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What's Next for Information World Mapping?: International and Multidisciplinary Uses of the Method

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ABSTRACT

As use of arts-involved and data visualization methods increases in information science, it is important to reflect on strengths and weaknesses of various methods. In this 90-minute panel, an international lineup of information researchers will share their experiences using the participatory, visual elicitation technique information world mapping (IWM) in their work. Panelists will discuss ways to adapt the technique to different contexts, share their thoughts on what is next for IWM, and raise questions regarding challenges and new uses of IWM in information research. Presentations will be followed by an interactive discussion among panelists and Q&A period with the audience.

KEYWORDS

Research methods; Visual methods; Arts-involved methods; Qualitative methods; Information behavior

INTRODUCTION

Information world mapping (IWM) is an arts-based elicitation method designed for use within qualitative interviews (Greyson et al., 2017). The method combines attributes of information horizons (Sonnenwald, 2005), Photovoice (Julien et al., 2013; Wang & Burris, 1997), and relational mapping (Radford & Neke, 2000), to generate participant-created visual maps of the people, places, and things in individuals' information worlds (Jaeger & Burnett, 2010; Yu, 2012), as well as participant-centered depictions of information practices (Savolainen, 2008) therein.

Since its inception for use in a study of health information practices, IWM has been adapted, translated, and used in studies on a variety of topics from refugee settlement (Martzoukou & Burnett, 2018; Shankar et al., 2016) to caregiving for people with dementia (Dalmer, 2017). IWM has been used with several populations, including iSchool students (Tsai et al., 2019), LGBTQIA community members (Kitzie et al., 2021), African immigrants (Mabi, 2020), and vaccine hesitant mothers (Greyson & Bettinger, 2017). IWM has spread from North America to Europe and Asia, been translated, and used not only in information science, but in other disciplines that may study information behaviours and practice, such as public health and ageing studies. Different materials have been used in various settings, and due to the COVID-19 pandemic, researchers have begun to explore online adaptations of the IWM activity. Although the method was originally conceived as an aid to verbal elicitation, researchers have been exploring analytic methods for use on the maps themselves as research data (Greyson et al., 2020).

This panel will showcase a variety of uses of IWM, describe the ways the method has been adapted and translated for use in different contexts (locations, cultures, disciplines, technology access environments), discuss analytic approaches to use with IWM, and raise questions for the future of the method. A variety of researchers who have used IWM in their work will describe the projects within which the method was used, highlighting the benefits and challenges of IWM in their experiences, and providing their perspectives on what are the next challenges or innovations for use or adaptation of IWM. Following these brief presentations, we will engage in an interactive question and answer session among panelists and with the audience.

PANEL PRESENTATIONS

Following a brief introduction to the method by the moderator (Greyson), each of four panelists will describe their use of IWM, including how it was situated within their research projects, how it worked for their study populations, approaches to analysis of data when using IWM, and questions their experience raises for future use of IWM.

Kitzie: Using IWM to Describe the Health Information Practices of SC LGBTQIA+ Communities

Kitzie has used IWM in ongoing research exploring the health information practices of LGBTQIA+ communities in South Carolina. Over 60 participants have engaged in IWM as part of this research during in-person semi-structured interviews and virtual focus groups. Participation is divided between community leaders and members, who mapped health information practices at both individual and community levels of observation. Data analysis is twofold, with content analysis of participant's map descriptions and situational analysis of the maps.

Kitzie will overview findings from IWM data collection and analysis, focusing on the following topics:

- Kitzie will identify strengths (e.g., comparison of individual and community as units of analysis) and challenges (e.g., participants' difficulty in generalizing practices at the community level) in adapting IWM to describe community-level, rather than individual, information practices.
- Kitzie will discuss unique opportunities of situational analysis for IWM, including opportunities to elicit and identify discursive power, resilience, and resistance among participants.
- Kitzie adapted IWM to a virtual focus group context and will address several lessons learned, including translating IWM to digital media and making IWM interactive within a focus group context.
- Finally, Kitzie will overview methodological strengths and challenges unique to her research, including pairing critical incident technique questions with IWM and cultural availability of IWM methods to participants.

Questions for discussion among panelists based on these topics may include: How faithful does IWM need to be to its original context in order to attain its underlying methodological insights? What are the unique insights IWM can contribute to describing the lived experiences of marginalized people and communities?

Mabi: Mapping the Employment Information Practices of African Immigrants

Dr. Millicent Mabi completed her doctoral studies in August, 2020, and is currently an adjunct faculty at the School of Information, University of British Columbia. Her research interests sit at the intersection of information and migration, including information behaviour of underrepresented groups, information poverty, Africans at home and in diaspora, immigration and settlement, and information services for marginalized populations. Dr. Mabi used IWM in a research that explored the role of information and identity for African immigrants seeking employment in Metro Vancouver, Canada.

Twenty-five African immigrants were invited to participate in the information world mapping. Nine of them opted not to participate. Participants who agreed to participate were given flip chart sheets and coloured markers and invited to represent their employment information worlds in response to a prompt. The maps served to deepen understanding of the interviews, provided prompts to engage participants further, and provided insights on other data collected as part of the study. There were benefits from the use of IWM with this population, as well as insights about the possible influence of culture, gender role and personality traits on IWM. Thus, I ponder over the following questions: Why might people engage in or opt not to participate in information world mapping?; What aspects of people's culture could influence information world mapping?; Is there a possible impact of multitasking on the quality of IWMs?; How can immigrant mothers be better supported to engage in information world mapping?

Martzoukou: Syrian New Scots' Mapping Across Language Barriers

Dr Konstantina Martzoukou (SFHEA, Ph.D, MSc, MA, ILM 5) is Teaching Excellence Fellow and Course Leader (MSc Information and Library Studies) at the School of Creative and Cultural Business of Robert Gordon University in Scotland. Her research interests encompass information seeking behaviour, information and digital literacy and online learning. Dr. Martzoukou used IWM in the "Syrian new Scots' Information Literacy Way-finding practices" research project, which she co-led with Prof. Simon Burnett. In this study, participants in focus groups were led through the IWM drawing exercise in translation, with prompts drawn from Dervin's (1976) taxonomy of exploring information needs based on describing specific problems as a way of articulating needs.

IWM was found to be a visual participatory, interactive drawing-based interview technique that enabled a richer exploration of information behaviour in context and was particularly useful with participants who did not speak

English. IWM in this context acted as both a research tool, an ice-breaker activity, and a way to express predominant feelings and emotional states. IWM was found to be an effective visual communication method to express what could not be easily articulated, acting as a prompt to stimulate participant engagement and interaction and as a device to contextualise and enrich the stories shared by the participants. Participants' drawings acted as stimuli for discussion around everyday life problems/ information needs, information sources & enablers/barriers, communication and sharing of information, cultural integration. They also provided a direct and unobtrusive means of communication between the researcher and the interviewees. While this study did not involve analysis of the visual information from the drawings, it nonetheless raised questions regarding analysis of maps. During the drawing exercise, researchers were unable to steer participants back to the specific direction of the study if they got sidetracked. As a result, the drawings expressed more than just information related domains, but also participants' affective situations. This caused us to wonder whether this 'lack of control' may be a challenge or an opportunity.

Tsai: Applying IWM in Academic, Health, and Everyday-life Contexts

Dr. Tsai is an Associate Professor of Library and Information Science at National Taiwan University. She obtained her Ph.D. in Library and Information Studies from the University of Wisconsin—Madison. Her research focuses on information behavior, especially how individuals with diverse backgrounds seek information and how individuals collaboratively seek, use, and exchange information to fulfill their learning objectives. Dr. Tsai has been acquainted herself with visual elicitation methods since 2010 and has been using IWM on various projects with different emphases in academic, health, and everyday-life contexts since early 2018. Nearly 60 students participated in IWM research when Tsai traced master's students' thesis writing processes, examined the everyday-life information behavior of Taiwanese international students in Japan, and explored the collaborative information practices of domestic and international students. An additional 197 students in the information behavior course during the last four years also worked on an IWM exercise. Despite several ongoing IWM projects, other IWM participants in her recent works include 17 first-time homebuyers and 17 caregivers of Autism Spectrum Disorder (ASD) children.

In this panel, Dr. Tsai will discuss issues encountered when implementing IWM based on her observations. Almost all participants chose not to do think aloud and preferred a quiet time to draw their IWMs. While many participants had an initial reaction saying that they don't know how to draw, after a few minutes they typically did it well. Prompting with earlier conversation in the interview and breaking down instructions in detail using a storyboard may help facilitate the process. Even when using the same 12-color pens and a blank A4 paper as the research tool, participants may exhibit different characteristics and preferences drawing their IWMs. The time needed and the use of colors and metaphor vary largely among participants. Some contemplated at least 10-15 minutes before drawing while others finished within 10-15 minutes; some preferred single color while others utilized almost all 12 colors provided; some depicted their IWMs using metaphor while others included specific items to present information sources. Quite a few participants relied on using texts and links in their IWMs. Nevertheless, IWM no doubt helps solicit and capture a thorough picture of information practices. Potential ways to accommodate participants and to facilitate the implementation of IWM will be discussed.

CONCLUSION

This panel will raise and discuss tricky questions regarding use of IWM, many of which are transferrable to other arts-involved, participatory, or community-engagement research methods. These questions include: What cultural influences have we observed to date that suggest modifications to implementation of IWM? How does IWM work in group settings, and online? Has the idea that IWM would give participants additional control over their narratives, and potentially reduce linguistic and literacy barriers between researchers and participants borne out in practice? Is the method also useful in data collection with privileged populations? When participants do take control of their IWMs, how do researchers manage the exercise or analysis of maps that took an unexpected direction? Is the unpredictability of the method and time required to include IWM in a study "worth it" in terms of enrichment of data, rapport with participants, or other factors? We expect there will not be one simple answer to any of these questions, given the diversity of researchers, participant populations, topics of study, and settings in which IWM is used; however, we will identify key questions and areas for exploration for the next phase of IWM in information research.

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