Seeing Histories in Bodies, Places, and Disciplinary Learning: Historicizing Methodologies

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Abstract: In this symposium, we will reconceptualize our methodologies and research design centering histories in places, bodies, and disciplinary learning. We re-engage in qualitative methodologies that guided us so far yet limited us in fully accounting for the sociopolitical and sociohistorical nature of our research and analyses. This symposium challenges individualized knowledge production and invites the field of the learning sciences to bring forth collective and dialogic figuring and refiguring, co-thinking, and community/solidarity building. Four sets of paired dialogues will defamiliarize familiar methodologies in the learning sciences (e.g., video-based research, interaction analysis, ethnography) toward fuller consideration of power and radical transformation. These paired dialogues will also open new horizons on the role of arts and affect in research from the perspectives of histories in places and in bodies. Collectively, we will revisit the epistemological assumptions that shaped what were rendered visible and invisible in our research process.

The overall focus of the symposium: Historicizing methodologies

Background

The International Society of the Learning Sciences Annual Meeting in 2022 will be held in Hiroshima, Japan – where histories of militarism, war, and colonial violence are still vividly inscribed within people, buildings, and ecosystems even after 76 years since the atomic bomb was dropped. Disciplinary learning, which is at the core of our inquiry in the learning sciences field, is never in a historical vacuum. Learning is "fundamentally cultural, unfolding through multiple pathways that occur in relation to shifting social and contextual conditions, to which humans are constantly adapting" (Lee, et al., 2020, p. xvii). STEM disciplines carry histories of colonialism and militarism and have directly contributed to destroying bodies and places (Philip et al., 2018; Takeuchi et al., 2020; Vossoughi & Vakil, 2018). As we center historicity in our conceptualization of disciplinary learning, we are grappling with a question: How can we account for the ghosts that haunt our historic present (Gordon, 1997). What will the ghosts in Hiroshima speak to us as we reconfigure the portraits of learning, learners, and disciplines in the post-pandemic world?

In our recent scholarship and panel discussions, we have collectively been pushing the field of the learning sciences to interrogate ahistorical epistemological assumptions on bodies, places, and disciplinary learning and calling for fuller accounts on historicity, coloniality and power (Ali, 2018, 2019; Avraamidou, 2020; Davis & Schaeffer, 2019; Marin, 2020; Martins, 2020, Philip et al., 2018, Philip & Sengupta, 2021; Takeuchi, 2021; Vossoughi et al., 2021). Our ISLS 2021 panel, *Expanding Conceptions of Learning: Colonialism, Social Movements, and Possible Futures*, identified some of the edges in our field: a) colonial histories and materiality/notability, b) racialization and discipline across countries (beyond the US), c) learning, freedom and agency, and d) criticality, ethical relations and possible worlds. In one of our dialogues, Audrey Msimanga reminded us of colonial narratives around learning and learners perpetuated upon people in the Global South:

> This local, national, continental and even global narrative that "something is not there" in the African child is often what shapes thinking about education in the Sub-Saharan Africa contexts that I have worked in. It is not unusual for a whole systemic reform or a review of the curriculum, a rethink of pedagogical approaches and/or assessment practices to be framed around just addressing "what is missing" in the learner. What is more, this broader narrative then filters

down and bears nasty stubborn babies in the heads of teachers and learners themselves (A. Msimanga, Personal Communication, May, 2021).

How can we, as the field of the learning sciences, shift away from this damaging narrative of deficiency, incompleteness, and insufficiency imposed upon learners under the guise of development and learning?

The field of the learning sciences is dynamically shifting to center learning that happens in the forms of collective resistance and protest (e.g., Special Issue organized by Curnow & Jurow, 2021), of prefigurative relationship-building processes (Uttamchandani, 2021), of multigenerational alliances (Tivaringe & Kirshner, 2021). Despite these shifts, the methodologies we draw from in our field remain largely devoid of full consideration of histories of places and bodies. The taken-for-granted White gaze (Toni Morrison quoted in Paris, 2019) assumed in "ethnography" has largely remained unquestioned. Colonial assumptions that separate human and more-than-human behind interactional analysis (Jordan & Henderson, 1995) have just recently begun to be questioned (Krishnamoorthy et al., 2021; Marin, 2020). How can we reimagine histories of surveillance and inherent power (Ali, 2018) reproduced through video-based fieldworks? Taking account of what is shifting and what remains unchallenged in the field, in our symposium, we aim for critical accounts of histories inscribed in places and bodies by reimagining our methodology. We will collectively re-figure ways in which we might reconceptualize our methodologies and research design as we take histories in places, bodies, and disciplinary learning seriously. Through our symposium, we pose questions to ourselves and to the field of the learning sciences: What kinds of questions do we have to ask for (and of) ourselves to deeply engage in historicity through our analyses and design? How do we re-engage in classic qualitative methodologies that have guided us so far, yet limited us in other ways? How could we reconceptualize our methodologies while accounting for sociopoliticalness and sociohistoricalness in our research and analyses?

In line with learning sciences scholarship focused on communality, justice and design (e.g., Davis & Schaeffer, 2019; Gutiérrez, & Vossoughi, 2010; Special Issue organized by Curnow & Jurow, 2021), we propose this symposium as an intentional shift away from methodological approaches that privilege individualized knowledge production and those that treat disciplines and methods in the field of the learning sciences as settled. In our call to deepen and historicize methodologies, we are drawn to interrogate the meaning and purposes of researcher reflexivity. Traditionally, the notion of researcher reflexivity calls for scholars to name intersectional identities and describe what we see as proximal histories (e.g., to characterize recent interactions and relationships to places and participants). Positionality statements, now a gold standard of qualitative research, may be contextualized by entries in fieldwork journals that are seldom (and never fully) represented in reports of research findings. While this attention to reflexivity represents an important departure from the positivist research stance, this notion of reflexivity does not necessarily invite or demand inquiries into collective histories of experience. Our methodologies may demonstrate an awareness of inter-subjectivity but inadvertently obscure the long and complicated histories that stretch across places, bodies, and time. At the same time, we recognize that important forms of reflection and insights into the relationships cultivated between learning scientists and research participants are sometimes intentionally withheld. We question what counts as disclosable and relevant to the study of learning, when and for whom accounts of identities and methodologies may fall short in capturing the richness of human experience (Bang & Vossoughi, 2016; Philip et al, 2018). Consequently, we seek to analyze, together, methodological efforts to "resist and navigate potentially disempowering social systems" (Lee, 2017, p.x) to include reflections on how our own vulnerabilities (Behar, 1996; Howard, 2020), knowledge, histories (Gutiérrez et al, 2017) and commitments inform what we notice and interpret.

Our ISLS 2021 symposium challenged individualized knowledge production and moved us to collective and dialogic refiguring of the field of the learning sciences. Unlike a traditional symposium that is formed by a set of related yet independent research papers, our symposium will result from our ongoing dialogues as pairs and as a whole group. In preparation for this symposium, we will continue this process of co-thinking and co-figuring by engaging in shared textual reading and paired and group analyses of data. During the symposium, we will extend this co-thinking and co-figuring to the audiences and participants by sharing our unfinished thoughts, our embodied tensions and dilemmas as learning sciences researchers, and inviting contemplations and questions from the audiences.

Description of Each Paired Paper

The first paper critically reflects on the collection and analysis of video data from an ongoing project on land-based disciplinary learning with refugee children. Highlighting moments of youth agentic selection (Ali, 2018), authors explore the subtle agentic moves that children use to communicate what should not or cannot be captured by the camera, in light of the geopolitical configuration of identities (Takeuchi, 2021). Paper two pursues questions about Interaction Analysis (IA) and ethnography by co-analyzing key moments from a community-

based summer program and a collective of improvisational jazz artists and musicians. Findings consider if/how IA can function as a tool for radical transformation and facilitate generative forms of relational praxis (Gutiérrez & Vossoughi, 2010) and accountability. Paper 3 invites a reimagining of the study of affect in the Learning Sciences that includes attention to emotional configurations (Vea, 2020) that emerge over time. Drawing examples from two projects that investigated students' layered sensemaking in STEM, the authors analyze how the felt dimensions of learning can also be viewed as embedded within longer, racialized histories of power. Finally, Paper 4 considers the role of arts-based methods as tools for disrupting narrow, exclusionary conceptualizations of science. Taking examples from projects situated in Brazil and the Netherlands, the authors describe the relationship between the methodological design, youth participation and longstanding issues of colonialism and power in science.

Format of the Symposium

For the symposium, each pair will present methodological insights developed through analyzing empirical data to explore histories in bodies, in places, and in disciplines. Each pair will share portions of their shared analyses salient for rethinking social research methodologies from sociohistorical and sociopolitical perspectives. Each pair will analyze (or reanalyze) data from our ongoing and previous works. In this process, we will defamilialize familiar methodologies and methods of analyses, and revisit some of the epistemological assumptions that shaped what were rendered visible and invisible in our research process. As a group, we collectively identify some areas where our field may further develop its tools and insights in order to account for histories in places, bodies and disciplines — through research methodology. This session will last ninety minutes, beginning with a five-minute introduction by the session co-chairs. Following, four papers will be presented (15 minutes each). The co-chairs will then facilitate a conversation across the papers for five to ten minutes. We will conclude this session with a fifteen-minute reflection and response on audience comments on the digital white board. We will also allow participants to engage in reflection or ask questions during these concluding fifteen minutes. Recognizing the limitations and opportunities of an online conference symposium, we have decided to utilize a digital white board to allow participants to engage in reflection and response, in real time. A digital white board allows for multiple streams of conversation to happen parallel, as opposed to utilizing a chat window. The whiteboard will include a guiding question developed for each paper as well as an overall guiding question. An example question is: 1) how we might more fully account for, and attend to, what constitutes post-Cartesian "rigor" in data collection and analysis as we attempt to shift away from Eurocentric, Western epistemologies? Over the course of the symposium, participants will be reminded to engage in conversation and response on the digital white board.

Off camera scripts in video research: Histories and politics of visibility

Arshad Ali, Miwa Aoki Takeuchi

Video-based research has been one of the primary research methods being used in the learning sciences (Derry et al., 2010). Video cameras are never neutral records of human activity. Rather, cameras are directed in particular directions to capture specific events, and more importantly, to not capture activity beyond the frame. Be it human, motion detection or algorithmic, the directionality of cameras is not without context, meaning and purpose (Ferguson, 2019). Beyond directionality, cameras themselves often represent a manifestation of the carceral state in the lives and experiences of poor and youth of color (Gregory, 2020). This is especially true for the communities that are under the threat of police surveillance. The presence of video cameras can inscribe traumatic relationships and panopticonic gazes (Foucault, 1980, p. 39) of being seen in public spaces (Ali, 2019). The field of the learning sciences has not fully articulated the histories of construction of Other (Said, 1978) through video-based research, and explored the material and epistemological limitations of this tool. Our dialogue critically reflects on what our research tools, including video cameras, produce and reproduce in the process of the learning sciences research.

We engaged in collective viewing of video data collected by an ongoing research project with refugee families and children's intergenerational wisdom sharing and land-based disciplinary learning in urban farms. The project was conducted in urban farms in the land of Treaty 7 regions during the COVID-19 pandemic and we analyzed video data and fieldnotes collected over 11 visits from August 2020 to September 2021 (each visit lasted 60 to 150 minutes). Video data were collected using a hand-held camera (worn by a researcher and participants), a wearable camera (worn by a researcher and participants), and a smartphone camera of a researcher. In this paper, the authors engage in shared analyses of what becomes visible and invisible in the video data and fieldnotes to each of us, who come with different histories and ontologies.

Our dialogue highlights moments of youth's agentic selection (Ali, 2018) of what should be presented and erased as data in the presence of a video camera. Recognizing the right and potential of participant refusal (Tuck & Yang, 2014), we, together, unpacked subtle agentic moves by young children to show what should and should not be documented in the video data, as well as what cannot be documented, in light of the geopolitical configuration of identities (Takeuchi, 2021). Our dialogue directed us to comparatively look at what was unveiled and hidden between when a video camera was on and off. For example, in the face of racism experienced on historically predominantly white farmlands after colonization, a refugee child from Syria only shared their experiences of racism and verbal and physical attack in the process of shared walks (Lee & Ingold, 2006; Marin & Bang, 2018), without a video camera. Children used a still camera to take photos that euphemistically reflect their racialized experiences, without explicitly explaining them verbally. In contrast, when the video camera was on, children shared the experiences partially, without explicitly naming the details of their experiences. We interpreted these moments of youth's agentic selection as key to interpreting macro carceral contexts and panoptical white gazes (Morrison, in Paris, 2019) and refusal (Tuck & Yang, 2014) for dignity (Espinoza et al, 2020).

Our dialogue through shared analyses raises questions to the field about the role of the learning sciences research in reproduction of surveillance and racialized gaze through video-based research. Our dialogue also identifies moments of youth's reappropriation of video and still cameras to challenge hierarchical relationships on seeing and being seen.

We will conclude our presentation by engaging the panelists and audience in a conversation exploring the significance of off-the-record (Ali, 2018) scripts for learning, and ask how we might more fully account for, and attend to, what constitutes post-Cartesian "rigor" in data collection and analysis as we attempt to shift away from Eurocentric, Western epistemologies.

Relational Ethics, Researchers as Learners and Methodological Futurities

Ananda Marin, Shirin Vossoughi

In what ways can Interaction Analysis (IA) and related ethnographic methodologies seed radical transformation? What role does deep engagement with the histories of bodies, places and disciplines play in such possibilities? We pursue these questions through close engagement with two settings where we participated in co-design relations that preceded and spilled out beyond "researcher" in ways that matter for how we understand the roles of research. We co-analyze key moments from one another's settings to consider how our training in IA and ethnography served as axiologies that shape everyday relations, particularly when shared political and educational work are leading activities and research is reconfigured as a form of learning towards those evolving ends.

In the first setting, ethnographic and interactional methodologies (McDermott & Raley, 2011) were utilized to scaffold teacher learning through careful attunement to pedagogical interactions. Within a teacher residency program that combined university courses on learning and educational justice with guided participation in a community-based summer program serving Black and Latinx middle school youth, the broader study considers the pedagogies and forms of co-teaching that supported teachers to attune to the histories of bodies, places and disciplines in ways that nurtured deep shifts in their ways of being with children. We draw on teacher fieldnotes as well as the dialogic feedback they received from researchers/teacher educators to examine how a novice teacher shifted their own talk and embodied interaction with a student in ways that reached towards an ethic of relationality, racial justice and holistic personhood. This empirical story helps us consider how criticality becomes necessary but insufficient for supporting educators to perceive and construct possible futures in here and now activity (Bang, 2020; Bang & Vossoughi, 2016).

In the second setting, co-design (Ishimaru et al., 2018) and conversational methods (Kovach, 2010; Wilson, 2008) were used as tools to explore how collaborative and improvisational performances become contexts for the microgenetic and ontogenetic development of skills, knowledge, and capacities across time, space, and social relationships. This project invited a collective of five Chicago-based improvisational jazz artists and musicians that routinely perform together and apart in various combinations of ensembles to use the tools of research to engage in and reflect upon their routine activities (i.e., designing and enacting a conversational concert and listening session). We draw on video and transcript data from co-design sessions to examine how genealogy and kinship (Janke & Gilles, 2012) were evoked to create contexts for participants to mobilize research toward their own desired ends — engaging in processes of relationship building through historicizing their own embodied and geographical stories of artistic creation. We consider how material relations (i.e., instruments and artistic tools) not present in the scene are made relevant through processes of remembering and storying, troubling tendencies towards relational dehistoricizing in IA.

Both studies consider what it can mean to understand researchers as learners who observe to participate and participate to observe in ways that can facilitate a relational praxis (Gutiérrez & Vossoughi, 2010). We consider interactional and ethnographic sensibilities as both scaffolded and endogenous to life (people are always already reading bodies, place, race, gender etc.) in ways that highlight the complex, sedimented layers of everyday activity. We work together to articulate how the growing attention to criticality in the learning sciences might reimagine and reorganize research towards transformative ends, raising questions about anchoring a critical politic (only) in the deconstruction of research as power. Here we draw on Indigenous and Māori centered work on the centrality of kinship and genealogy (Jahnke & Gillies, 2012), as well as ideas of "worthy witnessing" (Winn & Ubiles, 2011) to support relational accountabilities and the co-creation of possible futures.

Studying Affect and Learning through Lenses of Collective Memory, Histories, and Imagination

Natalie R. Davis, Thomas Philip

Research on teaching and learning has long focused on the role of emotions and affect (Boler, 1999; Fredricks et al, 2004; Vygotsky, 1987). Much of this work has explored how emotions serve as a conduit for learning by shaping motivations to learn and participate within communities of practice (Vea, 2020). More recently, scholars have advanced research that (re)considers emotion as a target of learning, and that recognizes the collective, political and ideological understandings represented through affective stancetaking (e.g. Boler & Zembylas, 2016; Curnow et al, 2021; Vea, 2020). While the Learning Sciences has demonstrated a growing interest in examining the affective dimensions of learning, there has been less focus on the methodological frameworks and tools needed to deepen understandings of emotion as situated in collective memory, histories, and imagination.

One of our primary concerns lies in the methodological tendency to overemphasize researcher-observed, individualized, universal and/or discrete constructs for emotion. An exclusive focus on an individual's affective experiences through this lens may obscure the complex relationships between affect, sociopolitical histories and contexts. For example, traditional ethnographic methods and discourse analysis are less likely to provide insight into affective experiences of learning that are not overtly expressed in the body at present or articulated aloud (Parks, 2020). Outbursts are documented but more subtle felt understandings tied to histories of power and race often drop out of our analyses. This may inadvertently suggest that learning only carries emotional valence at particular moments in time and in direct response to recent stimuli. Classical methodological approaches may also de-emphasize the racialized, gendered and/or aged experiences of learning to negotiate, subdue or internalize emotions in educational contexts. How do we account for the felt dimensions of learning that may be discerned in interaction while also interrogating if/how/when full emotional expression is constrained or otherwise less visible? As an alternative to decontextualized and individual assessments, the lens of emotional configurations helps us name and study the "situated and reciprocal interrelationships between feeling, conceptual sense-making, and practice that give emotion social meaning in the learning of individuals and collectives" over time (Vea, 2020).

In this paper, we revisit comparative cases from our individual work focused on ethics, historicity, politics and STEM learning. The first case draws data from a project that investigated Black children's layered meaning making during a classroom unit on water (Davis & Schaeffer, 2019). This work centered analyses of the socioscientific and felt dimensions of learning about water justice, a topic which can also be viewed as layered and embedded in longer, racialized histories of power. The second case explores undergraduate students' sensemaking in an engineering ethics class focused on militarized drones (Philip et al., 2018). The re-analysis presented here situates the localized manifestations of affect within the broader historical memories and ideologies of colonialism, imperialism, and nationalism. Looking across our own research, we consider the methodological openings and tensions inherent to work focused on affect, learning and justice. Applying the lens of emotional configurations and Gordon's (1997) notion of haunting, we look closely at textual and visual data to determine if/how they might serve as a window into collective histories of sociopolitical striving and human suffering.

Our findings raise questions about how we represent and study affective experiences in spaces of learning. Where the learning sciences has in large part focused on how individuals feel, our analyses suggest that collective longings for justice, imagination and shared felt experiences also co-construct learning in important ways. In the case of the water justice example, Black children's strong emotional responses to and learning about the Flint water crisis were also connected to their layered understandings and awareness of racism. We conclude with ideas for how researchers might become more methodologically attuned to collectivity and histories while also attending to the nuances of affect in moment-to-moment activity.

Arts-based methods in exploring issues related to power and colonialism in science participation

Lucy Avraamidou, Isabel Martins

Our purpose in this paper is to argue about both the need and the value for disrupting specific conceptualizations of the nature of science (i.e., white, heterosexual, middle-class men with superior intellect producing absolute knowledge in an isolated, culture-free, and methodical way) through capitalizing on ethos: scientific knowledge should be accessible to all members of the scientific and social communities to use. Toward this goal, we will engage with the following questions: a) How have understandings of the nature of science contributed to conceptualizations of who can be a scientist and who is recognized as a scientist? b) How are these understandings tied to issues related to power and colonialism in science education, c) How have these conceptualizations contributed to producing exclusionary narratives and perpetuating inequalities in science? d) How might arts-based methods be used to explore issues related to power and colonialism in science participation?

In exploring these questions, we draw from research projects carried out in the context of the Netherlands and Brazil and provide empirical evidence of how various arts-based methods (e.g., narrative production, life stories, photovoice products, writing and poetry) were used to explore issues related to power and colonialism in science participation in the context of after-school science programs with young children.

The first research project is situated in the Netherlands and examines the ways in which out-of-school, STEM community-based programs might serve as a means for disrupting monolithic conceptualizations of the nature of science and existing exclusionary narratives of who is considered a legitimate producer of scientific knowledge (Avraamidou, 2021). This is especially important in former colonial contexts, such as the Netherlands, which, unlike other European countries lags behind in processing its colonial past across educational institutions (Wekker, 2016). Hence, the out-of-school program, theoretically framed in Culturally-Relevant/Sustaining Pedagogies, aims to serve a group of young children with a migration background. The project comes as a response to the urgency and value of engaging with a set of underexplored questions that relate to issues of colonialism, power, and racism, in science education in the Netherlands.

The Netherlands is used as an example of a country with a colonial past, in order to make the case for the urgency and value of addressing goals related to social justice in education. This interest is rooted within the fact that the community of educational researchers, especially in the area of STEM education, have remained largely uninvolved with research that examines issues related to access, inequality, colonization and equity.

The second research project is set in Brazil, a country where race relations have been shaped along almost four centuries of slavery of Black populations who were brought by force from Africa. For Gomes (2003), one of the challenges faced by Black populations in Brazil is "to build a positive Black identity in a society that, historically, has taught black people from very early on that in order to be [socially] accepted, it's necessary to deny their own identity" (p. 171). In 2003, following years of claims by social movements, a federal bill made the teaching of Afro-Brazilian and African History and Culture compulsory in Brazilian Basic Education. Although authors like Santos and Neto (2011) acknowledge that the school alone will not be capable of reversing years of disqualification of the black population and consequent social injustices, several efforts have been made to reinforce the role of schooling in fighting against racism and overcoming prejudice (Verrangia 2014). The project analyses the efforts of a community of learning which gathers university researchers, pre-service and in-service teachers, and research students in order to develop contents for a website that explore approaches to racism in the science curriculum. Contents are organized as Questions & Answers which address issues such as: social media algorithms that select and erase images of people according to phenotypic aspects; ways through which structural racism in Brazil shapes social and professional relations in science; expressions of scientific racism concerning health rights of the Black population, amongst others. Analyses explore transdisciplinary contributions to the understanding of racism and its curriculum representations as well as ways to fight it.

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