STORY-MAKING: A COMPLEX METHOD BASED ON ARTS-BASED RESEARCH IN SOCIAL DESIGN

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ABSTRACT

The study explores how the combination of visual art making, in this case, textile making, and storytelling can enable story-making to express research participants' inner worlds and world views in social design practices. Arts-based research (ABR) can address the limitations of conventional methods of practice and research in social design to elicit more profound and often unexpected responses from participants, leading to compelling reflections that can influence interview processes and the connections they involve. ABR's potential for unforeseen insights opens new possibilities for methodological explorations, specifically applying complex methodologies, by tackling the limitations of conventional research methods in social design. Using a socially constructivist approach, this inquiry into social design used ABR and cultural probes by combining textile making and storytelling. Analysis by the two participant-authors generated different interpretations of the participants' expressions. The study finds that the ABR story-making method can deepen insights into the participants' life experiences to uncover social aspects that can foster and strengthen new connections through design.

Keywords: Social Design, Arts-based Research, Story-making, Collaborative Visual Analysis

1 INTRODUCTION

ABR has the transformative power to support critical thinking and enhance creative and multifaceted communication while driving cultural and social change, making ABR so engaging and exciting for researchers and practitioners. This study will investigate the combined use of textiles and storytelling, paired with collaborative visual analysis, in a methodologically complex [1] method called 'story-making'. This method can elicit expression, reflection and analysis of life situations. This study aims to understand how story-making contributes to generative mindsets in the research field to enhance ABR's unstructured and exploratory knowledge generation in social design research and practice. In this article, social design is understood as creating designs for stimulating change that involves developing new ideas, solutions, and scaffolds to address social needs and reforms to foster stronger social connections [2], [3]. Scaling social design interventions should involve reshaping and strengthening the networks that support community members by enhancing and integrating social elements logically and effectively [4]. However, uncovering these social elements remains challenging and deep-seated and underlying issues are often hidden by more apparent challenges.

Drawing from stories as the essence of social fabrics [5], this study enquires how story-making can generate an understanding of these deep-seated unknowns and silences within society's ambiguous settings that social designers and practitioners have to deal with. The study asks: "How can the multi-method approach of story-making contribute to social design and practice as an exploratory and plural method?" When story-making is applied collaboratively and practised with care, open, transportive and improvisatory processes can emerge and stimulate engagement and empathy [6], [7]. Improvisation, as such, has a connective function, drawing from the affordances provided within specific settings and environments [6]; thus, its importance in social design cannot be sufficiently emphasised.

The exploratory method, story-making, creates understanding through reflective textile making and storytelling. This method, situated in an ABR strategy, can serve communities as a meaning-making process essential for uncovering hidden aspects of the societal challenges they face. McNiff [8, p.28] provides a comprehensive definition of ABR as 'the systematic use of the artistic process, the actual making of artistic expressions in all forms of the arts, as a primary way of understanding and examining experience by both researchers and the people they involve in the study'. The qualities of ABR, mainly its focus on questioning life experiences, hold immense promise for social design.

The study follows a socially constructivist approach and ABR [9], in addition to cultural probes and storytelling. Using ABR as a research strategy, textile art and storytelling were used as empathy-building activities during an international exchange between university students and academic tutors from Estonia and Japan, of which only ten individuals, half of the participants, engaged in the ABR activities. The findings will reveal how story-making and analysis are underpinned by art thinking as a generative and exploratory mindset to create diverse insights into the participants' memories, life experiences, resolutions, and unanswered questions. This study's value is to promote combining arts-based methods (ABMs) and other research methods to generate rich data from explorative art thinking. The generative ability of ABR is valuable in social design research and practice as it enables far broader means of expression, discovery, questioning and sense-making for working through life experiences, reflecting on complex situations, and creating and recreating associations that can impact on life realities. In addition, the value of this study, as Huss [10] explains, is that arts-based approaches and artistic outcomes should not be viewed not as the ultimate objectives of the research but rather as a means to acquire new knowledge to foster social and political change. These approaches ask for transformative processes supported by methods and tools. These present new opportunities for social designers to create new toolsets that integrate exploratory arts practices with transformative design approaches for their fields of practice.

2 THEORETICAL FRAMEWORK

This theoretical framework sets the foundation and elaborates on using ABR and storytelling in social design. The framework discusses the tenets of ABR and its role in social design while also elaborating on the roles of stories and storytelling. ABMs are used in various fields, especially those perhaps closer related to the arts, such as creative arts and music therapies [11], socially engaged art practices [12], participatory research [13], and social work [10]. Understanding societal behaviour and identifying elements that can lead to positive outcomes is key to enhancing well-being. Non-economic factors such as social capital, democratic governance, and human rights significantly influence a society's well-being. Strong social relationships are vital to well-being and significantly affect policy development [14].

2.1 Arts-based research in social design

ABR has been used in diverse research settings with marginalised communities [15]. By combining visual art and storytelling, ABR has effectively generated profound narrative responses and empathic socially focused research processes in marginalised settings (see [10], [7]). The values researchers seek to bring about in ABR are to facilitate the varied ways communities prefer to explore issues pertinent to their needs. In research contexts, ABR does not necessarily focus on solutions but instead explores new possibilities. This research approach can cultivate self-reflection and disrupt dominant narratives [15]. The value of ABMs has been recognised to encourage more horizontal and democratic research practices for decolonising participatory research [13]. ABR is steered by a moral community transformation is often experienced.

ABR can effectively unite diverse groups, as different cultural, social or spiritual experiences can be shared through visual, performative or digital expression and artmaking. Responses elicited during ABR can be emotional, intuitive, or psychological but not necessarily intellectual [17]. ABMs can be culturally modified to accommodate participants' values and beliefs as they can cultivate connection and empathy between researchers and participants to engage in research problems [17]. ABR's role in identity expression [18], through its ability to challenge dominant ideologies and include marginalised voices, enables participants and researchers alike to experience, think, and express differently [15].

Enabled by ABMs' fluidity, flexibility and adaptability, arts-based researchers often use methodological complexity [1] in data collection, documentation and content generation. Arts-based researchers concern themselves with knowledge transfer and translation by diverse means for alternatively collecting, analysing, and disseminating data [9]. ABR enables the coexistence of multiple and opposite perspectives [13], and the opening of spaces between self and others. Through ABR, research participants can engage in embodied processes to uncover inner or shared worlds through creative participation. ABR's value for generating empathy in the fuzzy front end of service design processes has been established [7]. However, the role and impact of ABR received little attention in social design. However, the role of ABR in generating empathy within communities has been established [7]. In summary, ABR can enable knowledge transfer to generate an understanding of communities' historical,

social, economic, and environmental contexts as they provoke and transport ideas, as well as cognitive and emotional empathy and compassion.

2.2 Storytelling

Stories are affirmations of the 'cleverness necessary to get on in the world, the kind of humour required to persevere' [18:110]. Frank [18:110] further explains how stories can create the 'the moment and the story-how well the transition was made-and how effectively the telling of the story focused attention'. Storytelling can be applied through performance and dialogue or creative writing. Storytelling and art-making, or story-making, can enable new dialogues and participation, underpinning their value in representation and visual dissemination for impactful research [19]. Story-making necessarily represents fabrication as it is based on personal life histories [20], experiences and memories that are reconnected and expressed through storylines and voice [21]. 'Story is how we package and present the lived experience', says Tordzro [21:1]. Therefore, the fabrication of such histories is itself generative and explorative. The narrative potential of stories embedded in artefacts to narrate meaning independent from the designer-maker's intention has been established [22]. Narrative potential can illuminate participants' unconscious fears, reasoning and emotions.

Individual and collective storytelling is integral to arts-based approaches. Still, the most significant social impact of the arts is that it enables people to think critically about their experiences and those of others [23]. Storytelling creates authenticity [18:109]. According to Frank [18:109], authenticity is not a precondition of storytelling as it comes through the process. Stories can help people to explore the 'world as a narratable place; that is, a place that stories can make sense of', explains Frank [18:111], as they can 'guide what to do next and how to live now' [18:112]. Both storytelling and artmaking can help make sense of challenging and complex realities. Therefore, story-making is a performative, complex, and explorative cognitive-embodied process of remembering, discovery, and sense-making based on creative expression in various forms and materialities.

Research by Bloome et al. [24:45] illustrated the effect of story-making in adopting and adapting 'extant stories and recounts of experiences to accomplish a broad range of in situ social goals and develop a repertoire of narrative styles and structures'. Such practices require creativity and divergent approaches that may be likened to art thinking, which requires emotional and cognitive capacities to transport participants using their skills, imagination, and creative competencies. Participants can explore and expand story-making to express and possibly gain insights into their life experiences.

In social and learning contexts, Gudmundsdottir [25] writes about story-makers when they transfer essential histories for learning, for example, to stimulate interest in learning topics and create a contextual understanding of the story's people, places, and culture. At the same time, story-makers can knowingly and unknowingly contribute to strengthening negative and dominant narratives about people, places, and culture. For this reason, the ethical implications of story-making are important, requiring care and reflexivity of story-makers to create stories mindfully of existing dominant narratives. Frank [18:111] reminds us about the importance of 'narrative revisionism' for shaping morality that needs constant revision through 'subsequent stories, including retellings that put different emphases on old stories'. Narrative revisionism is an essential element of storytelling, making processes and creativity that social designers should adopt in their community practices. It opens locally situated opportunities for reflection, improvisatory processes, re-learning and re-telling for reform, shaping the social connections that social design methods hope to target.

3 METHODS

This study adopted an ABR strategy, using textile making and storytelling as key methods for producing visual and textual data. The textile-making served as cultural probes to elicit storytelling and discussion amongst the participants and author-participants. The analytical approach used was collaborative visual analysis [26:3131].

3.1 Research participants

As an alternative to standard research methods in research and practice, textile art and storytelling were combined to explore the participants' life experiences during a two-day visit to Yabakei, a culturally and environmentally significant village in Oita prefecture in Japan. The ten participants, aged between 21 and 53, included international and local students and tutors. Both authors participated in this activity, while the remaining participants and institutions were anonymised for privacy reasons. Participants were

asked to provide a written story accompanying their textile art as an additional method. Participants were invited to use objects or inspiration found in their environment in Yabakei. All participants provided informed consent before the activity to adhere to ethical requirements.

3.2 Cultural probes



1. Scar Stories. It is said that every scar is a story—a story of adventure, perseverance, overcoming an obstacle, and taking risks.



2. Grow like tree rings. For me, loncliness happens when I feel ignored or misunderstood by people I love. It reveals my deep fears and vulnerabilities, as well as the desire for connections with others, like a brief death. However, loneliness also made me see myself and build a relationship with myself, which fosters personal growth akin to the growth of tree rings.



3. Holding Traditions. In small communities, knowledge, traditions, and skills are quick to fade if no one wants to learn them. Everyone can do something to fix this.



4. Rice plant with the sun in the background. It was my first time visiting Japan, and the last thing I saw was the bright sun. The first thing I ate was Onigiri.



5. Shared Moments. On my first day in Japan, I met this man in a bookstore who gave me an amulet with an engraved angel. This gift was meant to bring good luck and protection. This embroidery of an angel reaching out with her hands symbolises the power of shared moments and the universal desire for happiness and well-being.



6. Loss of connection. My grandma taught me these three techniques when I was four years old. Her health is deteriorating, and soon, I'll lose her, which for me means losing connection with my past and future. I express the feelings of end and loss by depicting cultural folk symbols once instead of in traditional repeated sequences.



7. Making decisions. Making decisions will leave a different mark on your life. Some are more noticeable, some less, some take away from you, some add, some will mend broken parts, and some leave you fragile.



8. All together. Someone once wrote, "We are all alone together". So, loneliness is often a blessing, and it is my quiet time. I am lonely when I get busy.

Figure 1. The eight purposively selected textile arts and stories of the participants. Photography by M. Sarantou (2024).

Cultural probing involves using a set of stimulating tools and materials that may offer a strategy for exploration [27]. Participants received a probing kit with a 10 x 10-centimetre linen textile, thread, needles, and paper clips as materials to engage in the story-making and create the textile art. Besides the cultural probing kit [28], no creative specifications were delivered to each participant. The strength of the cultural probing method is that it aids the exploration of people, agency and the environment within a specific context [27:29]. Eight textiles and stories were purposively selected for the collective visual analysis conducted by both authors. The data collected from this stage of the ABR were the textile artworks and hand-written stories on paper transcribed and presented below in Figure 1.

The following subsections will explain the theoretical considerations for the methods used: cultural probes, probing kits, storytelling, and analysis. Next, the implementation of the analysis as the author-

participants attempted to use generative art thinking to identify various ways of story-making will be elaborated on.

3.3 Analysis

Collaborative visual analysis is an analytical approach to 'enable distributed exploration and evidence gathering, allowing many users to pool their effort as they discuss and analyse the data' [26:3131]. This analytical approach has been used alongside arts-based methods [29], drawing from storytelling, visual data, and reflective processes to enable dialogical analytical processes in which two or more researchers facilitate the analytical process. The literature has given limited attention to analysis in ABR. Focus group discussion, storytelling, sketching, note-taking, and idea-sharing can be used as methods for story-making. Collaborative visual analysis aims to shift from personal to group agency [26], yet it is based on individual and collaborative interpretations; it is a subjective approach that draws on personal experience and is supported by narrative accounts and reflective approach, each analyser's findings and subjective analysis must be negotiated within the group of two or more participants. The more participants, the broader the distribution and interpretation, which may prevent power imbalances, especially between researchers and participants [26]. Negotiation results in the research being non-exploitative and accessible while retaining self-interrogation [29].

The study outcomes were analysed by the authors using collaborative analysis. The author-participants' analysis of the eight purposively selected textile arts and stories was facilitated on the digital Miro whiteboard platform. The images and stories were collected, grouped and analysed using the platform's sticky note function. Three one-hour sessions, one online discussion and two in situ assisted in refining the visual analysis collaboratively. The data generated from the collaborative visual analysis included transcribed focus group data, mapping, and note-taking. The discussions were recorded and transcribed using the digital Zoom meeting platform, which supported the theorisation. Selected findings present the inter-subjective insights of the collaborative analysis, in which the authors seek to illustrate the generative and diverting potential of art thinking, which will be presented hereafter.

Knowledge translation in ABR generates diverse insights, and the generative ability of ABR continues to motivate practitioners and researchers to challenge existing research methods and formats. The analysis by the author-participants revealed the interpretive process of generating understanding from the artworks and stories. The numbers allocated to the artworks and stories also correspond to the numbers in Table 1. Reflections from the analysis are:

When I see these artworks, it is how I read them; I see some differences. In the beginning, I was reading the keywords. When I was reading, what was the story? I was confused. Then, I turned to the artwork and tried to feel it directly. And then I felt something different - harmony. So, I then went back to the words and expressions. Then I felt like I understood. The purpose of the artwork is to understand, and the artwork helped me to reflect on my views. (Author-participant 1, 2024)

Drawing from such examples, the analysis used different shapes and colours to express the relationship between the artwork and the story. The positive triangle represents an artwork (A), and the inverted triangle represents a story (S). The same yellow colour refers to feelings of deep connection between artwork and story. The colour blue refers to when a story feels different from the artwork. The use of the different colours and shapes is illustrated in Table 1.

Symbols	Analysis
LEGEND	Stories, Artwork and Storymaker. The identities of the participants are protected,
Artwork (A)	yet we create clarity for the reader by coding and distinguishing the eight stories,
Story (S)	artwork and storymakers using numbers, e.g., story 1, 2. 3, to 8, artwork 1, 2. 3, to
	8 and storymaker 1, 2. 3, to 8.
A	This symbol represents the equal impact of the artwork and story. This implies that
	the artwork vividly and concretely reflected the story's narrative, and we did not
	need to use additional information to understand this story and artwork. This is
A=S	reflected in artworks 1, 2, and 3. The image of the scar in artwork 1 aptly reflected
	the description in story 1, "A story of adventure. It is a story of perseverance. A
	story of overcoming an obstacle and taking risks." In artwork 3, two hands held
	together illustrated a call for people to work together to preserve tradition.

Table 1. Analysing Story-making: The relationship between the artwork and the story.

A≠S	In this symbol, different colours indicate that we cannot wholly associate the artwork with its story. This is reflected in artwork 4 and 5. For example, artwork 4 is minimal and abstract, making it challenging to fully grasp the meaning of the image in the artwork alone. Upon reading the description, we can feel and interpret the green lines as representing upward movement. However, we still found connecting the visual imagery with the onigiri in story 4 difficult. <i>Onigiri</i> is a Japanese food made from rice formed into triangular or oval shapes and often wrapped in seaweed. As a result, while we could understand artwork 4 and story 4 individually, it was challenging to perceive a link between them.
S>A	This symbol suggests that the story had a more substantial impact than the artwork. When looking at artwork 6, we find it hard to comprehend its meaning. However, after reading the story, strong emotions arose, although expressing these feelings directly into words was difficult. After setting our emotions aside momentarily, we used drawing to explore the meaning and connection between artwork 6 and story 6. One picture depicted older trees' leaves turning into nutrition for young trees, revealing the connection and loss between old and young generations, which is also related to story 6. As outsiders to the specific culture referred to in story 6, it is challenging for us to empathise with it. Resonating with this artwork and the narrative of story 6 and exploring its meaning through imaging and drawing led us to understand that the meaning of story 6 is more profound than the artwork 6 itself.
Ax S>A or S	This symbol means the outcome of the interaction between the artwork and the story surpasses either of them individually, as in artwork 7. The meaning of story 7 and artwork 7 support and complement one another. Although they take on different forms, they are profoundly complementary. The relationship between artwork 7 and story 7 is closely connected, and one allows us to understand and feel the other better.
$ \rightarrow \bigcirc \qquad \qquad$	This symbol shows a complex process of understanding as represented in artwork 8. Initially, the narrative of story 8 was difficult to understand. Unlike Storymaker 8's definition of loneliness as 'blessing' and 'quiet time', loneliness is often experienced as unfavourable. However, upon feeling the artwork again, a sense of the narrative of harmony and peace was experienced through the regular circles, representing ripples on a peaceful lake. This perception helped to gain an understanding of story 8 as a cyclical process. Although we cannot combine artwork 8 with story 8 at first, the visual expression plays a crucial role in reading story 8.

Five different relationships between the artwork's visual expression and the story's narrative are presented in a limited form in Table 1, which can be expanded upon. Different patterns regarding the relationship between the visual expression and the narrative in the story-making are presented here as examples to illustrate the generative ability of art thinking in the ABR and analysis and how they can collectively serve as an approach to creating diverse understanding and insights into participants' inner worlds.

4 **FINDINGS**

The narrative extractions deriving from the collaborative analysis conducted by both authors (Authorparticipant 1 and 2) reflect the diversity and ambiguity of meanings generated from story-making. While they are complementarity, the meanings can be both implicit and explicit. Hence, the application of methodological complexity can be supportive ('a circle that helps me', Author-participant 1, 2024) in the analytical processes of ABR. However, simultaneously, it can elucidate differences, disjuncts, and uncertainties and bring forth the unsayable [30].

The artwork shows something bigger, or it shows something or explains something more than the story. But they're both related to each other; without the word's help, I can't understand the artwork, but after viewing the artwork, I also need help with the words. They are a circle that helps me understand what expression is. Some works are very direct, like the hands. (Author-participant 1, 2024)

How does thinking relate to this process? For example, our thinking is very exploratory. It is abductive. It seeks to understand what is there. It seeks to find, to discover. But it is opening our possibilities. Illuminates the resources. (Author-participant 2, 2024)

If I use some artistic tools, I have to reflect and go back to my archive to explore, not just the process. And this archive is not something passive. Some actions can trigger the potentialities to come from your archives. Your way to explore more of the resources or knowledge in their life. It's a kind of emergence; to discover. (Author-participant 1, 2024)

ABR enables mental, performative and emotional spaces for story-making (and story-finding) as generative and analytical processes in ABR. In reflection on the narrative extractions from the analysis, story-making and grasping of stories to generate understanding of one another's worldviews, complexities and sensitivities are emphasised for developing more robust analytical processes for ABR. The chance to 'visualise and emotionally connect' (Author-participant 1, 2024) refers to ABR's potential to one another's inner worlds through collaborative, multisensory, and explorative story-making. In addition, through ABR, the artworks can serve as an impetus for creating intersubjective mental overlaps and spaces for reaching out into one another's inner worlds. Author-participant 1 (2024) explained, 'I turned to the artwork and tried to feel it directly,' which resonates with Frantz Fanon's [31] notion of feeling one another as a form of proactive, compassionate empathy [32].

If we want to know another person's thoughts, initially, we all share differences. If we're going to understand another person's story, we must learn their knowledge. That knowledge only exists in that person's background. I relate to this knowledge by reading the story first and then visually analysing it as a chance to emotionally connect with the person's knowledge through the artworks that my understanding changes. That changed my perception of the meaning. (Author-participant 1, 2024)

The excerpt above illustrates the role and importance of narrative revisionism, explained in Section 2.2. Narrative revisionism enables stories to be (re)interpreted, corrected, and (re)told to represent better meaning-making, emotions, and thus the depth of understanding. The complex methods selected for the study enabled narrative revisionism as to how what occurred could be questioned. New knowledge could emerge through careful and critical views of what was presented through the textile art and written reflections by the participants.

Story-making is a complex method based on data generation and analysis through a divergent and generative process. This process brings forth diverse meanings and interpretations while embracing complexities and an exploratory mindset, as illustrated by the narratives captured by the Authorparticipants in the analysis. Table I exemplified the subjective analysis used in artwork and story analysis by eight story-makers. In addition, it promotes 'openness of interpretation' [9] and illustrates the divergent and generative ability of ABR.

Table 1 is not instructive but aims to uncover how diverse understanding and sense-making can occur using various methods and methodological complexity in ABR. It illustrates how reasoning and emotions are influenced by the artwork's intricate visual cues and symbolisms and how or whether the written stories support them. However, they also support the indirect story-making and story-finding of those who read and interpret the ABR. The analysis also sheds light on the potentials, ambiguities, and complexities inherent in applying methodological plurality.

In storyline representations, three views can exist: a) the view of the audience or broader public on the artwork and its meaning to the views or arts audiences, and b) the view of the participants on their discoveries in their arts-based expressions, and c) the view of the participants on how the audiences receive their creative expressions or artefacts and whether understanding and empathy are generated around their needs. These findings shed light on the functioning and potential of ABR, specifically the story-making method, in social design practice and research regarding the needs and challenges communities face. Communities often remain unengaged in tackling their own challenges, which may be brought on by ill-defined social interventions and social designers who assume they best understand these needs and challenges [4]. A lack of empathy underpins ill-defined interventions. Not sufficient time and care are provided to delve deeper into aspects essential to community well-being and reform. ABR can effectively address this challenge in the early stages of community intervention design.

5 CONCLUSIONS

ABR does not seek to obtain a means to an end but to uncover and generate understanding through exploration and improvisation [10]. It is a divergent and generative approach to exploring challenges in

research and practice. The improvisatory nature of story-making and its ability to stimulate re-learning and drive reform is evidenced by the excerpt *'it is opening our possibilities...illuminates the resources' (Author-participant 2, 2024).* In comparison, when pairing collaborative visual analysis with story-making, more complex, deep, and divergent findings can be generated by all researchers and participants of the ABR. Story-making can stimulate creative content generation and problem-finding while creating insights into the complexity of life experiences central to social design. It can facilitate diverse data generation, analytical approaches, and creative dissemination.

Social design can be better approached through open-ended cognitive, embodied, nonverbal, and reflexive processes to reveal participants' inner worlds, emotions, and experiences. Figure 1 presents the outcomes of the story-making, both the textile art and the written stories. In contrast, the data resulting from the authors' collaborative visual analysis is presented to illustrate the exploratory analytical approach to ABR. Table 1, the result of the collaborative visual analysis, presents an example for social design researchers and practitioners to explore people's life experiences using the analytic method developed in this study. This analytical method directly enhances empathy through the analysis of the visual information in comparison to the content of the story by creating deeper insights into the inner worlds of the participants. Integrating such methods in design contexts will set ABR's use in social design apart from socially engaged arts.

The study finds that the ABR approach story-making method can deepen insights into the participants' life experiences. This knowledge can facilitate effective social design processes to address the local change communities envision and the specific requirements they see as suitable to their contextual needs. In addition, this study illustrates that all research participants have an opportunity to participate in story-making through the creation of data and new insights, as well as knowledge production through analysis. Such methods enable the collaborative creation of knowledge, empowering participants to express their values and participate in joint data analysis through storytelling [33]. Research participants can co-analyse with researchers and collaboratively decide on the analytical methods and procedures to untangle the meanings of the data.

However, it is essential to understand ABR's limitations. While expressive, reflective, and transportive, ABR challenges social designers. This approach asks for more time, patience, creativity with communities, and a keen interest in uncovering their more obvious needs and journeys beyond the obvious [34]. Yet, some communities may resist creative approaches due to their unfamiliarity. Hence, arts-based methods must be carefully selected and integrated into social design practices, requiring additional resources in the social setting. In addition, the interpretive challenges ABR poses may create more undefined challenges than solutions. Social designers need skills in facilitation and choreography, with the first focusing on supporting dynamic group interactions [35]. The latter focuses on crafting precise, often predetermined, or pre-designed aesthetic actions brought to life through coordinated patterns and flows within environmental and spatial considerations [36].

This research is limited by being a single-setting, cross-cultural project executed as a single ABR activity. Future research should continue in different settings to validate and deliver robust results on how ABR and the story-telling method can be integrated into well-facilitated social design processes and community-choreographed social action. However, ABR's potential lies in its exploratory nature and in encouraging early research findings and theoretical explorations of the role of arts thinking as a generative approach in ABR.

REFERENCES

- Fitzpatrick, H., Luthe, T., and Sevaldson, B. Methodological Pluralism in Practice: A systemic design approach for place-based sustainability transformations. In *Contexts—The Systemic Design Journal*, 2, 2024. <u>https://doi.org/10.58279/v2003</u>
- [2] Manzini, E. Design, When Everybody Designs: An Introduction to Design for Social Innovation, 2015. (MIT Press, Cambridge, MA).
- [3] Nicholls, A. and Murdock, A. The nature of social innovation. In *Social innovation: Blurring boundaries to reconfigure markets*, 2012, pp. 1-30. (Palgrave Macmillan, London).
- [4] Goldsmith, S., 2010. In *The power of social innovation: How civic entrepreneurs ignite community networks for good*. (John Wiley and Sons, Chichester).
- [5] Ospina, A. and López, A. Luxury craftsmanship as an alternative to building social fabric and preserving ancestral knowledge: A look at Colombia. In *Sustainable Luxury and Craftsmanship*, 2020, pp.101-128.

- [6] Sarantou, M.A. and Miettinen, S.A., 2017. The connective role of improvisation in dealing with uncertainty during invention and design processes. In *Conference proceedings of the Design Management Academy*, 4, 2017, pp. 1171-1186.
- [7] Akimenko, D., Sarantou, M. and Miettinen, S. Collaborative art and storytelling as an empowering tool for social design. Sarantou, M. and Miettinen, S. (eds.), *Empathy and Business Transformation*, 2022. (Routledge, London). <u>https://doi.org/10.4324/9781003227557</u>
- [8] McNiff, S. Art-Based Research. In *Handbook of the arts in qualitative research: Perspectives, methodologies, examples, and issues,* 2008, pp. 29-40.
- [9] Chamberlain, K., McGuigan, K., Anstiss, D., and Marshall, K. A change of view: Arts-based research and psychology. *Qualitative Research in Psychology*, 2018, 15(2-3), 131-139.
- [10] Huss, E. Affinity Between the Aims of Social Work and the Mechanisms of Arts-Based Research. In *Journal: Social Work and the Arts*, 2024, pp. 107-120. (Oxford University Press, Oxford) <u>https://doi.org/10.1093/oso/9780197579541.003.0008</u>
- [11] Ledger, A. and Edwards, J. Arts-based research practices in music therapy research: Existing and potential developments. In *The Arts in Psychotherapy*, 2011, 38(5), pp. 312-317.
- [12] Wang, Q., Coemans, S., Siegesmund, R., and Hannes, K. Arts-based methods in socially engaged research practice: A classification framework. In *Art/Research International: A Transdisciplinary Journal*, 2017, 2(2), 5-39.
- [13] Seppälä, T., Sarantou, M., and Miettinen, S. (eds.) Arts-Based Methods for Decolonising Participatory Research, 2021. (Routledge, London). <u>https://doi.org/10.4324/9781003053408</u>
- [14] Diener, E. and Seligman, M.E., 2004. Beyond money: Toward an economy of well-being. Psychological science in the public interest, 5(1), pp.1-31.
- [15] Sarantou, M.A., Akimenko, D. and Escudeiro, N. Margin to Margin: arts-based research for digital outreach to marginalised communities. In *The Journal of Community Informatics*, 2018, 14(1). <u>https://doi.org/10.15353/joci.v14i1.3407</u>
- [16] Savin-Baden, M., and Wimpenny, K. Ethics in arts-related research. In *A practical guide to arts-related research*, 2014, pp. 81-95. (Brill, Leiden).
- [17] Leavy, P. Introduction to arts-based research. In *Handbook of arts-based research*, 2018, pp.3-21. (Guilford Press, New York).
- [18] Kreiner, G. E., Hollensbe, E. C., and Sheep, M. L. Where is the "me" among the "we"? Identity work and the search for optimal balance. In *Academy of Management Journal*, 2006, 49(5), 1031-1057.
- [18] Frank, A. W. Why study people's stories? The dialogical ethics of narrative analysis. In *International Journal of Qualitative Methods*, 2002, 1(1), 109-117.
- [19] Estrella, K., and Forinash, M. Narrative inquiry and arts-based inquiry: Multinarrative perspectives. In *Journal of Humanistic Psychology*, 2007, 47(3), 376-383.
- [20] Bailey, L. E. The Fabrication of Personal History (Doctoral dissertation). Faculty of Alfred University, 2014. Available: <u>https://aura.alfred.edu/server/api/core/bitstreams/30931130-830f-43ae-9d41-2157c8c938a4/content [Accessed on 2024, 22 November]</u>
- [21] Tordzro, G. K. Story, Storying and Storytelling (Doctoral dissertation). School of Education, College of Social Sciences, University of Glasgow, 2018. Available: <u>https://theses.gla.ac.uk/8941/</u> [Accessed on 2024, 22 November]
- [22] Cockton, G. Design situations and methodological innovation in interaction design. In *CHI'10 Extended Abstracts on Human Factors in Computing Systems*, 2010, pp. 2745-2754.
- [23] Kárpáti, A. Arts-Based Interventions and Social Change in Europe, 2024. (Routledge, London).
- [24] Bloome, D., Champion, T., Katz, L., Morton, M. B., and Muldrow, R. Spoken and written narrative development: African American preschoolers as storytellers and storymakers. In *Literacy in African American communities*, 2014, pp. 45-76. (Routledge, London).
- [25] Gudmundsdottir, S. Story-maker, story-teller: Narrative structures in curriculum. In *Journal of Curriculum Studies*, 1991, 23(3), 207–218. <u>https://doi.org/10.1080/0022027910230301</u>
- [26] Willett, W., Heer, J., Hellerstein, J., and Agrawala, M. CommentSpace: structured support for collaborative visual analysis. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*, 2011, May, pp. 3131-3140. <u>https://doi.org/10.1145/1978942.1979407</u>
- [27] Gaver, B., Dunne, T., and Pacenti, E. Design: Cultural Probes. Interactions, 1999, 6(1), 21-29.
- [28] Hemmings, T., Clarke, K., Rouncefield, M., Crabtree, A., and Rodden, T. Probing the Probes. In Proceedings of the PDC, 2002, pp. 42-50.

- [29] Sarantou, M., and Miettinen, S. Reflections in water: Displaying political agency through costume, performance and video. In *Studies in Costume & Performance*, 2022, 7(1), 109-126. https://doi.org/10.1386/scp_00063_1
- [30] Visse, M., Hansen, F. and Leget, C. The unsayable in arts-based research: On the praxis of life itself. In *International Journal of Qualitative Methods*, 2019, 18, 1-13. https://doi.org/10.1177/1609406919851392
- [31] Fanon, F. *The Wretched of the Earth, 2002.* (New York: Grover, 2004). Available: <u>https://www.academia.edu/download/55950513/The_wretched_of_the_earth.pdf</u> [Accessed on May 26, 2024].
- [32] Tunstall, E. Decolonizing design innovation: Design Anthropology, Critical Anthropology, Indigenous Knowledge. In Gunn, W.; Otto, T.; Smith, R. C. (eds), *Design Anthropology: theory and practice*, 2013, pp. 232-246. (Bloomsbury, London, New York).
- [33] Shea, M. V. Developing Methodologies for Co-Production of Knowledge: Data Production and Analysis in Community-Based Research Partnerships. In *Qualitative Inquiry*, 2024, 31(1), 3-18. <u>https://doi.org/10.1177/10778004241227268</u>
- [34] Sarantou, M., Novoa, C.G., Remotti, S. and Alhonsuo, M. More Patience and Creativity: Team Learning in Online Stakeholder Workshop settings. In *Research in Arts and Education*, 2021(3), pp.1-28.
- [35] Schwarz, R.M. The skilled facilitator: A comprehensive resource for consultants, facilitators, managers, trainers, and coaches, 2002. (Jossey-Bass, San Francisco, CA).
- [36] Butterworth, J. Dance studies: The basics, 2011. (Routledge, London).