

## Co-Fostering Translanguaging Spaces through Design for Embodied (Re)connection

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**Abstract:** Building the scholarship on design and equity in the learning sciences, our work attends to the role of languages, power, and historicity in the design process. In this paper, we discuss our design approach to challenge normative power dynamics by centering the concept of translanguaging in a land-based program with refugee children, on an urban regenerative farm. Our design is nested in the larger vision shared by participating teachers for reclaiming power and shifting normative power dynamics through languages. Guided by the corporeal and spatial expansion of languages, we focused on children's embodied employment of collective community practices, land-based knowing and full repertoires of semiotic resources in the presented co-fostered interactional moments. Through our interaction analysis, we highlight the child-led expansion of semiotic repertoires, embodied representations of community, identity and (re)connection to the land. These child-led moments forge new pathways for equity and design.

### Introduction: Power and historicity in design

Design is never politically neutral. From benches in the park to algorithms ubiquitously used in our daily lives, design discriminates (Benjamin, 2019). As we consider design that either perpetuates or challenges oppression and discrimination, we need to attend to the “account[s] for critical historicity, power and relationality” (Bang & Vossoughi, 2016, p. 173). Designing learning environments for equity explicitly focuses on the vision for breaking down existing oppressive systems and examines transformational learning opportunities for people and communities to make sense of their identities as designers of possible futures (Gutiérrez & Jurow, 2016). Focus on power and justice in design have been highlighted in the forms of participatory design (Bang & Vossoughi, 2016), social design-based experiments (Gutiérrez & Jurow, 2016), and design justice (Costanza-Chock, 2020). In the process of design toward equity and justice, researchers may outline a viable learning trajectory, but the pathway must remain open-ended for the community members and learners to imagine and design their own futures as “lived experience is non-transferable” (Costanza-Chock, 2020, p. 83). As “equity is both ideal and pragmatic” (Gutiérrez & Jurow, 2016, p. 6); designing for equity is an ongoing process where researchers critically evaluate any reproductions of oppressive norms and navigate tensions between systemic constraints and need for social transformation (Bang & Vossoughi, 2016). Building on this body of scholarship on design and equity, our work adds to the discussion on the role of power and historicity in design, by focusing on the role of languages in the design process. In our design of the land-based learning pedagogy, *Soil Camp*, we intentionally positioned facilitators, and children as *co-learners in front of the land*. Soil Camp is a summer outdoor learning opportunity serving refugee children in Calgary, Canada and a designed network toward eco-social justice (<https://www.soilcamp.ca/>). Alongside predominantly racialized, multilingual educators, together we collectively reconnect with the soil, community and silenced histories on land, while deepening our understandings through relational and embodied transdisciplinary STEM experiences. This was intentionally created as an act of “deepening learning and contributing to a more equitable social world” (Gutiérrez & Jurow, 2016, p. 30). Given that almost all the children who participated in Soil Camp are Indigenous in their countries of origin, reconnecting with the land is the act of *presencing* (Nxumalo, 2019) their intergenerational wisdoms in the predominantly white farmland landscape. This act of presencing is intertwined with resistance, agency, and transformation in the everyday acts of Othered bodies-in-places by making their presence visible through occupying, gathering, and renewing the place (Nxumalo, 2019).

In this paper, we draw from the concept of translanguaging in our design, the agentic and dynamic linguistic practices of multilingual people, which cannot be confined to named languages (García & Wei, 2014). Translanguaging challenges colonial monolingual norms and dominant deficit discourses on language minoritized people and communities by recentering the speaker and their unique lived bilingual language experience and semiotic repertoires embedded in (their displaced) lands (Thraya & Takeuchi, 2022). In our design of Soil Camp, we closely attended to spatial aspects of translanguaging inspired by Wei (2011): “translanguaging spaces are not physical locations or historical contexts only, but are networks of social relations...that are created

by individuals through distinctive (of the network) and shared (amongst the network members) practices for specific social purposes" (p. 1225).

An iterative process to design was employed using the aforementioned framing and guided by the voices of our co-learners, their organic languaging practices, and holistic identities. In our Year Two of the design, by bringing forth the notion of translanguaging design for equity, we attended to the aforementioned need for “critical historicity, power and relationality” (p.173) as discussed by Bang and Vossoughi (2016). The central thesis for this design saw translanguaging spaces as nested in the larger vision for reclaiming power and shifting normative and oppressive power dynamics. This co-fostering process challenged the colonial matrix of power that exists within educational spaces that continues cycles of oppression due to the differential power ascribed to peoples, languages, histories, and ways of knowing. Through this, as we will show in our Findings, democratized relationships emerged across these contexts. This paper is guided by the following inter-related and nested research questions:

1. How did facilitators and children enact participatory design in a translanguaging space that centers equity and shifted the normative power dynamics?
2. In the designed space, how did co-learners co-construct the translanguaging space?
3. How can co-fostered translanguaging spaces develop avenues for collective and individual (re)connection?

### **Framing languages in design for learning: Designing translanguaging spaces for equity**

The designing of learning environments that carefully attend to and listen to polylingual repertoires can open up new pathways for non-dominant children’s identity and learning (Gutiérrez, Bien, Selland, & Pierce, 2011; Lizárraga & Gutiérrez, 2018). As Lizárraga and Gutiérrez (2018) have shown, children can open up the new learning as organizing possible futures in the spaces that embrace fluid boundary crossing and *nepantla literacies* (p. 39), which cannot be conformed into normative linguistic practices (e.g., the ones that have often been imposed on non-dominant children in school settings). Semiotic repertoires cannot be completely seen, but through design we can improve the accessibility to such resources. Our design and analysis share this orientation to in-betweenness, fluidity, and children-led space creation leveraging their already existing linguistic repertoires.

Thus far, the conceptualization of translanguaging has been anthropocentric, focusing on human communications yet can be reframed as “a pedagogical tool for (re)connection with each other, intergenerational knowledge, and more-than-humans” (Thraya & Takeuchi, 2022, p.616). Moving beyond our previous conceptualization, we push for viewing translanguaging from an embodied and historicized lens. Marin (2020) reminds us that those who research STEM education should develop systems of analysis and ways of seeing and listening that allow us to “re-member (Grande & McCarty, 2018; Wa Thiong’o, 2009 as cited in Marin, 2020) relationships between land, humans, and more-than-human relatives” (p. 31). As children engage closely with more-than-human lives on lands (Marin & Bang, 2018), they could engage in translanguaging practices that go beyond human-to-human communications. Based upon our findings from Year One, we continued to explore the extended notion of translanguaging to account for the relationality beyond human-to-human connection, to include more-than-humans, land and silenced knowledges (Thraya & Takeuchi, 2022). This theoretical push is increasingly pertinent with the current global influx of displaced refugee families embodying agricultural experiences who are stripped from their generational connection to more-than-humans through the resettlement process.

Scholars who study translanguaging have proposed an expanded view of translanguaging to include nonlinguistic modes including embodied communicative practices (Blackledge & Creese, 2017; Suárez, 2020). The attention to embodied communicative practices within translanguaging enables “a holistic focus (addressing ideologies, histories, potential and constraints) on action that is both multilingual and multimodal” (Kusters et al., 2017, pp. 11). As Suárez (2020) demonstrated, embodied translanguaging practices enable linguistically minoritized learners’ expansive expression of scientific models. Such embodied translanguaging can be spatially expanded “assembled in situ, and in collaboration with others, in the manner of distributed practice...beyond the linguistic to include all possible semioticized resources” (Canagarajah, 2017, p. 37). Canagarajah (2017) emphasizes on the spatial repertoires being “embedded in the material ecology and facilitated by social networks” (p. 37). The semiotic ecosystem of Soil Camp showcases “an assemblage” of “different trajectories of people, semiotic resources and objects [can] meet at particular moments and places” (Pennycook, 2017, p. 280). These assemblages (as Pennycook conceptualized based on Deleuze and Guattari’s posthumanist conception of assemblage) are powerful interactional becomings, which are highlighted in the chosen episode.

## Methodology

We draw from participatory social design research methodology (Gutiérrez & Jurow, 2016) that centers historicity, diversity, equity and ecological resilience as design principles and aims to co-design just practices and futures in partnership with a range of communities. We are also guided by Indigenous ways of knowing and decolonizing methodology that acknowledge colonial relationships reinforced by research and honour and carefully listen to the voices of Indigenous people (Smith, 2001; Marin, 2020). Aligned with design-based research that values iterative cycles of development, implementation, and study of design (The Design-Based Research Collective, 2003), our design has emerged from multi-year collaborations and redesign. One of the foci of redesign was around linguistic practices through our reflections on linguistic design for equity and justice. Our methodological commitment oriented us to analyze interactional phenomenon of translanguaging (García & Leiva, 2014) while historicizing the phenomenon of translanguaging in light of macro histories. As we analyzed the interactions, we closely attended to the power dynamics surrounding the participants, colonial histories (between humans and between humans and MTH), and linguistic norms reproduced or challenged in particular interactions.

Since 2021, in total, 85 children (5 years old to 15 years old) and over 20 families joined our program, Soil Camp. All attendees were refugees from Syria, Northern Iraq, Kurdistan, New Guinea, Pakistan, South Sudan, Ethiopia, and Eritrea who had resettled in Canada within the last five years. Eighteen teachers and teacher candidates (who are mainly racialized multilinguals) joined as facilitators of Soil Camp. A team of researchers collected the following datasets from two iterations of Soil Camp that took place over two years. The video data was collected using three modes (Go-Pro cameras worn by both the participants and by the researchers, Handycam video cameras held by the participants and researchers, as well as still cameras that were stationed on tripods in the primary spaces of interaction). A total of 91 hours and 35 minutes of video data was collected by the research team. For this paper, we draw from video data collected during the second iteration of Soil Camp (totaling 5 hours of video data) to gauge emerging interactional phenomenon under the design that was intentional about leveraging participants' translanguaging experiences.

Our analysis started from our collective reflections on learning moments that speak to the analytic foci of embodied translanguaging practices. These focused learning moments are partially guided by our positionalities as researchers/facilitators. Sophia Thraya (Author 1) is a second-generation Canadian of the Lebanese diaspora and self-identifies as bilingual, holding both English and Arabic in her linguistic repertoire and dear to her heart. Her partially shared histories and previous engagements with and within the community has provided her with ethical engagement affordances, but more importantly the responsibility to continue to seek guidance. All the co-authors were racialized, multilinguals with the lived experiences of immigration. Although our positionality goes beyond what can be summarized in these few sentences, our analyses were guided by our personal and collective histories that shape reflexivity and sensitivity to certain aspects of learning. Drawing upon theories of learning and knowing, we take an introspective multi-level sociocultural approach to critically analyze micro-moments of interaction within the greater macro institutional and historicized climates across spaces. Our analysis emerged from analytical gazes wherein first-, second-, and third-person testimonies are intertwined (Espinoza et al., 2020). Our analysis was possible because we had shared experiences of being together on the land with children during summer camps over the past two years. These shared experiences allowed us to surface the layered translanguaging practices and the interactional co-fostering of the translanguaging space through collective movements-with-the-land.

After analyzing the data from Year One, there were many significant insights into the organic language practices and the power of such a stance in learning environments. As we pursued analysis of Year Two data, we paid attention to the enactment of redesign and intentional enaction of translanguaging practices. We then analyzed segments of data where the participants were bringing in non-dominant (and often censored) languages in institutionalized schooling spaces. Collective viewing of data and collective analysis were followed to bring multiple voices into video data analysis. Subsequent to these collective viewing sessions, we transcribed key segments of data as compelling enactment of translanguaging initiated by the participating children. Guided by the corporal expansion of languages, we attend to children's embodied employment of collective community practices, land-based knowing and full repertoires of semiotic resources in the presented co-fostered interactional moments. We examined how children provided glimpses of their semiotic repertoires which forge new pathways for embodied representations of community, individual identity and MTH (re)connection by moving beyond the planned activities.

## Findings

### Iterative design reflection: Enacting participatory design in translanguaging spaces

Integral to Year Two iteration was the co-fostered translanguaging through intentionally concretized design elements. From the Year One observations of ideational artifacts (Nasir, 2004), Thraya concretized key elements within the space that served as “transformational tool[s] for deconstructing the colonial views of what it means to learn in educational spaces and with what languages” (Thraya & Takeuchi, 2022, p. 7). Concretized elements were both explicit and agentic in nature.

The first concretized element to this iteration was the official statement of listening together to the histories, languages, and stories through anti-colonial relationality within Soil Camp’s vision and grounding epistemologies; directly connected to the central thesis for design centering power and presencing in the linguistic design for equity and justice. Prior to the start of Soil Camp, the preservice and in-service teachers and researchers became familiarized with our grounding episteme through professional development sessions to explicitly discuss the theory and pedagogy of translanguaging as a tool for (re)connection based upon the Year One findings. This integral dimension of the project was revisited daily and reflected upon throughout the iteration as our predominantly racialized multilingual educators co-enacted this episteme with the children. This episteme was presented to the children through various collective consciousness raising conversations and whole-group exercises. An example of this is when all participants, including facilitators and researchers, shared the languages that they held in their hearts which we termed “translanguaging hearts.” Going around in a circle, children witnessed the meeting of individual and community multilingual identities. This was a key moment in the assembly of the Soil Camp spatial repertoire. Seeing others with similar as well as different repertoires to their own coming together in the space was transformative in abolishing English monolingual superiority. As a result, languaging coming from the peripheries became centered in the “learning space.” Our collective stance was reminded to all through our daily affirmation which was modelled by facilitators and repeated by all in our morning arrival meeting. Such an explicit affirmative stance directly countered the macro-level oppression and deficit linguistic ideologies present in disciplinary spaces as part of broader colonial agendas. The affirmation read: *I will learn with my whole language heart, I will connect with my beautiful knowledges and speak with the words that flow naturally, I will (re)connect and make new friendships using my whole self, with all the living things I meet, we will share, love and be together on this land.*

The second concretized element was embodied transdisciplinary experiences where translanguaging was nested, spontaneous and agentic. This was done consciously as facilitators saw how it could easily be extractive if done in ways that were too direct, where children were asked ‘to language’ by the ways of superficial translation work which could replicate dominant oppressive languaging practices and remove learner agency. As we demonstrated in the following section, with this adoption, we saw a shift from peripheral engagement to agentic, centered engagement of children. Alternatively, we designed transdisciplinary experiences where translanguaging was visible, heard, agentic, and embodied—where they engaged on their own terms. Embodied experiences such as a Blackfoot medicine and MTH meeting walk led by a Blackfoot knowledge-holder and educator offered a transformational space for embodied repertoire use.

The aforementioned concretized design elements were balanced with the spontaneous child-led moments of co-fostering in the translanguaging space. The greatest learning from Year One was done by listening to the children — not to their responses to our questions, but rather listening to how they responded to one another and to the space through agentic and embodied experiences. Attention paid to informal spaces, and micro-interactions were most insightful in understanding the children and their relationships to language as an avenue for (re)connection. We intentionally concretized the lead of our children as a central design element, as co-fostering such a space would not be possible without this work being done *with* the children.

## Collaging

Through the aforementioned intentionally concretized design elements Soil Camp and the iterative design reflections, translanguaging had a commonplace during the planned and unplanned activities. Specifically, during a collaging activity that took place over two days, children were prompted to create collages of their collective and individual networks of community. This experience took place in an event tent on the land, while children came in to find the tables covered with a variety of print materials spread out for them to cut and paste from local cultural, event, and business magazines. All children in the identity collaging activity were Yazidi-identifying from Iraq working alongside Sophia and co-facilitator Layelle, an educator of Syrian descent. Notable translanguaging that went beyond named languages including the Kurdish dialect of Kurmanji, Arabic and English occurred in modes of verbal communication and child-led music selection which played in real-time in the co-fostered space. Through the intentional design and deep caring relationships developed among facilitators and the

children over the course of two summers, these interactions broke down the hierarchy between “teachers” and “students” and actively countered the macro geopolitical, and linguistic matrix of power tied to identities in the space. While the designed experience encouraged learner agency and embodied expression through the medium of collage, the activity became a site where children, unrestricted by the design of the activity, took the opportunity to showcase parts of their shared identity on their own terms. Through an initial discussion of unpacking what community meant to them, the children articulated their complex, layered, and emerging relationships with languages, places, people and more-than-humans (MTH). The topic of discussion included what community is and how children located themselves within networks of community—geographically, locally and abroad, as ecosystems, culturally, linguistically, spatially, and through interest-based networks. We also discussed how Soil Camp was a meeting point that transcends boundaries and divides. As Dila (all the participants’ names are pseudonyms), a girl-identified Yazidi participant expressed:

I am still connected to Iraq, my language, I feel connected to Indigenous ways, it shows us many things, like Canada, like Calgary, and Arabic—it is kind of a language of ours but it's a little different. I connect to everything.

This quotation captures how Dila connected to core pieces of her identity, that are lived, and transcend borders and divides, including complex historical dynamics embedded in the fabric of her linguistic repertoire tied to the Arabic language. Arabic is the national language of the dominant majority in her country of origin and the officially adopted language of ISIL who were responsible for the unjust genocide and forced displacement of the Yazidi people (as brought up by children during the activity). Evident forms of redefining such relations through the new spatial repertoires formed in translanguaging spaces have surfaced across both years. We can see that for these racialized multilingual children language is seen as alive, embodied, and is employed as an act of sustaining relationality (Henne–Ochoa et al., 2020)—which is further unpacked explicitly in the subsequent section. The children collaboratively created the networks of community collage, with a significant inclusion of images and words related to environmental sustainability and more-than-humans that the children were in community with at Soil Camp. Some children used the scrapbook letter stickers to create words of the places in which they connected with—including countries of origin (Iraq, Syria) as well as Canada. Images of Treaty 7 territory were also focal to the collective piece including both natural features and man-made monuments—taken from the local magazines. Images of peoples donned in Indigenous cultural regalia, and other images of cultural celebrations were also featured on the poster. Following the completion of the collaborative poster, all were given a piece of scrapbook paper that they used as a base for their identity collage.

### **Embodied translanguaging and interactional presencing of dîlana kurdi**

The following interaction highlights the equitable participatory design in action through the child-led moment of moving beyond the designed learning experience and into a space they co-fostered relationally in the moment. This assemblage exemplifies the dynamic exchange and the ways in which the children draw upon their lived-experiences, collective practice and other available spatial resources to co-create child-led artifacts that were embodied tools for storytelling, (re)connection, and collective remembering. This episode occurred during the individual collaging experience. As the children alongside the facilitators engaged in the artistic process, rich conversations emerged around MTH relationality among the group leading to one child to begin singing about her connection to MTHs that she described as “being a part of [me].” Sophia asked the group if they would like to play Kurdish songs on Sophia’s iPhone and they were quickly met with a wave of excitement. The girls passed around the iPhone, taking turns playing Kurdish children's songs that they were fond of and listen(ed) to pre-migration in Iraq and after resettlement in Canada. An eruption of collective remembering, singing along and sharing connected to the songs emerged from this addition to the space. It was not until the introduction of music that the planned experience of collaging began to shift into a child-led employment of linguistic and non-linguistic resources for expression and collective remembering through music. This was the start of a powerful exchange with Sophia and the children about family traditions and customs of the ethnoreligious community around their celebration of Eid and weddings—touching upon food, clothing and celebratory practices including dance. Embedded and integral to this interaction was the ways in which this engagement was approached, the participants explained many pieces of this through a comparative lens—employing their knowledge of Sophia and the co-facilitators’ religious and cultural identities (Muslim Arab women). They shared their knowledge of both common and differing experiences. Episode 1 began as the children were in the final stages of their pieces. Kurdish music filled the tent, and the co-facilitator suggested an Arabic song that her students enjoyed and asked if the children knew the song as well. The children immediately suggested the song be played and as the song began the majority of children began to sing along. Dila joins in dancing from her seat, rolling her shoulders forward to the beat.

**Table 1**

*Excerpt 1: Child-Initiated invitation to dance together*

Time Stamp	Speaker	Transcription
#12:22:47-8#	Dila	That is how Kurdish people dance
#12:22:52-0#	Tela	And kind of with their pinkies
#12:22:56-7#	Sophia	Can you show me?

**Figure 1**

*Excerpt 1 in action*



After this invitation by Sophia, there was an immediate response by the group. Lilan stopped her cutting and pasting and joined pinkies with Sophia and both Dila and Alal came from around the table to link pinkies. The girl-identified children began guiding Sophia through the motions of the dance. They took the opportunity to teach facilitators the isolated steps as their arms rowed forward synchronously, continuously linked by their pinkies. The children gently guided Sophia and took the time to explain the many variations in the dance known as *Dilana Kurdî*, a Kurdish folk circle dance. Sophia paid close attention and asked clarifying questions related to the movements—following the children’s lead. Dila invited and guided the group to move outside of the tent to continue the dance. A noteworthy use of language showcased the democratization of power occurring through this child-led interaction.

**Table 2**

*Excerpt 2: Child-led movement on the land*

Time Stamp	Speaker	Transcription
#12:24:01-5#	Dila	We can go outside and dance like this /holds pinky out/
#12:24:03-0#	Sophia	Should we ↑
#12:24:03-4#	Dila	Yeah, let’s go

Prior to the re-interlacing of the pinkies and the circle dance commencing, a moment of joy was exhibited while moving-on-land, the children were dancing, jumping, clapping and hugging (see centered image in Figure 2). The Arabic song continued playing and the *Dilana Kurdî* began again. The girls modeled with their bodily movements supplemented with counting and verbal feedback. The repurposed Arabic music became the soundtrack of this interaction. The girls verbally shared how much fun they were having, and the co-facilitator asked if they would like to learn *Debka*, a similar-styled Levant folk dance. The co-facilitator was met with enthusiastic responses and Sophia made explicit the commonality she found in both dances and explained the steps in a parallel manner to *Dilana Kurdî*. The Arabic *Debka* music plays, and the girls recognized the song. The girls held hands and followed the lead of the facilitators. The *Debka* dance ends and Lilan shared her knowledge of how circle dances are common across cultures. The group found commonality as they discussed the importance of these dances in celebratory times including weddings and holidays such as Yazidi New Year. *Dilana Kurdî* began again as Kurdish wedding music played, the co-facilitator heard a familiar word *حياتي*, *hayati*, a term of endearment meaning ‘my life’ in Arabic. The co-facilitator was met by the children sharing that this is a common word in Kurdish—an additional shared dimension of their semiotic repertoires.

Notable in these interactions are how all the participants started to become “co-learners” through embodied translanguaging—the ways that transcended borders between facilitators, who are Arabic speakers carrying Muslim diasporic practices and Yazidi children. We see a shift in conversation and moments of collective remembering emerge on a collective and individual level. Silenced personal experiences and the sharing of the collective story of the ethnoreligious group from the perspective of Lilan began. Layered sharing filled the hollow middle of the circle and was assembled in situ as all agentically shared. Lilan talked about the lived, pre-migratory and current oppressive histories of her peoples as she danced:

For Êzidiâns (Yazidis) back in the olden days, they had to do what adults had to do like at the age of 6. They weren't really treated that goodly and they really didn't have that much money. So, they had to make their own stuff and farm. But it was so much fun though, I miss those days. Now it's harder...there is still people trapped by the Daiş (ISIL) [It's not really like a war] that's why we had to move from that place.

**Figure 2**  
*Dilana kurdî in action: Visualizing the assemblage*



Together there was a shared use of translanguaging as a tool for (re)connection to one another, MTH, shared linguistic and non-linguistic embodied resources as well as silenced histories and stories. The meaning of translanguaging to (re)connect for co-facilitators in this moment manifested into being a witness and listener as the flow of sharing occurred. Translanguaging to connect for the participants in this moment meant connecting to memories of joy, loss, nostalgia and hope that were layered, heard and alive in the recounts as Tela shared, "I love the place that's, just like, flat and it is all green with daisy and flowers."

## Discussion

In this paper, we have demonstrated how iterative design of translanguaging space towards equity and justice facilitated the emergence of an assemblage where silenced languaging, cultural practices and lived realities coming from the peripheries became centered in the learning space of our designed Soil Camp program. While the design initially focused on linguistic translanguaging experiences, dance was employed by the children as an embodied nonlinguistic resource; a meaningful piece of their semiotic repertoire deeply tied to historicized sociocultural dimensions and embodied connections to the land. It is in such a moment that "embodied communication [comes] plainly into view" (Blackledge & Creese, 2017, p. 255). Both the Kurdish circle folk dance and Levantine Debka have origins connecting to story, land, soil regeneration, promotion of plant growth and agricultural fertility (Al-Awwad, 1983). Circle folk dance, a common and integral part of all co-learner's repertoires were brought out and made visible through this child-led moment. It is in such moments that new avenues, unimagined by facilitators, come alive. The children employed dance as a mode of translanguaging to communicate silenced stories and lived experiences of their community through dance, which can be seen as an act of *presencing* (Nxumalo, 2019). The performances spontaneously emerged in new geographical locations, allowing for (re)connection with living things across cultural, species, spatial, linguistic and temporal divides.

Through these evolving intentional and explicitly designed disruptive practices, not only were children's multilingual identities validated, but also the intergenerational knowledge systems and stories that are intrinsically embedded within their repertoires—resulting in the co-creation of "new social realities" for learning (García & Leiva, 2014, p. 204). This can be seen as an assemblage of silenced histories, stories and collective remembering as a result of the promotion of child-led, dynamic opportunities for (re)connection. Children were then able to see how their repertoires are resources in all spaces and offer tools for (re)connecting relationally. It was evident that to foster an agentic and embodied translanguaging space we had to follow the *corriente* (García et al., 2017, p. 21) and lead of our co-learners. Facilitators welcomed and encouraged the in-the-moment adaptation of the learning experiences and space by participants. We see active and reflective listening centered in the episode, and as such, facilitators were able to follow children's agentic movements and insight as a way of reorganizing "systems of activity in which participants becom[e] designers of their own futures" (Gutiérrez & Jurow, 2016, p. 566) in line with social design experiments. As demonstrated in this paper, Soil Camp's spatial and embodied semiotic repertoire could emplace the silenced displacement of peoples, knowledges, and histories that are inextricably connected to land and MTH networks of connection. The explicit design intention to concretize linguistic elements of design toward corporeal expansion of translanguaging, while balancing such elements with spontaneous child-led moments is what led the researchers to dance with the children—a literal embodied pathway toward equity and justice.

## References

- Al-Awwad, S. (1983). "Al-Dabkeh" [The Dabkeh]. In *Studies in Palestinian Folklore*, 100-103. Amman Jordan, Department of Media and Culture.
- Thraya, S., & Takeuchi, M.A. (2022). Translanguaging as a tool to (re)connect: Co-designing land-based learning environments with refugee children. In C. Chinn, E. Tan, C. Chan, & Y. Kali (Eds.), *The 16th International Conference of the Learning Sciences 2020 proceedings* (pp. 615–622). Hiroshima, Japan: International Society of the Learning Sciences.
- Blackledge, A. & Creese, A. (2017). Translanguaging and the body. *International Journal of Multilingualism*, 14(3), 250–268. <https://doi.org/10.1080/14790718.2017.1315809>
- Canagarajah, S. (2017). Translingual practice as spatial repertoires: Expanding the paradigm beyond structuralist orientations. *Applied Linguistics*, 39(1), 31–54. <https://doi.org/10.1093/applin/amx041>
- Costanza-Chock, S. (2020). *Design justice: Community-led practices to build the worlds we need*. The MIT Press.
- Dulay, H. C. & Burt, M. K. (1974). Natural sequences in child second language acquisition. *Language Learning*, 24(1), 37–53. <https://doi.org/10.1111/j.1467-1770.1974.tb00234.x>
- García, O., & Leiva, C. (2014). Theorizing and enacting translanguaging for social justice. In A. Blackledge & A. Creese (eds.), *Heteroglossia as practice and pedagogy* (pp. 199–216). Springer. [https://doi.org/10.1007/978-94-007-7856-6\\_11](https://doi.org/10.1007/978-94-007-7856-6_11)
- García, O., & Wei, L. (2014). Language, languaging and bilingualism. In *Translanguaging language, bilingualism and education* (pp. 5–18). Palgrave Macmillan. [https://doi.org/10.1057/9781137385765\\_2](https://doi.org/10.1057/9781137385765_2)
- García, O., Johnson, S. I., Seltzer, K., & Valdés, G. (2017). *The translanguaging classroom: Leveraging student bilingualism for learning*. Caslon.
- Grande, S. & McCarty, T. L. (2018). Indigenous elsewhere: refusal and re-membering in education research, policy, and praxis. *International Journal of Qualitative Studies in Education*, 31(3), 165–167. <https://doi.org/10.1080/09518398.2017.1401144>
- Gutiérrez, K. D., Bien, A. C., Selland, M. K., & Pierce, D. M. (2011). Polylingual and polycultural learning ecologies: Mediating emergent academic literacies for dual language learners. *Journal of Early Childhood Literacy*, 11(2), 232–261. doi:10.1177/1468798411399273
- Gutiérrez, K. D., & Jurow, A. S. (2016). Social design experiments: Toward equity by design. *Journal of the Learning Sciences*, 25(4), 565–598. <https://doi.org/10.1177/1468798411399273>
- Henne-Ochoa, R., Elliott-Groves, E., Meek, B. A., & Rogoff, B. (2020). Pathways forward for Indigenous language reclamation: Engaging Indigenous epistemology and learning by observing and pitching in to family and community endeavors. *The Modern Language Journal*, 104(2), 481–493. <https://doi.org/10.1111/modl.12652>
- Lizarraga, J. R. & Gutierrez, K. D. (2018). Centering Napanla literacies from the borderlands: Leveraging “in-betweenness” toward learning in the everyday. *Theory into Practice*, 57(1), 38–47. <https://doi.org/10.1080/00405841.2017.1392164>
- Marin, A., & Bang, M. (2018). “Look it, this is how you know:” Family forest walks as a context for knowledge-building about the natural world. *Cognition and Instruction*, 36(2), 89–118. <https://doi.org/10.1080/07370008.2018.1429443>
- Marin, A. (2020). Ambulatory sequences: Ecologies of learning by attending and observing on the move. *Cognition and Instruction*, 38(3), 281–317. <https://doi.org/10.1080/07370008.2020.1767104>
- Nasir, N. S. (2004). “Halal-ing” the child: Reframing identities of resistance in an urban Muslim school. *Harvard Educational Review*, 74(2), 153–174. <https://doi.org/10.17763/haer.74.2.x203671222708725>
- Nxumalo, F. (2019). *Decolonizing place in early childhood education*. Routledge.
- Pennycook, A. (2017). *Translanguaging and semiotic assemblages*. *International Journal of Multilingualism*, 14(3), 269–282. <https://doi.org/10.1080/14790718.2017.1315810>
- Suárez, E. (2020). “Estoy Explorando Science”: Emergent bilingual students problematizing electrical phenomena through translanguaging. *Science Education*, 104(5), 791–826. <https://doi.org/10.1002/sc.21588>
- The Design-Based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher*, 32(1), 5–8. <https://doi.org/10.3102/0013189X032001005>
- Wei, L. (2011). Moment analysis and translanguaging space: Discursive construction of identities by multilingual Chinese youth in Britain. *Journal of Pragmatics*, 43(5), 1222–1235. <https://doi.org/10.1016/j.pragma.2010.07.035>

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