Moving for the Movement: Applying Viewpoints and Composition Techniques to the Design of Online Social Justice Campaigns

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ABSTRACT

By leveraging approaches from other disciplines, designers can expand the boundaries of interaction design to tackle complex socio-technical problems. To address the challenges of networked social justice movements, we developed a workshop for designers and social justice activists based in Viewpoints and Composition, a philosophy and set of techniques for the theatre. Building on other experience prototyping and somatic methods, the workshop leads participants through the design of a hypothetical internet-enabled social justice campaign, encouraging them to imagine the felt-experience of networked social justice movement building in a socio-spatial context. We conclude with insights from the workshop and plans to further develop these techniques.

Author Keywords

HCI; interaction design; embodied design methods; social justice; activism

CCS Concepts

•Human-centered computing → Interaction design process and methods; Participatory design; Human computer interaction (HCI);

INTRODUCTION

There is much anxiety about the platforms and algorithms that connect us, shape our interactions and influence our society [1, 38, 54, 57]. There is a growing understanding of the conflicting interests at play (e.g. [21]) and concern that human relations are losing out [7]. As issues of misinformation,

algorithmic bias, and echo chambers demonstrate, there is a need to design future technologies, especially social media, that rather than generate ad revenue for elite shareholders, serves the most marginalized and vulnerable of society and creates pathways for civic engagement and empowerment.

During the past two decades, social justice activists have increasingly used social media tools for organizing. While these tools allow groups to emerge quickly and their message to be broadcast widely, platforms such as Twitter also suffer from context collapse, making social contexts difficult to discern [35], raising issues of privacy and security [31], and calling into question the impact of social media on long-term movement building efforts which rely on relationship building, trust and the negotiation of a shared set of values and goals [2, 52].

Working with social justice activists and issue-oriented communities, designers can immerse in the successes and challenges of users who are already appropriating social media tools for empowerment and civic engagement and can co-design future social technologies that reflect the dynamic, relational and multi-dimensional social networks that lie beneath today's two-dimensional social media interfaces.

Our co-design workshop borrows methods from theater created for non-hierarchical, horizontal collaborative processes, allowing designers, technologists, activists and other stakeholders to participate in the design process on even ground. Theater methods have historically been used to address social issues and deconstruct existing texts; in this case, we use these methods to deconstruct networked social justice campaigns on Twitter and reimagine platform-agnostic networked campaigns and the tools necessary to carry them out.

HCI has paid increasing attention to bodily and aesthetic experiences in design [34]. Drawing from the philosophy of Richard Shusterman, somaesthetics and related soma-based design methods assert that we experience the world through our body and thus believe that designers should be sensitized to bodily experiences [50, 29]. While most embodied design

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practices are used to situate technology in specific physical contexts, theatre can also be used in the design of technology that is not itself situated in physical space, e.g. IoT or smart materials. Virtual technologies, such as social media, are representations of socio-spatial relationships, i.e. social media platforms represent complex webs of social interaction that can be mapped and have their own “placeness” [26, 27]. We can use theatre to explore these virtual technologies in an embodied way in physical space, helping us make virtual relationships more concrete, and increasing our understanding of complex socio-technical systems.

We specifically draw from Viewpoints and Composition, a philosophy and set of techniques for the theatre derived from modern dance [5]. Viewpoints exercises are somatic, centering the first-person experience of the participant, but placed within a socio-spatial context. Using Viewpoints, designers can explore the underlying mechanisms and relationships of social media physically in time and space and gain a greater understanding of a user’s felt-experience. Composition, the companion method to Viewpoints, offers techniques for sketching through performance applicable to interaction design.

In order to apply this method to our work with social justice activists, we developed and ran a workshop based in Viewpoints and Composition with local activists, designers and computer scientists. The workshop led participants through the design of a hypothetical online social justice campaign, encouraging them to imagine the felt-experience of online movement building in socio-spatial contexts.

We contribute techniques for designers adapted from Viewpoints and Composition. We discuss the development of the method and describe its application in designing social justice campaigns and future technologies to support them. We then surface insights from the workshop and suggest future research directions and applications. We see potential for future applications of this method to design social technologies collaboratively with users, beyond social justice campaigns.

CONTEXT OF THE RESEARCH

There is an increased interest in social justice and community-based approaches to technology design; Allied Media Projects, for example, is a network of people and projects for media liberation based in Detroit, Michigan [41] and Sasha Costanza-Chock has recently published a volume on “Design Justice” [11]. Others are addressing data sovereignty and consentful technology [33, 25, 32], and social technologies such as Holaback! and We Are Dynamo have been designed to support movement organizing [16, 44].

Social media, especially Twitter, has played an important role in the development and success of networked social justice campaigns [13, 20, 40, 52], as such activist use of Twitter represents the current state of the art and serves as a jumping off point for our study. In Twitter campaigns, the narrative emerges from the actions of individuals who are connected through affordances of the platform, such as hashtags, mentions, and followers [3]. Individuals often personalize a campaign hashtag, sharing their personal narratives, feelings and opinions [40]. It is only through the hashtag that these per-

sonal narratives can be read together as a public narrative, a statement of shared values that drives action [23]. However, on Twitter and other social media platforms, time, space and social contexts are collapsed [18, 35], making it difficult to communicate social connection and the socio-spatial distance between movement actors and those in power. In this flattened environment, the public narrative may not coalesce. Instead, it may get lost in the noise of social media, fracture, be co-opted by actors with opposing motivations, or may be misread by the media or other publics.

Understanding the Problem Space

As part of a previous study of social justice activists using Twitter, we identified common challenges: generating public awareness for a campaign, engaging audiences through on-line participation, dealing with harassment, and negotiating meaning among campaign participants who personalize, transform, or appropriate the message for their own purposes [10]. Seeking to develop tools to support social justice activist on Twitter, we employed speed dating [12], creating 10 design scenarios addressing the above challenges, which we tested with 8 of the study participants.

While the speed dating participants responded positively to many of the designs, they also expressed reservations about automating social interactions, for example through bots or notifications. Participants expressed a mistrust of the platform, resisting the introduction of new features and to algorithm-based solutions more generally. They were cautious about both platform and community-based methods for flagging trolling behavior, for fear that the algorithm or process could be used against minority groups. This reflects the highly relational nature of social justice organizing; it is through social interactions that activists build trust with each other and construct the networks necessary to carry out collective actions. Speed dating also helped participants articulate a core tension in using social media to organize: in order for their actions to have influence, they need to be successful as individuals on the platform (to gain followers and retweets). However, social movement are collective actions that succeed through many voices speaking as one. How can they stand out as individuals and act as members of a collective simultaneously?

Figure 1. Participants in a warm-up exercise, focusing on bodily and spatial awareness.

Reframing the Problem

To address issues of trust raised in speed dating, we shifted our approach, inviting social justice activists to co-design with us. We asked ourselves, 1) How can we help social justice activists better understand the underlying mechanisms of existing social media platforms? 2) How can we surface the values and goals of social justice activists, including those that may be at odds with existing platforms (e.g. the tensions between collective action and personalization)? and 3) How can we support the design of new networked social interactions that reflect the values and needs of social justice activists?

To help social justice activists understand the mechanisms of Twitter and to surface their feelings and values around them, our workshop featured experiential exercises that draw from theatre. Theatre is a way of creating a safe space for groups to explore interactions and re-imagine themselves and the world around them [4, 51]. It has been used, going back at least to the 1960's and the work of Augusto Boal, as "a lab for problem solving, for seeking options, and for practicing solutions" [4]. Acting leverages the body and all of the senses to experience and respond to the world [22], in the process, accessing and exchanging tacit knowledge [47].

We started with the challenges identified in our previous study [10]. To address the challenge of generating awareness, we developed exercises based in Viewpoints that demonstrated how attention works in a multivocal environment. To address encouraging participation, we developed exercises to explore aspects of virality and amplification. To address how personalization affects a networked campaign, we introduced techniques to transform a message through gesture.

Next we adapted a theatre technique called Composition to guide the process of co-designing new hypothetical networked campaigns. Based on our research, we created scaffolded embodied design activities to encourage reflection and support innovative design at each of the following stages: the design of the activist message, how participants interact with the message, and how that interaction shapes network growth. By using techniques from theater to express these designs, we encouraged participants to design outside of the specific features and interfaces of an existing social media platform.

Rather than develop platform-specific features to address current concerns, we felt it would be of greater benefit to engage in activities to surface activists' values and goals, explore the current state of networked social justice campaigns and engage in co-design activities that suggest both campaigns and new technologies that are more in line with their goals.

EMBODIED DESIGN METHODS

Embodied design methods draw from theatre [24, 36, 53], dance [43], play [30, 34] and other somatic traditions, such as yoga and Feldenkrais [29, 50]. They leverage the body and all of the senses, drawing from phenomenology and theoretical frameworks such as embodied cognition and pragmatist aesthetics [15, 49, 37, 56]. These methods have been used in ideation, prototyping, participatory design, user testing, and to sensitize designers, increasing their awareness of embodied phenomenon and their ability to articulate them [34,

55]. These methods help designers better understand complex systems and relationships between people, places and objects.

A number of embodied design methods situate participants in a socio-spatial context to better explore and understand complex relationships and systems. Experience prototyping, for example, employs any number of tools ranging from storyboarding to role play to simulate the essence of an experience, bringing to light the subjective and relational aspects of the interaction [6]. User enactment is a method used to probe an improved future offered by a new design. Designers construct physical and social contexts within which participants play out scenarios, often with novel technologies, to understand the user's felt-experience and values, and to explore social interaction around a future design [39].

Engaging in improvisation, role play and playful interactions can invite unexpected and spontaneous exchanges, forcing participants to respond in the moment and creating space for discovery [30, 34, 47]. Gerber draws from improvisation to improve group brainstorming among interaction designers. Improv techniques, such as building on the ideas of others and withholding judgement, reinforce favorable group dynamics [24]. Improvisation also encourages rapid ideation. In embodied storming, participants simulate an environment and enact multiple improvisations around a design problem [47]. Embodied sketching uses playfulness to spur creativity and design for bodily-experience early in the design process [34].

Somaesthetics

Somaesthetics is an interdisciplinary field introduced by philosopher Richard Shusterman. It is concerned with the body, soma, and our sensory, aesthetic, experience [50]. Soma-based design methods encourage participants to deepen their awareness of their own bodily movements and sensations [29]. Because of the emphasis on the first-person experience, designers practicing these techniques, such as Höök and her colleagues, often engage in autobiographical design practices. Training in somatic practices, such as tai chi, increases the designers' awareness of their own bodies and of the physical world around them [29]. Designers engage in ongoing somatic training and fold them into design ideation and prototyping.

Methods have also been developed in which designers observe and learn from movement experts [43] and in which experts in a somatic practice facilitate co-design processes [46]. Ross and Wensveen, in order to explore dimensions of aesthetic experience, asked dancers specializing in modern improvisational dance to act out choreographies exploring their design problem. They then used Laban Movement Analysis to analyze the choreography and extract useful concepts [43]. Schiphorst calls for somatic connoisseurs to work as part of a interdisciplinary design team, bringing their "somatic sensibilities" to the design process and facilitating somatic experiences with designers and participants [46].

Soma-based design turns the focus inward to the first-person bodily, felt-experience. Designers working with embodied methods develop them over years of practice and training. However, because embodied experiences are difficult to articulate (especially in text), expertise remains tacit [55]. Using

qualitative frameworks, such as Laban Movement Analysis, can help translate bodily experiences into design concepts [43]. However, there remains a need for more concrete ways to translate felt-experience into design practice [29].

We saw an opportunity to explore embodied design tools that are both somatic and situated within a social context, providing greater awareness of the bodily experience of networked social interaction. We turned to Viewpoints, which offers a philosophy and suggests techniques to increase bodily awareness within a socio-spatial context and provides a set of principles to analyze and build from these experiences for design. Adapting the companion method, Composition, designers can sketch and create physically enacted proto-narratives for the design of future technologies.

VIEWPOINTS AND COMPOSITION

Viewpoints was developed partly in response to the American misappropriation of the Stanislavski acting method. In this interpretation of Stanislavski, actors are encouraged to induce an emotional state, sometimes by accessing emotional experiences from their personal history [19]. Viewpoints focuses instead on the external environment, increasing the actor's awareness in the moment and training actors in kinesthetic response, responding physically to outside stimuli [5]. Generating "viscerally dynamic moments in the theatre," Viewpoints has been used for over forty years to create experimental and avant-garde works and enliven naturalistic productions [17].

The viewpoints, according to Anne Bogart and Tina Landau, are comprised of nine physical dimensions (and three vocal dimensions, not applied here), five viewpoints of space and four of time [5]. The physical viewpoints are:

- **Shape** is the outline that the body makes in space. Shapes can be made by a single body, multiple bodies, or the body and elements of the architecture.
- **Gesture** is a movement ("shape with a beginning, middle and end" [5]). Behavioral gestures are gestures that are part of everyday life, while expressive gestures are abstract and embody an emotion, idea or value.
- **Architecture** is elements of the physical environment and how it affects the actor's movements.
- **Spatial relationships** represent the distance between things on stage, especially the distance between actors and what that distance communicates.
- **Topography** is the floor pattern or design created by movement through space.
- **Tempo** is the speed in which a movement occurs.
- **Duration** is how long a movement lasts.
- **Kinesthetic response** is a reaction to a movement or stimuli in the environment.
- **Repetition** is repeating a movement on stage. The movement may be produced by you or by another actor or object.

Viewpoints offers principles and techniques for multi-disciplinary teams to collaboratively generate new works. Creators employ these techniques to craft "points of awareness on stage." Through shifts in points of awareness and spatial relationships between people, objects and the environment, creators communicate meaning to the audience [5].

Composition is a method of sketching in time and space: "It is an opportunity for the ensemble to explore the material in a concrete,actable way" [5]. Theater director Jay Scheib describes Composition as a way of conducting research, to find the hidden possibilities in a subject and express the essential experience [45]. Using a set of materials, or "ingredients," a group of actors sketch out and improvise a short scene or bit of choreography. By quickly sketching these compositions, creators can experiment with a combination of viewpoints, character, relationship and story, extracting compelling interactions for further development and inclusion in performance.

Viewpoints and Composition builds from spatial relationships, points of awareness and action-response sequences to develop narratives in a collaborative and non-linear way, offering techniques for interaction design. Based on physical performance rather than role-play or improv, by using Viewpoints we can bring virtual, 2-D experiences to life in physical space. Building on other experience prototyping and somatic methods, we adapt Viewpoints and Composition techniques and exercises to design social justice campaigns in a networked environment and new technologies to support them.

Figure 2. Overview of the workshop by phase.

WORKSHOP OVERVIEW

We designed and ran a workshop titled "Moving for the Movement," which used Viewpoints and Composition techniques to explore and design online social justice campaigns. In the workshop, we aimed to explore the challenges of social network campaigns, sensitize participants to the felt-experience of participating in an online social justice campaign, and using embodied methods, design hypothetical social justice campaigns that suggest the design of related tools and technology.

Drawing from the expertise of the research team in design, HCI, and theatre, and building from previous work developing workshops using Viewpoints and Composition methods for transformational game design [9], we designed a two-hour workshop that was piloted with 6 self-identified social justice activists as part of a weekend long symposium. After debriefing the workshop with the research team, we expanded the

Phase 1		
Concept	Exercise	Viewpoints/Techniques
Introduction	1.1 Meet Participants 1.2 Introduce networked social justice campaigns: Can you name some networked campaigns? What have you participated in? What are elements of a networked campaign? What has been successful?	
Safety, Consent	1.3 Movement introduction: Keeping ourselves and others safe. Demonstrate consent and refusal of consent	
Bodily and Socio-spatial Awareness	1.4 Movement Warm-up: Cover the space. Notice the room. Walk in the empty spaces. Acknowledge those that you pass. Change your tempo and floor pattern. Sync tempo, and change tempo together. 1.5 Start and Stop: Respond to the movements of others by either starting, stopping or changing tempo.	Architecture, Spatial Relationships, Tempo, Topography Kinesthetic Response
Phase 2		
Attention	2.1 Pass the Focus: Only 1 person can move at a time, and 1 person must always be moving. 2.2 Boost the Focus: When 1 person stops, everyone stops, and turns to face them. The person who initiated the stop performs a gesture which everyone repeats. A new person initiates movement.	Spatial Relationships Gesture, Shape, Tempo, Duration, Repetition
Virality	2.3 Movement Telephone: someone performs a gesture and teaches it to a second person. That person teaches it to someone new, etc. 2.4 Recycling I: 1 person would perform a gesture while moving around the space. As others become aware of the gesture they repeat it until everyone performs the gesture. Then someone initiates a new gesture, etc.	Gesture, Repetition, Shape Recycling
Virality, Personalization	2.5 Recycling II: Everyone walks through the space repeating a gesture. When they encounter another person they may recycle all or part of the other's gesture. The facilitators guides participants to change the tempo, duration, size or shape of the gesture.	Recycling, Gesture, Kinesthetic Response, Shape, Tempo, Duration, Repetition
Phase 3		
Designing a Campaign Message	3.1 Small Group: Set goals and draft campaign message using worksheet as guide 3.2 Represent campaign message through short gestural choreography. Teach choreography to the other participants.	Gesture, Shape
Virality, Personalization	3.3 The facilitator prompts groups to change the shape, size, tempo or duration and otherwise personalize their choreographies. 3.4 Negotiating the Message: As a small group, participants perform their choreography while walking. When two groups encounter each other, they have to (non-verbally) combine their choreographies or decide to all perform 1 choreography. Continue until 1 choreography remains. What elements persisted? How did groups negotiate the transformation? 3.4 Groups iterate on their choreography based on exercises.	Gesture, Shape, Tempo, Duration, Repetition Gesture, Repetition
Phase 4		
Designing for Participation	4.1 Small Group: What actions do you want others to take? How does it add to the message? How much do you want individuals to be able to personalize or adapt the message? Are there moments of synchronicity? 4.2 Perform the message and the response of campaign participants.	Composition
Network Design	4.3 Storyboard network shape and growth over time 4.4 Each group tests their network design by performing it and recruiting others to join in the campaign in the desired network shape.	Storyboard, Composition
Phase 5		
Technology Design	5.1 Small Group: What are the elements of the campaign? What type of technology or tools are needed to execute it? If you had a magic wand what would you do to make executing networked social justice campaigns easier?	

Table 1. Overview of workshop concepts, exercises and the associated viewpoints and Viewpoints or Composition techniques.

original two-hour format to four hours, allowing more time for discussion and debrief. We then recruited 12 participants through our local personal networks to participate, 6 of whom identified as activists, and the rest were designers and computer scientists with an interest in embodied methods and/or social justice activism.

In each phase, a facilitator introduced concepts related to online social justice activism, led movement exercises to explore and design with those concepts, and then guided debrief discussions. Table 1 is a breakdown of concepts, exercises and techniques. In phases one and two, we used Viewpoints techniques and actor training exercises to increase bodily and socio-spatial awareness and explore the concepts of attention, virality, and personalization. As the workshop progressed, movement exercises became less exploratory and more generative (see Figure 2). In phase three, we broke into small groups to allow participants to generate hypothetical designs for an online social justice campaign. Participants discussed the goals and message of their campaign using a worksheet as a guide. They then created short gestural choreographies to represent their campaign messages, and in phase four created embodied proto-narratives that situated those designs in a networked context. In phase five, participants translated their proto-narratives into actionable campaign and technology designs.

We concluded the workshop by asking participants to imagine all of the known online tools and other technology needed to execute their designs, then identify where the gaps lie and what future technologies are necessary to execute their vision. The research team then analyzed the video, observation notes and artifacts produced to draw out insights on the problem space, iterate on the workshop and work towards innovative interactions for the design of future networked technologies.

For the remainder of this section, we describe the Moving for the Movement workshop in greater detail. Breaking down the workshop by phase, we discuss workshop facilitation, goals, example exercises, and the artifacts created. We surface interactions created in workshop activities and debrief discussions that informed participants' designs.

Facilitation

Good facilitation practices are important to ensure the physical and emotional safety of workshop participants, surface observations from movement exercises, and guide discussions. Because the focus of the exercises is on the felt-experience of the participant, exercises might be uncomfortable and can elicit negative emotions. Throughout the paper, we share some of our facilitation practices, but also recommend Seeds for Change's guide for facilitators [28].

Viewpoints and Composition techniques are commonly taught in university and private actor and director training programs. If designers are new to these techniques, good precursors are consulting with a theatre practitioner on workshop design or working with them as a somatic facilitator [46]. They will be able to introduce Viewpoints and Composition techniques and help minimize issues of anxiety and body consciousness that can inhibit participation in performance activities [14].

At the beginning of the workshop we made clear that each participant's physical and emotional safety was our primary concern. We encouraged participants to step out of exercises if they felt uncomfortable or needed a break and assured them that there was a lot to be gained by taking time to check in with their own emotional state. We introduced the idea of consent, and stated that there would be no physical contact unless consent was explicitly obtained. Then participants played out a short script asking for permission to place their hand on their neighbor's shoulder, to which the neighbor replied "no," thus practicing asking for consent, and feeling confident in refusing it. In keeping with expectations, participants moved in and out of exercises in order to rest and reflect on their experience.

We tried to reduce anxiety among participants by scaffolding the exercises, starting with very simple movements, e.g. walking through the space, and building to more expressive and complex choreographies. Initial exercises involved everyone moving at once, making it difficult to pay attention to what others are doing and shifting the participants' focus inward.

Phase 1: Developing Bodily and Spatial Awareness

First we introduced the participants, the research team, and discussed the agenda and facilitation guidelines. We engaged in a discussion of contemporary social justice campaigns and the personal experiences of those present. Then we performed a set of warm-up exercises that laid the groundwork for further explorations by introducing bodily and spatial awareness. We began with a series of exercises that build from the simple act of walking through the space at one's own pace [42]. As participants covered the space, the facilitator asked them to direct their attention inward, noticing their own pace and comfort level, and then slowly to increase their awareness of their environment and the people around them. Then the facilitator added directions that allowed participants to experiment with the viewpoints individually, such as tempo and the spatial relationships between people. For example, the facilitator instructed participants to look for the empty space in the room and "walk in the spaces between people."

We introduced exercises in kinesthetic response where participants performed an action in direct response to the actions of others. In exercise 1.5, participants could choose to either stop, walk or to change their tempo, but they were challenged to choose their actions in response to the actions of the other participants. The exercise forced them to increase their awareness of other participants and to improvise action-response sequences outside of a prescribed context or meaning.

Phase 2: Exploring the Problem Space

Once we introduced the basic Viewpoints principles through warm-up exercises, we transitioned to exercises specifically designed to explore the problem space and surface the values and felt-experience of participating in an online social justice campaign. After each exercise, we debriefed the experience and made connections to the design problem.

We performed a series of exercises on attention. In the first exercise, only one participant was permitted to move at a time, but there had to always be one person moving. In this way, participants increased their awareness of the group and looked

for subtle physical cues to hand-off to the next mover. One participant described knowing when to pass the attentions as, "more of an intuition thing where...I don't know, the bodies feel each other. It's not something that you think through." Participants enjoyed when the hand-offs were unpredictable and playful; however, as one participant described, it was also important that the person receiving the hand-off was ready and consenting, "I was trying to make sure that the other person was reacting positively in the face or not making backing away gestures...so at one point I was (looking back and forth) going 'OK, everyone's fine? Ok.'"

Embodied exploration helped make design problems concrete, such as how to draw attention in a noisy, networked environment, and provided participants with an experiential understanding of networked campaigns. In the debrief, participants shared tactics for successfully focusing and handing off attention. They also expressed self-consciousness with being the center of attention. Valuing fair "turn taking," they wanted others to share the spotlight, and looked for cues that the other person consented to any hand-off. This raised concerns about both personal credibility and authority (e.g. "am I worthy of having the attention?"), and the fear of speaking up online that informed later design decisions. For example, when designing their campaigns, participants came up with strategies to make sure no one person was the center of attention. In phase 4, two groups designed campaigns that relied on a network of smaller groups where participants could feel safe to share their personal experiences without making them vulnerable to public attack. One group then designed a mechanism by which topics of discussion could be published pseudo-anonymously by the group on a public site such as Twitter.

Figure 3. One workshop participant teaches another an expressive gesture.

The photo shows two women standing and facing each other. Each have their right arms raised above their heads.

Phase 3: Creating Embodied Interactions

In phase three, we moved from exploration of the problem space to ideation. By designing a hypothetical social justice campaign, participants were able to apply their understanding of the concepts presented in phase two and test out campaign designs. In small groups, using prompts provided, participants drafted the message of their campaign, and identified the goals, audience and the change their campaign would inspire.

The goal of a networked campaign is to inspire others to act; therefore, designers need to think through what actions they hope to inspire and make those actions clear and attainable. Summarizing their message with action words such as "reveal," "connect," "switch" and "welcome," workshop participants enacted the core action of their campaign message with a gesture. They expanded that gesture by enacting the point of interaction with new participants and the action they hope to inspire, creating a short choreography. Through a series of exercises, we then investigated how these short choreographies might be transformed in a noisy networked environment, especially through personalization and repetition. Based on these explorations, participants iterated on the brief choreographies and then translated the resulting gestural choreography into a revised action-oriented campaign goal and slogan.

Enacting the campaign through short gestural choreographies brought clarity to the campaign designs. For example, one group revised their message to make it more active. Their original message was "let's heal healthcare," but they realized that "healing healthcare" was too abstract and did not suggest a clear action that a member of the public could take. They shifted their goal to "reveal" the cost of healthcare, encouraging participants to share information about healthcare costs. Another group refined their environmental message, "no to fossil fuels, yes to nature," to encourage participants to share their personal reasons for changing to renewable energy sources. In their photo sharing campaign, participants posted images of their favorite natural setting using the hashtag #WhyISwitched.

Phase 4: Situating Interactions in a Networked Social Context

To support the design of new networked social interactions, we challenged participants to imagine how their campaigns might play out in a networked environment. We expanded the gestural choreographies created in phase three to envision how the network might grow over time. Moving between Composition exercises and storyboarding activities, designers tested their assumptions about how social interactions unfold in a networked context and applied strategies for attention, virality and personalization introduced in phase two.

Participants first used storyboards to illustrate the shape of campaign growth over time (Figure 4). Then, using Composition methods, they attempted to represent that shape through performance by soliciting other participants, willing yet unaware of the designers' goals, to join in their "campaign" by enacting gestures in the desired spatial and temporal arrangement. For example, Figure 4A represents a random arrangement of people as triangles. They first form dyads and then

Figure 4. Storyboards created by workshop participants. In A, triangles represent people; people form dyads that then expand into small groups that are closed, but connected. B. represents members from an in-group leaving their circle to greet outsiders and forming new smaller groups.

form closed but loosely connected small groups. When they enacted their composition, participants started to form small circles, but fumbled to connect one circle to the next. This spurred discussion about how information travels from one small group to the next and raised questions about who has the responsibility to maintain the connection between groups and how that can be supported through technology.

All four groups applied strategies discussed in phase two. For example, all groups initiated the campaign by having all members of the group performing a simultaneous gesture, thereby avoiding any one person having to take on all of the attention themselves. They also passed the gesture through one-on-one interactions, teaching each new participant the gesture before moving on (see Figure 3). This helped control the message and dissuaded newcomers from personalizing or otherwise adapting it.

Phase 5: Connecting Insights to Technology Design

The final campaign designs generated by the small groups reinforced the findings from our research that tools with capabilities beyond the existing social media platforms are needed.

Two of the four groups designed networked campaigns that could largely be accomplished with existing technology: one crowdsourced information on the cost of healthcare to make a case for healthcare reform and the other was a viral hashtag campaign that took advantage of the affordances of Twitter. The other two groups designed networked campaigns that think beyond existing social media platforms. These two campaigns relied heavily on relationship building and trust. One campaign (Figure 4B) was designed to create pathways for outsiders, in this case immigrants, to connect with people at the core of a local social network and form diverse small groups. Key to the design was increasing the core's awareness of the outsiders and finding non-threatening ways to welcome outsiders into their circles. As they designed a video outreach campaign, other questions were raised around translation, safety and anonymity, and how online relationships might also reach offline, connecting immigrants with local services. The group represented in Figure 4A discussed

the importance of private chats and real world meet-ups, especially to build one-on-one relationships. They also discussed meaningful ways to aggregate and share important themes from discussions with other small groups and the larger public. In both cases, care was taken to consider social interactions, personal safety and relationship-building.

INSIGHTS

In addition to the storyboards and worksheets produced by participants, we consider the choreographies created in the workshop as the primary design artifacts. These choreographies included moments of interaction between users and social technologies that contributed to design. In our analysis of these choreographies, we used video recordings and observation notes to identify and characterize repeated and common movement patterns, points of failure or discomfort, and major shifts in socio-spatial relationships and their effects.

We present insights related to the embodied exploration of networked social justice campaigns, including how participant designs, including the choreographies that they created and storyboards, addressed issues of attention, virality and personalization. We raise questions about collective action and personalization in social justice campaigns and reflect on ways that we could better address this tension in future workshops, and we share reflections on how facilitation techniques helped bring to light issues relevant to social justice campaign design.

Time and Space

It is notoriously difficult to design interactions that incorporate time and space for two-dimensional screens. Yet the social networks that these interfaces represent are multi-dimensional, relational and dynamic. In this workshop, we acted out interactions in time and space to think beyond the confines of existing two-dimensional interfaces. By exploring socio-spatial relationships in an embodied way, we gained insight into attention, virality and personalization. Designing with these concepts in mind brought to light additional strategies and challenges, for example, how to demonstrate the relationship between actors in a coordinated campaign and how to connect small groups in a single network, ultimately raising new design questions.

Attention

Attention focuses an individual's awareness on a particular idea or aspect of the environment. Viewpoints techniques are used to create points of awareness on stage. We engaged those techniques to consider how to create points of awareness and direct attention on social media.

In addition to understanding issues of attention in a noisy environment such as Twitter, movement exercises also surfaced negative associations with being the center of attention, taking up too much space and vulnerability. Participants took these into account when designing their compositions, engaging further tactics to create points of awareness; however, participants struggled to translate these insights and tactics into their final campaign designs, raising questions about how to direct attention in a networked campaign.

In phase two, we moved through a series of silent exercises where we "passed the attention" (2.1, 2.2). One person at a

time became the center of attention and everyone else followed their lead until handing off the attention to someone new. The struggle to get everyone's attention in a room with a dozen people moving simultaneously and independently was easily relatable to the challenge of attention on Twitter. After the exercise, some participants expressed self-consciousness about being the center of attention and shared their strategies for avoiding receiving a hand-off. This provided a jumping off point to discuss self-consciousness, credibility, feelings of worthiness and fear of attacks when speaking out online.

Participants took these feelings about attention into account when, in phase four, small groups of participants created and performed a proto-narrative of their campaign. In all four campaigns, the core group members performed their initial campaign choreography simultaneously, thus avoiding any moment when one person stood alone as the center of attention. Simultaneous action also helped draw attention to the core group, especially when the group stood physically together in the middle of the room. However, initiating a simultaneous action was not easy. All of the groups had false starts and moments of hesitation. One group spread its members out around the room to initiate the campaign in the hope of engaging more people as they moved throughout the room. This tactic was not successful in garnering attention, and it wasn't until two of the members gathered in the center of the room and performed the gesture together that others caught on.

In phase five, the small groups translated their embodied proto-narratives into actionable campaign and technology designs. Here, earlier concepts around attention surfaced again. Two of the groups developed strategies for grabbing an online audience's attention, namely recruiting community leaders and celebrities to initiate the campaign. While not necessarily innovative, the strategy does demonstrate an awareness of how attention on platforms such as Twitter is often generated. The other two groups did not directly address issues of attention in their designs. For the researchers, the proto-narratives raised interesting questions about creating centers of attention in networked environments. Often campaigns start with a number of people simultaneously but individually posting a campaign message, changing their profile picture or using a hashtag. But perhaps there are ways to better strengthen the relationship between users acting in coordination, both to build trust and reduce the anxiety of the campaign participants, and to communicate those relationships to increase the action's visibility.

Virality and Personalization

Social justice campaigns do not rely on a single post going viral, but on the virality of a hashtag, slogan or idea. Often activists personalize or contextualize campaign content by adding expressions of emotion, personal experience or opinion [40]. Activists may also adapt a hashtag to make it applicable to a specific context (e.g. one variation of #MeToo was #ChurchToo, discussing sexual assault and harassment in churches). This kind of personalization expands the scope and reach of the campaign.

We employed a Viewpoints technique called recycling, where actors are encouraged to repeat movements performed by others to create motifs with emotional impact. Participants used

recycling to design for virality and personalization, leading to the design of interactions that went well beyond the capabilities of a single social media platform.

In phase two, after completing a series of recycling exercises (2.3-2.5), participants expressed delight in not only seeing their gestures repeated by others, but seeing the creativity with which others made a gesture their own. But the most striking observation was how a simple gesture, like waving one hand, took on a greater meaning when repeated by a dozen different people. We discussed how personalization emerges in online campaigns and how hashtags, slogans, and other behavioral scripts, such as participants posting selfies of themselves at work as part of #ILookLikeAnEngineer, attempt to either minimize or encourage personalization.

The proto-narratives performed in phase four, reveal two different approaches to virality, both relying heavily on one-on-one interactions, but leaving little room for personalization. All four groups chose to spread the message, i.e. teach the gestural choreography, to other participants by standing in front of the new participant, usually making eye-contact, and performing the gesture as the new participant attempted to mirror it (see Figure 3). The one-to-one interaction facilitated learning, and formed a personal connection between participants. In three of the compositions, after a new participant learned the choreography, they then would walk around the space until they encountered another person, stand in front of them and perform the choreography together. As the pattern progressed, participants became more confident with the choreography and the tempo of the gesture and walking increased.

The fourth group took a different approach; after initiating the campaign, the core members started to form a circle and encouraged newcomers to also form small circles, repeating the choreography inward to each other. They attempted to make not just the gesture, but the group formation "go viral," but it was difficult to communicate their intentions non-verbally through gesture. This experience of failure led the group to further ideate about the small group dynamics, and to design a campaign that went beyond the capabilities of any single existing social media platform. They designed system of small, private chat groups that would extract resonant themes from their discussions to share with others publicly via Twitter, thus encouraging inter-group communication and also sharing their insights with the public.

Personalization is a mechanism that activists use to help in expansion of a message. They often do so by including personal stories and images in the content they generate. While none of the groups explicitly choreographed for personalization in their compositions, two of the groups included personalization in their phase five designs, for example, by encouraging participants to share personal photos.

Post-workshop the research team reflected on the prevalence of one-on-one interactions in the compositions and hypothesized ways features such as mentions and tags might be used to personally hand-off a campaign from one participant to the next. We also discussed the lack of personalization in the compositions and the limited strategies for increasing reach. It

is not surprising that participants have difficulty with this idea, as we often think of virality and reach as a product of the mechanics of the platform and the appeal of the content, and not as something that can be designed. As we discuss in the next section, we believe that these issues can be addressed through embodied exercises in future iterations of the workshop.

Collective Action vs. Personalization

Discussions like the one described above raised questions about the trade-off between collective action and personalization. This tension came up in several workshop discussions and mirrors criticism of online activist campaigns in the social movement literature [48]. For example, participants raised questions about the ways campaigns like #MeToo that rely on personalization through sharing personal experiences may leave participants feeling vulnerable. In a warm-up exercise, the group was instructed to move at the same tempo without discussion or keeping the beat (e.g. by clapping or stomping in time). But they repeatedly failed to match tempo, an experience that was visibly frustrating for some participants, but also was a missed opportunity to reflect on the difficulty and limitations of synchronicity, especially in networked environments where awareness is limited. In retrospect, we also could have further examined the contrast of individual personalization and collective action through such debrief discussions. Viewpoints exercises are often used for ensemble building. Some of these exercises focus on simultaneous action and non-verbal group decision making and could be used to examine questions of individual personalization and collective identity. Additionally, we could have taken more time to iterate on the compositions in order to test out different strategies.

Learning from Facilitation

Our facilitation guidelines around safety, consent and taking reflective breaks also surfaced insights for participants in the workshop that influenced campaign designs.

Participants sometimes chose to step out and take a break from the exercises. While the researchers can't know the exact reason for a participant's actions, experience tells us that this often occurs when a participant loses focus, is overwhelmed, fatigued or frustrated. Physical and emotional fatigue is a known issue among social justice activists [8]. Not only did this provide individuals the opportunity to reflect on the issue of fatigue (in one case a group simplified their choreography to conserve energy), but also forced groups to adapt their campaigns to be able to work with variable numbers of core members. For the researchers, this surfaced an important feature of good networked social justice campaign design.

Following our consent guidelines, one participant was not comfortable with being touched, and thus, one group had to redesign their interaction. This raised issues of consent, boundaries, and persuasion, all of which are relevant to social justice communities and networked campaigns.

FUTURE WORK

Moving for the Movement is a first effort in using this workshop format to co-design networked social justice campaigns and new technologies to support them. We adapted techniques

from Viewpoints to gain an embodied understanding of the felt-experience of social justice campaigns online. Using Composition methods, we created proto-narratives for new campaign designs that suggested future technology design.

Our workshop was 4 hours, including a dinner break. In an ideal scenario this process would be broken up into shorter sessions, each with movement exercises and ideation or prototyping sessions, allowing participants to become more fluent in the techniques, strengthen the collaboration, and allow design ideas to develop. In future work, we plan to use this approach to prototype technology in support of a real world networked social movement through sustained work with a particular issue-oriented community. It is only through partnering with a community on a real-world issue that we can come to understand how, as designers, we can best serve and collaborate with these groups, design effective campaigns and prototype the future technologies needed to execute them.

In future iterations of the workshop, we plan to more explicitly introduce strategies for network growth based on research of both existing social media platforms and organizing models, and then use Viewpoints-based exercises to explore and expand these strategies. We will also surface tensions between collective action and personalization through exercises and discussion. We will address questions raised in this workshop regarding the relationship between offline events and groups and online campaigns and networks. Finally, by expanding the workshop into a series of sessions, participants will be able to focus more on their final campaign designs and prototypes.

We see potential in applying Viewpoints and Composition to interaction design beyond the context of social justice campaigns. Other networked social contexts would benefit from a deeper understanding of how social interactions unfold in time and space. Such explorations may contribute not only to the design of campaigns, but to the design of innovative future social network interfaces and platforms.

CONCLUSION

In this paper, we have presented a workshop on designing online social justice campaigns using techniques borrowed from theatre and dance. We used Viewpoints exercises and techniques to explore the current state of social justice campaigns on social media and the felt-experience of participants. Using Composition methods, we developed and enacted interactions for hypothetical social justice campaigns, and scaled out to enact the growth of a networked movement over time. We reflected on the insights these techniques inspired, identified pain points for participants, and opportunities to improve and expand the workshop in the future.

After running the workshop, we see potential for the application of Viewpoints and Composition in the domain space of social justice campaigns and more generally for interaction designers seeking to design with greater sensitivity to the felt-experience in networked social contexts, especially when co-designing with affected or issue-oriented communities. We propose future work to further develop the techniques, apply the method to other domains and prototype designs generated in workshop sessions.

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