaMInD [1]) aims to gather them into a comprehensive and accessible method card toolbox. This project, therefore, involves making inventories of existing methods, categorizing and grouping methods based on crucial distinctive features [1], and micro-packaging them into accessible method cards and support for navigating the collection. Furthermore, a primary aim is to explore the *teaching* with / of these methods in various curricula ranging from sports and movement to the engineering domain – to deliver a new generation of designers who can tap into the playful, play-oriented, embodied, movement-based perspectives to design.

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[1]https://www.mecamind.eu

1.1 Aims and Contribution

This paper addresses one specific challenge in the context of MeCa-MInD: in our experience, movement-centric design activities place particular demands on the facilitator who guides the activities towards fruitful outcomes, in addition to and distinct from facilitation approaches for the typically somewhat more cognitive, sticky-note-whiteboard-and-tangible-prototype types of design methods. Plus, we see a challenge regarding how to *teach* facilitation – because the industry not only needs designers who can participate in these methods, but also experts who can take the lead in these activities: beyond mastery of the method into the facilitation and guidance of others in this design work. In this paper we therefore aim to explore the facilitator roles and their facets for movement-based design. We embed our discussions in literature and the context of our own experiences, leading to initial steps for a framework describing facilitation for MBD specifically, recommendations for facilitation of movement-based design activities, and teaching.

2 BACKGROUND

According to Mosely et al. [17], the primary role of a (design) facilitator is to make space for dialogue and assist group members in collaborating, so they can approach the design themes and challenges in new ways and generate new ideas. According to Hunter et al. [10], the facilitation of groups originates from co-operative movements that aim to ensure group members can fully participate in decisions making if they demand so. They align this with a democratic model rather than a co-operative model. The democratic model requires co-operation and participation in majority decision-making, and the democratic model state it as the best way to make decisions. The authors elaborate on the continuum of decision making, with autocracy (single person decision making) on one side, democracy in the middle, and they set 'co-operacy' (new word) on the other. The authors state that democracy and autocracy are both practical and have advantages. Although the authors argue towards co-operacy, they believe it is used negligible because of culture and less societal trained skills. In their view, the facilitator role is comparable to a leader or chair of a committee for which they have been elected, and a facilitator is skilled in guiding a group in co-operative processes, including shared decision-making to fulfill its purpose in the best manner — focusing on managing design activities, unlike managing the content. Hunter et al. [10] describe the shift from dependence (autocracy) through independence (democracy) to interdependence (co-operacy).

Facilitation as a practice is a fundamental methodological challenge in Participatory Design (PD) and Human Computer Interaction (HCI) discourse. Dahl and Sharma [4] argue that participatory design facilitators significantly impact participatory activities and outcomes and propose six facets of the facilitator's role: 1) Trust builder, 2) enabler, 3) inquirer, 4) direction setter, 5) value provider, and 6) users' advocate. Each role was associated with specific responsibilities and strategies. In addition, facilitation requires 'core design competencies' [16], particularly design process knowledge and understanding. Mosely et al. [16] identify facilitation as the process and act of drawing on and applying design processes and approaches to enable dialogue and ideas to emerge within participatory design contexts in developing novel solutions to complex problems.

In this, the facilitator's approach and characteristics play a crucial role in shaping a project's dynamics [16, 29]. Starostka et al. [29] showed that Design Thinking facilitation is practiced in various ways, recognizing a continuum between a Methods-focused approach on one end and co-facilitation on the other. They describe this in four facets: 1) understanding Design Thinking from a tool perspective vs. a mindset perspective 2) focusing on solutions vs. problems 3) having a planned vs. emergent process 4) individual vs. shared leadership. They highlight that each parameter is a continuum and that the facilitator's approach can change, either voluntarily (e.g., adjusting to the group's development) or involuntarily (e.g., by group pressure or implicit habits and preferences of the facilitator).

Specifically for movement-based design methods, additional considerations come in. Svanæs and Barkhuus [30] propose theoretical perspectives such as Gibson's ecological theory of perception, Dewey's aesthetics, somatics, and introspection, as a takeoff point for the facilitator's instruction and guiding movement-based methods. They further propose that the facilitator be aware of and make explicit the theoretical and philosophical stances of facilitating the movement-based design activities.

An essential role of a facilitator in MBD is to create a safe and welcoming space where the design activities can take place. People may feel exposed and embarrassed performing movement activities. As such, the initiation of icebreakers and team building are essential elements of a well-performed facilitator role. Such activities often strengthen the playful mindset and creative body being. Thus, a playful approach will be part of unfolding movement-based creative resources of the participating bodies. According to O'Shaughnessy and Ward [20], Lee et al. [12], and Svanæs and Barkhuus [30], training activities for participants such as improvisation and somaesthetic reflection may create a better starting point for participation in the design activities and thereby a more favorable outcome of the design activities.

This is not only a matter of getting rid of possible awkwardness and sense of unsafety (due to the unknown), it is literally about developing skills to be more sensitive to what the body tells and how to communicate this to oneself and others. That may be particularly important if the participants have little or no movement experience. Thus, an additional primary role of a facilitator of MBD methods is to motivate and engage participants in play and movement and encourage the individual to incorporate their own bodily experiences, feelings, and senses as a source of knowledge, inspiration, and testing of concepts and prototypes (see e.g., [13, 21].

"Show don't tell!" is an approach proposed by Márquez Segura et al. [19]. On the other side, Lee et al. [12] describe how it is also essential to document and share the embodied and subjective experiences that arise from doing MBD activities; they describe somaesthetic reflection using verbalization as a method. This "doing" and "reflecting" are modes that the facilitator and participants need to take and change over time. Höök et al. [11] describe how the tacit knowledge from our bodily experiences can be very challenging to verbalize.

In summary, we see the participants' embodiment contributing to movement-based design, resting on four pillars of facilitation of a safe and welcoming design space among participants, embodied training of carefully selected techniques and methods, "show don't

tell" embodied ideas, and verbalization of embodied experiences (see Figure 1).
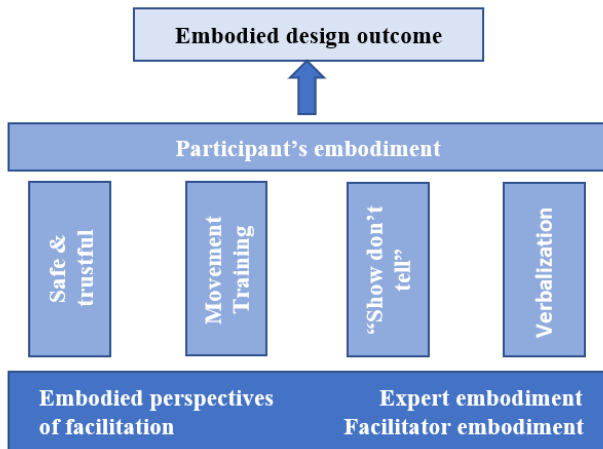

Figure 1: How a facilitator can support participants in MBD activities according to summarized literature

The importance of the facilitator is thus clearly seen, but how should this work specifically? Quoting Lauren Tan, "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." [31, p180]. This, is the focus of the current paper – to explore how these general insights translate to more concrete advice on the facilitation of MBD activities.

3 APPROACH

To develop our insights regarding the facilitation of MBD activities, we first applied for an ethics review to conduct research in our teaching sessions on which our analysis is based (request #RP2022-50). We then started trialing MBD methods in several design sessions including empathizing, generating, and testing phases, with various target groups. Briefly summarized, these included the following sessions: three consecutive sessions with students Interaction Technology ($n \approx 20$ on average), three parallel design sessions with industry people and design professionals) ($n \approx 5$ per session), a workshop to teach creative acrobatic performance (55 students and one teacher), a conference workshop (7 local participants and 8 online participants), and a playground workshop with 16 students, three industry designers, and two teachers. The sessions covered various application domains including sports, playground play, and health applications, and led us to experience in practice some of the barriers to the logistics and execution of sessions as well as barriers to getting participants to immerse themselves and engage with the process. While doing so, and while informally discussing amongst the authors our experiences and reflecting on them, we identified several dimensions/facets to our own experiences as teacher/facilitator in the various sessions, considering topics such as perspectives (ranging from facilitate-as-co-participant to facilitate-as-outsider) and stage engagement (stepping-in-and-out)

In this paper, we present our first thoughts regarding facilitation for MBD. For this Work-in-Progress paper we did not yet follow a formalized methodology in analyzing our experiences, but we loosely organized our thoughts and reflections along dimensions of what gets facilitated, how one can do facilitation in different ways, and who is the facilitator regarding different roles and skills. Finally, we reflect on the *teaching* of the facilitator role to MB designers, which we see as a crucial point to address in future work, and on which tools can support the facilitation.

4 RESULTS AND DISCUSSION

In this section we highlight experiences and observations from our design sessions. Our reflections are grouped in subsections that together sketch out a (highly preliminary) structure in which facilitation of MBD can be understood; for some topics we draw upon additional existing literature to clarify distinctions that we made.

4.1 What is facilitated?

Similar to much related work, we found that our role sometimes focused on *structure* facilitation (ensuring that the group takes the right steps in the proper order and time). In addition, there was some facilitation of *content*, helping people identify interesting ideas that emerged and highlighting "unheard ideas" from group members to build upon.

The facilitation of *mood and energy* for the best possible *commitment and engagement* was also seen as necessary. Even though our participants were not un-experienced in creative design, moving and acting out in the "performance space" was scarier than being creative with sticky notes and whiteboards. Facilitation in *maintaining a playful attitude* (distinct from energy) is also crucial [2], and even more so as our groups were designing for embodied/movement-based *play* experiences. Having a playful attitude is hard to do on command, so we tried to sneak this in by role-playing (giving the right example ourselves to take the group along) and adding task constraints and props to the activity.

We also saw *group-building* facilitation. As acting out (in often new environments with new people) is scarier, the group dynamics also become more critical. This calls for making the right groups, engaging with the people that need to be involved, and keeping an eye on those students that benefit from being watched while avoiding focusing on those that would find this detrimental. For example, we often attempted to have in every design group at least someone with a relevant background in movement (sports trainers, dance amateurs, actors etc.).

Finally, something that we experienced as quite different from non-movement-based methods that we guided in the past, we saw a need for facilitation of *stage-engagement* (helping people with stepping-in-and-out). We observed things such as people standing in a circle, where taking a step back led to "disengagement from the movement"; people starting the session hiding at the edges of the room, watching what was going to happen in the center; and people seeing not all places in the room as potentially being "on stage". People often seemed not aware that they would literally step out of the activity in some places and moments; we attempted to help them wield this stage presence deliberately.

4.2 How does the facilitator approach their role?

4.2.1 Shared facilitation vs controlled facilitation. Sometimes, as facilitator we would take strict control of the steps that the groups carried out; at other moments, we provided a general outline and light guidance only. This depended on the personal preference of the particular facilitator(s) in each session, of what the group responded well to at any particular moment, and the experience that the facilitator had in "winging it" i.e. switching naturally between these approaches.

Fully controlled facilitation – The facilitator controls the process; participants focus on the current task/activity. We saw this especially in warm-up phases and with groups struggling to get into the experience: "now do this, now do that". This approach supports building a safe and friendly movement environment, but probably takes away some flexibility and spontaneity.

Shared participation – The facilitator lets participants explicitly suggest methods or respond more implicitly to what happens between the participants. We saw this especially with the smoother going sessions. This approach requires that participants feel comfortable, and runs the risk of a particular person becoming too dominant.

Fully shared facilitation – Facilitation as the "sum of intentions from the participants," fluctuating between participants in no specific pattern. In our practice, when left on their own, some groups would appear to lack a facilitator role whereas in other groups, the members would take turns steering the direction of the movement activities. This approach seems to require a more experienced group with a clear shared view of their goal, path, and timeline.

Technology based facilitation – Providing facilitation only through technological means and instructions. For instance, we sometimes used a canvas approach in which points of preparation and attention were given, and more strict indications of process stages were defined, after which groups were left to follow those rules and structure. This approach seems to help make sessions more efficient, but seems generally not adaptive enough and not sensitive enough to what happens in specific groups.

4.2.2 Levels and perspectives of participation in the design activity. Another thing we varied in our facilitator role related to our perspective on the activity carried out by the group and the level of involvement that we took upon us, roughly summarized as a spectrum ranging from "inside, playing" to "outside, observing and controlling". Our discussion of this facet is inspired by Loke and Robertson [13] (recognizing the perspectives of the *'mover, observer, and machine'*), and the description of Svanæs and Barkhuus [30] of three perspectives based on Fdili Alaoui et al. [7].

"1. First-person perspectives are focused on self-observation and exploration of one's own experience in developing and testing technologies." [30] In this perspective, as facilitators we sometimes briefly joined the design activity in a more immersed manner. We focused on our own senses and experiences, left the responsibility for content and progress more shared between participants. This might be seen as "undercover facilitation", being a role model to get others to move along. Similar to how in sports a trainer can role-model facilitator, sometimes "jumping in and doing it" is needed.

"2. Second-person perspectives include participant observation through kinesthetic empathy." [30] This perspective focuses on the senses and experiences of others. Not by standing apart and observing them from the outside, but by perceiving the actions and responses of another person in the activity, in a way resonating with it, and then observing and reflecting on one's own bodily and embodied responses to what happens. Thus, this perspective yields insights from one's own unique experience, rather than from summarizing observations of what the other person may have experienced. As a participant, this is a source of unique insights regarding the topic of the design activity. As a facilitator, this perspective seems a powerful tool to monitor the performance of the group, and to see whether it seems useful or necessary to join the group more actively in the first or more systematically observing in the third perspective.

"3. Third-person perspectives posit observation as objectively gathering data from the world that removes the bias of the self." [30] For participants, this perspective may be relevant for recording and documenting the outcomes of the design activity, or for taking the machine perspective described by Loke and Robertson [13]. As facilitators, we were more focused on the process and the goal in this perspective. We observed to see which groups were struggling or not following the process adequately, we did time keeping, chose which groups needed extra attention, etcetera.

We think that for participants, these three perspectives offer different embodied 'points of view' on the collective MBD activity, as can also be illustrated through further literature [7, 28, 30, 32]. The perspectives are not fixed but rather dynamic positions the participant can take and vary during the session. While the facilitator is responsible for the overall process, needing to always keep a 3rd person perspective on the whole group, we argue that purposefully changing perspectives during the MBD session is also necessary to fulfill this role. For example when the facilitator notices that participants struggle to start an improvisational movement exercise they might need to step in as 1st person participant to 'show by doing' [19]. Furthermore, sometimes the facilitator might need to switch to a 2nd person role to get a better understanding of the embodied group experience through *kinesthetic empathy* [25, 30]. While the participants need to learn when to take which perspective within the MDB session, the facilitator needs even more to master shifting between these perspectives while continuously maintaining a 3rd person perspective on the group process. Finally, it is very hard to both act and reflect at the same time, yet a great facilitator skill is to know which mode is necessary and when. Since this skill will also benefit the participants in their activity, the facilitator needs to be able to teach them to others, as well as be able to know when to shift to 2nd and 3rd person perspectives themselves to verify and add to what is verbalized by the participants.

4.3 Who is the facilitator in their various roles?

Given the facets discussed above we can articulate a few typical roles the facilitator can draw upon, moving back and forth between various role-related perspectives and activities.

The instructor and games master – Sets up the "games" (activities/methods) in advance, explains them at the start, structures

the execution of the activity, but (3rd person) ultimately lets the participants do the playing.

The coach and mediator – Guides the direction of the activity, partial active involvement. The aim is to optimize the performance and to achieve results, but takes a more active and immersed role than the games master in steering the group to the correct execution of the activity.

The role model – As a kind of "undercover facilitator", the role model is conscious of their role in the group and actively plays it out to help others participate in the group activity.

The initiator and animator – Controls the purpose of the activity, starting from full active involvement. Focuses on the energy in the process and how it can be affected/manipulated in pursuit of the goal. Participant immersion is a key indicator. Plays a lot with 1st and 2nd person perspective to help groups along, exploring emergent movements.

This role can be better understood by looking at how Börghall [2] describes this animator role in more depth, how it creates prerequisites for new paths of movement, encourages and supports the movement inquiry, opens a space for wonder, supports the participants in exploring the principles of the movement idea, gives room for exploration, and lets the art of improvisation be a driving force [2]. In Latin, "anima" is defined as "breath of life". The animator is grounded in using the principles for *animating* movement instead of *instructing* specific movement techniques. For Börghall [2] to succeed as an animator, one needs to have the courage to play and be playful, as the entrance to being creative. They argue for finding the naive desire to play and for the animator to use themselves to change perspective, stimulate the desire to play, energize the process, and create intensity. Finally, as an animator, in contrast to the instructor, one will have to show courage to lose control of the process and move from being self-conscious to being in a state of devotion and self-forgetfulness [2].

4.4 What skill set would an MBD facilitator have?

Comparing these roles and approaches, the question arises: what skill set does a facilitator need? Firstly, we feel that they should have mastered managing and shifting between the levels of participation and the perspectives described before and know the structure of the methods to be carried out. To be effective, a facilitator should also know how to fit in and to be authentic. Another facet that strikes us is that the facilitator may be already good at going back and forth between "stepping in and fully engaging, participating, losing themselves in the activity", "standing a bit apart, observing and reflecting on what's going on and nudging / steering the group in better directions" and "stepping out and controlling / directing from the outside". Here we typically expect that it helps to look at what makes for a strong group leader in sports, dance, youth work, and similar – the good facilitators in our experience already bring quite a bit of that to the table. Experience with stage performance also seems to help, especially with stepping in and out.

4.5 The need for training for MBD facilitators

Clearly, facilitation does not come naturally without any practice. In our sessions, some teachers/facilitators were better than others

in managing aspects of the role. For the industry to pick up on using these MBD methods requires a transferable form of facilitation expertise. Although not all of our students need this, we expect that some should at least learn to lead sessions, rather than only participate in them. This involves methods as well as mastering aspects of didactics, pedagogy, and group work. From our experience, facilitation tasks and skills may be specific to the movement-based design methods being used, and there is a gap from existing general knowledge on facilitation of play, movement, and creativity, to more actionable advice on how to specifically do this in a specific setting for a specific activity. Anecdotally, we got the sense that good facilitators, among other things, have learned this in a teacher-apprentice-like setting, in a guided learning-by-doing experience; how to organize that remains for future work.

A critical facet in this concerns the perspective taking. Participants can take different embodied perspectives, or points of view [cf. 7, 28, 30, 32], to the collective MBD activity. However, participants must learn how to execute consciously, observe, and verbalize these embodied perspectives through practice [cf. 12, 20, 33]. Additionally, they need to learn when to switch to what perspective in order to obtain new information or validate insights that emerge from the group session. The facilitator has to master these skills to teach them to others and be able to switch between these perspectives within the session to stay connected to the group's lived experience while maintaining a 3rd person overview of the overall process. We noticed that this type of multi-perspective facilitation is quite a demanding and challenging task to do. Working in duo facilitator was a productive way to lighten this workload and enable an observational dialogue whereby facilitators purposefully take different perspectives while working with a group. This helped us form a research perspective to share and validate observations and discuss insights from a shared embodied experiential perspective.

4.6 What can be the role of method cards to support the facilitator in MBD?

A central goal of the MeCaMInD project is the exploration of method card boxes for movement-based design. While working with method cards in some sessions, we perceived different functions of the cards, also in relation to the facilitator of the session in which they are used. Method cards could help participants get quickly introduced to a new method; could serve as a handhold / cheat sheet for the teacher while preparing the session; could serve as a refresher for the facilitator before starting an activity; be a guideline for self-steered / shared facilitation by the members of the group; in combination with a whole collection, serve as a reminder of the more extensive collection of methods for people who already know them; provide a compact reminder of the steps in the method for the group right now "oh yes and then now we need to do X" (card as the structured facilitator). Not all of these purposes seemed (always) relevant in our sessions, and the selection of cards taken on board for a specific session might depend on which function is at the forefront. In addition, we saw that it could be beneficial for some functions of the cards for the facilitator to modify the card and tailor it to some specific aspects of the current application domain/setting of the design work.

5 CONCLUSION

Based on lessons learned in this work, we see a need for a more formally structured conceptual framework for different perspectives on the facilitation of MBD, in addition to and separate from what is known on facilitation of design work in general. Furthermore, we see a need to extend our teaching approaches to include teaching for 'the next level of mastery' of design methods – even though not every single student needs that level of mastery. Future work is needed to address such frameworks and teaching methods in a concrete and actionable way, tailored to the specifics of certain methods. This will therefore also be a particular focus of our own followup work in research and teaching.

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