One-way lectures, status reports, brainstorming, and open and managed discussions can all be tedious, alienating and demoralizing exercises of unbalanced power. We see opportunities to rethink in-person and online interactions across spheres such as workplaces, classrooms, conferences, and movement organizing. We share essential principles of Liberating Structures (LS), a set of 33+ open-source methods for more engaging and effective gatherings. We offer visual illustrations, practical examples, and insights from our experiences using LS for teaching and facilitation. LS, named by action researcher William Torbert and elaborated by Henri Lipmanowicz, Keith McCandless and others, are grounded in complexity thinking (vs. linear machine models), observing that innovation emerges from interconnectedness and non-linear feedback. LS thus attend to “micro-structures” of convenings to better organize participants’ time and attention: the invitation, participant distribution, timing and steps, group configurations and space arrangements. Facilitators can adopt, adapt, repeat and combine methods like Open Space, Troika Consulting, Drawing Together, and Impromptu Networking to support gatherings of any size. We believe LS can ease the work of dismantling oppression and reassembling the new pluriversal worlds we seek, by supporting communities of learning, design and social change in organizing inclusive gatherings, challenging institutional norms, and building alternative visions.

Keywords: liberating structures; complexity thinking; convenings; inclusion

1. Introduction
The COVID-19 pandemic disrupted our usual ways of gathering. It has been simultaneously harmful and freeing. The shift to remote and virtual convenings was exhausting for many people and has excluded people who lack access to technology. It also revealed possibilities for including more people across
different geographies and abilities in digitally mediated gatherings. Perhaps the chief effect of this rearrangement of social interactions was simply highlighting the importance of dedicated time for our collectives to connect around shared goals, in whatever format. Yet we (the authors) also notice how ineffective, boring, and unbalanced many meetings continue to be, whether they take place virtually or in-person.

While meeting or instruction norms are far from universal, many conventions of gathering – such as trappings of agendas and meeting minutes to purposes of decision-making and governance – are pervasive in formal organizations as well as social movements worldwide (Brown, Reed & Yarrow, 2017). While such gatherings play a key role in social life and organizational process, they have limitations. Meetings – whether in the Kenyan health sector (Brown & Green, 2017), urban planning in London (Evans, 2017), or the Spanish Occupy movement (Corsín Jiménez & Estalella, 2017), can “perform” the work of participation or empowerment to varying degrees of authenticity. Ethnographic accounts of transnational scientific projects reveal that while meetings can be a time-wasting exercise, they can also be generative for both relationships and project outputs (Riles 2017; Alexander, 2017).

A mid- or post-pandemic world offers an opportunity to rethink interactions – in workplaces, educational settings, and social movements – towards these more beneficial outcomes, particularly to harness collective knowledge for socially- and ecologically-minded innovation. Liberating Structures offer one pathway for reimagining the processes of gathering people together for learning, planning, exploring, or creating. Liberating Structures (LS) are a set of 33+ methods for inclusive, engaging and even fun practices that unleash group creativity and shared ownership; champions offer LS as alternatives to conventional meeting formats that effectively retain agenda-setting and decision-making power among few people (Lipmanowicz & McCandless 2013). LS in effect reorganize key elements of our convening systems – namely, participants’ time, attention, and energy – in subtle but simple ways towards emergent purposes and actions. LS can further scaffold our work in dismantling oppressive dominant systems and reassembling elements into the new worlds we seek: ones where everyone is collectively engaged in designing the future.

We draw on our own practical experiences with Liberating Structures in classes, meetings and workshops, to convey guiding principles and potential applications for designers and changemakers, recognizing the central function of facilitation in their work (Manzini, 2015). Although certainly new tools are needed for transformation, our goal is to recognize the value and amplify what already exists by helping to disseminate easy-to-access-and-apply approaches for pluriversal world-making. We show how these tools can support building pluralistic, dynamic communities for learning, design and social change. We include visuals throughout, recognizing multiple languages and ways of learning among readers.

1.1 Author Positionalities

Our perspectives in this paper – namely, our support of Liberating Structures and their value in convenings for the pluriverse – reflect tensions in how our evolving identities as scholars and citizens intersect with the realities of our livelihoods and institutional environments. We are both white, able-bodied, cisgender American women with doctoral degrees in the social sciences (planning; international development). We jointly have decades of experiences studying and practicing development and social change in the Global South and our home state of Louisiana. We currently work in a social innovation center in a private research university in the Southern United States, where enduring white supremacy, indigenous genocide and legacies of slavery and segregation uphold current structures of wealth and political power. Day-to-day, our university positions entail a lot of convenings, including research presentations, classroom teaching, capacity-building sessions and participatory feedback sessions. Our privileged identities can provoke or elicit both authentic respect as well as undo deference, authority
and presumptions of expertise, whether in our roles as professors guiding students in the US or guest trainers in a Kenyan non-profit.

Our personalities, values and brain chemistries further complicate these situations. As an introvert, Laura finds that group meetings can be exhausting and that she needs time to herself to process her thoughts during gatherings and recover afterwards. Máille finds that the entitlements learned through her whiteness and professional affiliations are exacerbated by neurodivergence, such that she can be either overly dominating or disengaged in conventional meeting structures, even while aspiring to more power-sharing collaboration. We have both committed the errors of espousing participation or inclusion while failing to give time to others’ voices or worldviews. We have also both sat by, frustrated, watching unsatisfactory gatherings unfold: faculty meetings where only senior members speak, conferences where presenters read their articles, classrooms where the same student rambles on while others nod off or roll their eyes. From American higher education to community-based development in the Global South, we have found the same dynamics of endless, long meetings. The agendas, the unspoken rules, the power dynamics – all functioned to curtail participation, creativity, and collaboration.

We are constantly seeking more methodologies for inclusive, dynamic and emergent co-creation. As scholars of social innovation (see Murphy et al., 2021), we incline towards transdisciplinary action inquiry to address wicked problems, from children’s access to play to global climate change. We see problem-solving as a relational process that requires healthy, interdependent social structures. Yet dominant academic and professional paradigms offered us few good models for how to work better together for the just, equitable and ecologically sound futures we desire. Over time, we learned what meaningful interactions felt like to us by seeking out and orchestrating more unconventional gatherings such as creative design sessions, relational meditations, group inquiries, and empathetic learning communities. We realized that the good work at conventional gatherings happened in the coffee breaks, outside the formal agenda! It is in that spirit that we both found Liberating Structures appealing. When Laura learned about the menu of LS methods around 2013 grounded in complexity science, it made sense to her. She introduced the approaches to Máille, then her graduate student. We have found LS a welcome addition to our facilitation toolkits ever since.

2. Background on Liberating Structures

2.1 The Origins of Liberating Structures

Our current use of “liberating structures” refers to interactional methods popularized by Henri Lipmanowicz and Keith McCandless in the early 21st century. However, LS has a deeper lineage. Current scholarship attributes the concept to American action researcher William Torbert (Kimball, 2012). Through experiments in educational settings in the US in the 1970s, Torbert (1978, 1991) advanced a theory of “liberating disciplines” as a mode of organizing, indicative of higher-order organizational action logics that enable transformative inquiry. McCandless and Lipmanowicz, innovation specialists with deep global experience, began giving shape to this praxis after bonding over mutual interests in practical uses of complexity thinking. They worked with many others to field test protocols in US healthcare and Latin American business contexts, eventually curating a menu of 33 liberating structures with detailed protocols available open-source and in a field guide. Along with creating entirely new microstructures, their protocols build on recognizable design and collaboration methods, including World Café or Positive Deviance (Kimball, 2012). Figure 1 depicts the full menu of methods with titles, icons and brief descriptions. They selected these 33 for their power in re-designing how people can come together for more engaging, playful, inspiring, purposeful, and innovative sessions.
This LS origin story is a partial account that credits mostly white, Western men with creating and disseminating these methods. Many other individuals of diverse backgrounds have been instrumental in developing and scaling this school of thought, such as Indian American communications scholar Arvind Singhal (pictured with Lipmanowicz and McCandless in Figure 2 below), who has popularized LS in education. We need a deeper genealogy for LS that traces their likely culturally diverse, non-industrial influences. As a start, for example, Singhal et al. (2020) link LS’s theoretical groundings to many dialogic and constructive pedagogies, including Paulo Freire’s “liberating education” for the poor. Torbert’s (2021) more expansive view of “liberating disciplines” includes “trans-paradigmatic” spiritual practices.
like Christian prayer and Hindu yogas; he credits the Chinese divination text, *I Ching*, for example, with helping him discover new modes of inquiry that balance intuitive and scientific ways of knowing (p. 153). We also recognize that a global and diffuse community of practice is continually shaping and owning liberating microstructures praxis. A decentralized network is using wiki-pages, Google documents, Slack teams, virtual events and open-source materials to adapt, invent and diffuse practices.

Furthermore, systematized LS methods are not automatically critical or decolonial. Lipmanowicz and McCandless (2013) advanced their protocols working in public, private and citizen sectors; their book features applications of LS in reforming courts for child welfare alongside inclusive decision-making in corporate contexts. Yet the extent to which innovations within mainstream institutions can subvert the divisive and destructive logics of global capitalism or settler-colonialism is uncertain (Escobar, 2018). LS, like any tool, can be used uncritically to uphold harmful systems. For example, Lipmanowicz and McCandless (2010) used LS to foster bottom-up creativity in a global pharmaceutical company – an industry that at best leverages the market and public funding to produce medicines for customers, and at worst withholds life-saving drugs through price gouging for profit, neither of which constitute social innovations that are just or sustainable (Phills et al., 2008). We also respect Tuck and Wayne Yang’s (2012) assertion that “decolonization is not a metaphor” automatically commensurate with liberating social change. LS can even be used for radical social justice aims without actually working to repatriate land to indigenous peoples (though they could be used for that agenda). It might be difficult to disentangle LS completely from Euro-modernity, a dominant worldview associated with exploitative development and representative democracy alike (Kothari et al., 2019). In Section 4, we revisit this issue of liberating structures and pluriversal thinking.

### 2.2 Complexity Thinking Underlies Liberating Structures

The potential of LS for pluriversal aims begins with its underlying framework, which is based on insights from complex systems thinking that recognize the interconnectedness of elements, feedback loops, and non-linear changes (Boulton et al., 2015; Escobar, 2018). Complexity thinking suggests that innovations do not arise from careful planning or individual heroism, but instead emerge from the interactions of people, other actors, and dynamic environments. Small shifts in variables within complex systems can
have powerful impacts over time leading to regime change via “tipping points”. Drawing from these principles, LS methods attend to the relevant details of interactions that can enable systemic shifts, not only within a group but also in the wider environment.

Applying this ontology of complexity to meetings promotes ways of engaging outside of common top-down, centralized, return-to equilibrium management styles. Lipmanowicz and McCandless argue that organizational change strategies too often focus on difficult, costly and time-consuming alterations to macrostructures such as office buildings or organizational charts. Instead, they advocate for bottom-up change through easily-manipulated “microstructures” – a term they coined to render visible the small factors shaping interaction, such as a meeting location or format. Unfortunately, conventional microstructures such as presentations, status reports, brainstorming sessions, and open and managed discussions tend to become the routine, even though they limit dynamic participation (Lipmanowicz et al., 2015). The matrix in Figure 3 illustrates how these conventional forms lack structure for large-scale engagement of all actors in a system, while providing either too much or too little regulation of content. Liberating microstructures, on the other hand, employ just enough structure for self-guided group learning; the structures serve as enabling foundations, rather than constraints (Torbert, 1978).

Thus, liberating microstructures enable what the US-based pleasure activist and emergent strategist adrienne maree brown (2017) calls “intentional adaptation”. Brown likens collective leadership to the murmurations of starlings where groups move together in a purposeful but decentralized way. The flocking of birds is an oft-cited example of a complex adaptive system that produces sophisticated patterns of movement based on simple rules of synchronicity and adjustment.

2.3 The Simple Rules: Microstructure Design Elements

Including everyone in reflecting, learning, envisioning and sharing together requires careful attention to the characteristics of all microstructures (whether liberating or conventional) such as intentionality,
spatiality, and temporality. These design elements can function as light “guardrails” for improvisation, such as we might hear when jazz artists use simple rules to play new music together (Kimball, 2012). For each of their LS protocols, Lipmanowicz and McCandless (2013) identified design principles, or structural elements, that shape the right amount of control for the group. These five elements help distribute and contain content while expanding power to all participants to influence events:

1. **Structuring an invitation** to participate with a thoughtful, welcoming question or prompt that orients the group around their purpose – the how and why of gathering
2. **Arranging space and outlining materials** needed for creative, inclusive engagement, through formations like circles or materials like post-its, to organize energy and attention for the purpose
3. **Distributing participation** thoughtfully, to avoid top-down or didactic approaches, so that everyone present shapes the agenda and contributes (as opposed to a presentation where one person gets most of the time)
4. **Configuring groups** in smaller or changing formations (as opposed to one large group), to maximize interactions and opportunities for connection to many people and ideas
5. **Outlining the sequence of steps and time allocation** to allow for clear processes and iterations that more effectively include everyone in generating ideas (rather than one linear program)

Identifying these microstructure elements can create a “pattern language for engagement” that we can manipulate to “fuel interactions of a certain quality”; identifying these principles invite us to understand this language and experiment with it intelligently to meet our needs (Kimball, 2012, p. 3). Just as with any language, mastering these principles allows us to have increasingly complex conversations with deeper meanings and outcomes (Lipmanowicz & McCandless, 2013). This mastery could take the form of new LS methods and adapted applications for different group sizes and purposes (Kimball, 2012).

Another form of mastery can include “strings” that combine multiple LS methods for more elaborate purposes such as identifying system behaviors, prototyping new solutions, or catalyzing frontline action. New adopters with concrete short-term goals might begin with simple strings, such as when leaders of the American Psychiatric Nurses Association employed Impromptu Networking, 1-2-4-ALL and Crowd Sourcing at a conference to collectively determine new priorities for research (Mahoney et al., 2016). More advanced practitioners can combine these simple warm-up methods with more elaborate methods for organizational needs, such as Purpose-to-Practice, Open Space Technology, and the Ecocycle framework. These combinations can support complex, multi-day processes, like strategic planning retreats and global conferences.

3. **Liberating Structures in Use (in an online world)**

Here we share examples of facilitating LS from our own classrooms, meetings, and workshops. We also include examples shared with permission by colleagues. We hope to illustrate both how one might use a range of liberating structures and how we have adapted the five microstructure design elements to fit different situations.

3.1. **Troika Consulting**

The purpose of Troika Consulting is to create a reciprocal space for peer advising on practical and urgent issues. In a quick exercise, everyone can give and receive help on a compelling challenge or problem, no matter the size of the group. Here is the original protocol for this microstructure:

1. **The Structuring Invitation:** “What is your challenge?” and “What kind of help do you need?”
2. **How Space Is Arranged and Materials Needed:** Any number of small groups of 3 chairs, knee-to-knee seating preferred. No table!

3. **How Participation Is Distributed:** In each round, one participant is the “Client,” the others “Consultants”. Everyone has an equal opportunity to receive and give coaching.

4. **How Groups Are Configured:** Groups of 3 - people with diverse backgrounds and perspectives are most helpful.

5. **Sequence of Steps and Time Allocation:**
   a. Invite participants to reflect on the consulting question (the challenge and the help needed) to ask when they are clients, 1 min.
   b. Groups have first client share his or her [or their], 1-2 min.
   c. Consultants ask the client clarifying questions, 1-2 min.
   d. Client turns around with his or her [or their] back facing the consultants. Together, the consultants generate ideas, suggestions, coaching advice, 4-5 min.
   e. Client turns around and shares what was most valuable about the experience, 1-2 min.
   f. Groups switch to next person and repeat steps. (Lipmanowicz & McCandless, 2013, p. 194)

Tweaking tiny details in these design elements matter for facilitating desired outcomes. Laura uses this method regularly in the classroom with graduate students working on course projects. She created the visual instructions in Figure 4 to help students understand the design elements for one round. In this diagram, the purple figure is the Client; the Green and Red figures are Consultants. The graphic primarily demonstrates steps for an in-person setup, with the trios sitting close together at first and the Client turning around during consulting. Laura consulted the LS Slack community for ideas on adapting the method for a virtual meeting space such as Zoom, where trios could gather in private breakout rooms. The blue text boxes demonstrate these adjusted instructions. A key modification for remote engagement involves the Client turning off their camera for the advising portion (shown in the middle box), which mimics the cues of the Client turning around in their chair. Avoiding eye contact allows for the Client to listen but not engage with the Consultants. By completing another two rounds, everyone gave and received advice in under 30 minutes, no matter the size of the group. Playing both the Client and Consultant role enhanced student learning outcomes from the projects.

Another implementation of Troika Consulting features a “string” of methods used in an organizational context. Samantha Fleurinor, our colleague in the center where both authors work, was tasked with
facilitating monthly 2-hour team meetings to enhance collaboration among our members (who tend to work independently on different projects) in alignment with our adoption of a multiculturalism framework. Samantha turned to Troika Consulting to show the value we can bring to each other’s work. However, Samantha started the meeting with another method she encountered in an online learning community: Spiral Journaling (Barry, 2014). Figure 5 demonstrates the template for this exercise, which involves solo journaling to help prepare each Client for the consulting session by identifying the areas where they want to ask for support. Following the virtual adaptations of Troika outlined above, Samantha created breakout groups, paying close attention to group configuration by matching up team members who work together infrequently.

We see value in Troika Consulting beyond simple and practical problem-solving. For students, Troika helped build community and support systems and tapped into the collective wisdom of peer learning. For a team, Troika revealed different challenges they faced under the same mission or project. In a conference or global convening, Troika can be used to build new relationships among activists around the world needed to sustain and envision future world-weaving. Furthermore, Troika can help balance power dynamics through mutual reciprocity. It provides everyone an opportunity to offer their advice and help with each other’s problems, as opposed to the typical one-way exercise of capability often present in service provision.

3.2. Drawing Together
Where Troika Consulting employs verbal processing for pragmatic solutions, drawing taps into unspoken, or unconscious, thought processes to reveal unexpected meanings and patterns. It starts with silent, solo reflection on a challenge or situation using five easy-to-draw symbols, depicted in Figure 6, which were field-tested in different cultural contexts to confirm their universal meaning.
In March of 2021, Laura posed the following **structured invitation** to her social innovation graduate students: “Draw a journey of your world beyond the Covid pandemic ... “. She adapted the standard **steps** from the field guide protocols (Lipmanowicz & McCandless, 2013). She shortened the **timing** to reflect the limitations of a short class period and the comfort level of a group that had already spent two months together expanding their creative skills (including drawing):

1. Review the meanings of each symbol with the group, 1 min.
2. Warm up with practice drawing the 5 simple shapes, 2 min.
3. Solo: Sketch out your “journey of working on ___using only the shapes, and no words” 5 min.
4. Solo: Do a second draft of this journey. Add color, move/adjust shapes, 3 min.
5. In pairs: Share with someone else who will interpret what the drawing means, without the Drawer explaining anything or providing verbal commentary (swap drawings, read them), 5 min.
6. As a whole group: “What do our drawings reveal?” 5 min.

The four drawings in Figure 7 show the range of paper and digital sketches. Since the class was being held remotely on Zoom, students posted drawings on the digital whiteboard platform, Mural. Therefore, everyone could read and make sense of others’ journeys. Students reported that it was restful, spiritual, and team-building pause in their frenetic online spring semester. It helped them understand their own personal growth during the pandemic and their aspirations for changing societal structures.
We like Drawing Together as a microstructure for accommodating different styles of thinking and learning. It plays with different forms of processing and communicating, allowing, for example, introverts to recoup energy and explore their ideas through solo reflection. It can also be useful for asserting the value of “affective perspective-taking” or intuitive, right-brain processing in cultural contexts where cognitive or analytical thinking styles are venerated (many university classrooms and professional contexts). By using Drawing Together, in under 15 minutes, a group of any size can have a profound moment of introspection and connection.

3.3. What, So What, Now What (W³)

While the previous two liberating structures are more individually-focused, the “What, So What, Now What” method (W³) emphasizes group-level processing of a shared experience to evaluate progress and consider next steps. Figure 8 adapts the standard design elements for W³ into a visual template (except for space and materials, which involve separate instructions for different settings). The invitation is for groups to move along a ladder of inference in three stages of processing after a shared event, each involving three steps of individual, small grouping, and whole group work.
| STAGES: Move along a ladder of inference | INVITATION: After a shared experience, ask... | STEPS: Complete all 3 stages, following 3 repeating steps/stage |
|------------------------------------------|-----------------------------------------------|-------------------------------------------------|
| 1. WHAT: Collecting all salient observations | What happened? What did you notice? What facts or observations stood out? What do you know? | STEP 1 → Individuals Record initial thoughts 2 min |
| 2. SO WHAT: Sense-making to develop insights | Why is that important? What patterns or conclusions are emerging? What hypotheses can you make? | STEP 2 → Groups of 5-7 Share & add ideas 7-10 min |
| 3. NOW WHAT: Planning to suitable response | What actions make sense? What should we do next? What steps can build on this learning? | STEP 3 → Group of 10+ Highlight key points 7-10 min |

**Figure 8. Diagram of design elements for What, So What, Now What. Source: Adapted from Lipmanowicz & McCandless (2013) p. 197**

Another colleague, Rebecca Otten, used W³ in a string during a workshop with a local youth advocacy board. The board wanted Rebecca’s help mapping resources and relationships in their networks (to better support other youth navigating foster care systems). Rebecca wanted to facilitate a working session that balanced the board’s interpersonal tensions with productive design. Máille recommended liberating structures generally and W³ (a personal favorite) specifically so as to attend to both session process and content. Using the virtual software ConceptBoard for remote collaboration, Rebecca led the group through a mapping exercise to identify where a young person in foster care might tap into existing resources. She then used W³ to debrief the act of mapping itself. To stimulate reflection on new ways of working together and create accountability, she added prompts to the invitation around participants’ feelings, take-aways and commitments. Figures 9a and 9b show highlights from the three stages of WHAT/SO WHAT/NOW WHAT. Responses indicate that participants felt empowered and connected by sharing and documenting their siloed knowledge. They also envisioned individual and collective actions around both the content and process of the project, such as finding new resources and taking/making space in interactions.
Figure 9a. Advocacy board’s responses to W³ prompts of “What?” and “So What?”. Source: Rebecca Otten.

Figure 9b. Advocacy board’s responses to W³ prompts “Now what?”. Source: Rebecca Otten. Names redacted.
In general, we see \( W^3 \) as most useful for consensus-building and course-correcting for a group of people that will continue working together over time, such as the board members in the example. Much is at stake in such collectives, where disparate interpretations of the past can complicate decisions about the future. This exercise helps to ground action plans—a speculative endeavor—in actual observations and the meanings we ascribe to experiences. The iterative steps of individual work with small groupings in each stage help surface many more observations, insights, and ideas in a short time than conventional methods might allow. Participants can see how even the “facts” result from our biased and partial viewpoints, and that surfacing these different perspectives can lead to a more holistic strategy.

### 3.4. Simple Liberating Structures for Everyone

The above examples demonstrate a few extended applications of LS methods that we adapted using appropriate digital platforms and visual instructions as well as strings of multiple methods. This is just a sample of methods we use regularly. Our facilitation toolkits include many other LS methods that we deploy for classroom teaching, design workshops, and discussions with colleagues and community groups. A few others from our repertoire that we recommend for “getting your feet wet” with LS include:

- **1-2-4-ALL:** Considered a “gateway” method, this basic LS bounds and balances discussions with a simple progression from solo reflection (1 minute) to paired (2 minutes), two pairs (4 minutes), and ALL (whole-group discussion). This scaffolding gives all individuals space for reflection, gets people sharing with each other, and consolidates ideas and questions.

- **Impromptu Networking:** When convening many new people, this LS offers an alternative to awkward cocktail hours or instrumental schmoozing. Participants move around a room for one-one conversations fast three-minute rounds, around two questions: “What brings you here?” and “What can you offer this room/group?” An online version has two people in break-out rooms (add time), then moving one participant randomly to another room (think digital musical chairs).

- **25/10 Crowd Sourcing:** This alternative to classic group brainstorming supports buy-in and dissemination of new ideas. Participants write their most daring ideas on index cards then engage in iterative rounds of randomly passing and scoring cards with the whole group. By gathering and discussing the highest-scoring proposals, large groups can quickly and collectively wade through a plethora of solutions to elevate the freshest and most popular ideas.

- **Open Space Technology:** Through principles of self-organization, Open Space can focus a group while freeing and motivating individual action. Participants come to a gathering, such as an organizational retreat or professional conference, to deal with an overarching challenge. There, they co-create and enact the agenda by proposing, leading, and joining concurrent topical breakouts. The “law of two feet” encourages participants to wander among breakouts to find where they are best contributing and learning.

The methods we favor tend to reflect our roles as educators, trainers, and facilitators rather than project managers or community organizers. Even so, we aim to highlight methods valuable for individual learning and group sense-making required of ongoing teams.

### 4. Liberating Structures for the Pluriverse

As mentioned, LS can be applied in settings such as university classrooms and non-profit meetings. We also see possibilities in liberating microstructures for remaking everyday experiences to challenge unjust equilibria and catalyze small steps towards radical action. LS can serve a spectrum of political goals, from
moderate aims of cultural relativism within a one-world system to transformative philosophies of pluralism where many ontologies thrive (Escobar, 2021). In this section, we scaffold these pluriversal objectives. We outline key considerations for applying LS for inclusive gatherings, for challenging conventional behaviors and norms in modern institutions, and for embracing and imagining new coexisting worlds.

4.1. General Principles for More Inclusive Convenings

The most direct contribution of liberating structures for challenging universalism and embracing pluralism is to enhance inclusion. Inclusion refers to how people (assuming different identities are represented) are accepted, appreciated, and involved equitably in organizational life (Bernstein et al., 2019). LS can serve these goals by liberating the inherent creativity and wisdom of our crowd and promoting ownership and connection among participants, including marginalized voices. The utility of LS for more inclusive convenings, however, requires not just rote application, but wise adaptation to particular audiences, objectives and purposes, and relevant constraints. Therefore, we present considerations in using LS for inclusivity.

First, consider who is in the room: LS design elements help include everyone who is “already in the room” – who attends the class, meeting, conference, etc. This “room” can be large: facilitators can use LS with groups of any size, from 10-1000 people. But who gets that opportunity? LS design principles do not provide sufficient guidelines for who should be in the room. Our examples featured students in a class, staff in a university department and “stakeholders” for a planned retreat: a biased/partial role predetermined by official affiliations and organizational boundaries. Are these the “right” participants? This consideration is crucial given that members of social groups marginalized by variables such as race, class, ability, nationality, and more are systematically denied access to design, learning, higher education, and decision-making environments. Diversity is a necessary (albeit insufficient) condition for spurring innovation because it brings people together with different situated perspectives. One strategy, then, is getting beyond the view “from the top”. For immersive learning workshops, Lipmanowicz and McCandless (2013) recommend including participants from multiple levels of an organizational chart to maximize adoption of the LS methods. This same approach may be useful for organizational change initiatives; members of a manufacturing firm noted the importance of bringing diverse employees from across hierarchies and silos into ongoing LS facilitations, to generate holistic learning and transformation (Allen, 2018). Furthermore, any invitation needs specific and thoughtful attention to language, script, timing, cost/access of an event. Facilitators might consider how potential participants’ identities shape their perception of the invitation itself.

Second, modify methods for your audience: Facilitators need “personal knowledge of the ongoing dynamics of attention and empirical knowledge of the particular setting in question.” (Torbert, 1978, p. 130). In choosing and deploying methods, facilitators will likely need to adjust elements to ensure microstructures remain truly liberating, rather than inadvertently oppressive. The design element of step sequencing and time allocation offers a good example for adaptation. Standard LS protocols recommend quick steps and rapid iterations. However, pluriversal facilitators may adapt timing to ensure equitable access to meaningful participation. Adjustments may vary depending upon individual or group tendencies, such as participants with a stammer or limited literacy. Cultural speech patterns or beliefs about time may also affect participants’ ability to interact, especially in intercultural situations. Another example lies in the element of space arrangement. Though LS were designed for in-person gatherings, a community of practice began developing online applications (see the Slack channel) long before the start of the COVID-19 pandemic. For virtual gatherings – since remote engagements can mean stilted communication, dropped calls, small screens, etc. – facilitators should take extra care to model the method to ensure prompts and steps are understood. To that end, we offer
prototypes of visual directions (i.e., for Troika, Drawing Together and W³ in Figures 4, 5 and 8, respectively) developed over the last year of remote work.

Finally, stick with it for longer term culture shift: McCandless and Lipmanowicz (2013) advise that those who want to catalyze shifts towards a more participatory and innovative organizational culture must use LS consistently over time, not just ad hoc. This consistency strengthens relationships among parts of the system (e.g., the people) and stimulates behavior change through repetition. Longer-term applications link LS to organizational development. One US nursing school used a variety of LS over a two-year period to focus on challenges, appreciate effective practices, and design new forms of interaction (Mallert & Rykert, 2016). Stakeholders found that even though old patterns of conflict sometimes surfaced, the organizational culture was becoming healthier and would continue shifting. Multiculturalism trainings in American workplaces may echo these patterns: shifting norms towards inclusion likely requires “a set of sustained practices” that go beyond one-off “diversity trainings” (Bernstein et al., 2019, p. 397).

4.2. Challenging Conventions in Modern Institutions
Remaking worlds can start with individuals working within formal modern institutions – schools, design agencies, non-profit charities, UN agencies, government entities, small businesses, and global corporations. (The authors’ current employment in a university made our learning about LS possible.) Thoughtful individuals can bring LS principles to guide these convenings away from the default structures, through shaping the invitation to welcome all staff, choosing and organizing spaces with flexible seating and room to move; and by structuring prompts around “what is working”. Even these modest efforts to meaningfully include diverse voices in shaping agendas, if they transcend performative “participation” metrics, can challenge hegemonic ways of working. We share relevant examples here.

Educational settings: LS are a popular pedagogical tool. Case studies of K-12 and undergraduate settings offer moderate evidence that consistently using LS can enhance student learning; LS can democratize participation by creating a relational environment and evenly distributing voices (Singhal, 2016; Singhal et al., 2020). In our higher education examples, we aim to serve as facilitators of learning vs. “experts” passing on objective facts. LS guiding principles and specific methods can help bring alive pluriversal knowledge within a classroom and support non-hierarchical pedagogies of learning that engage students in multiple ways. By surfacing and playing with many perspectives, LS can help students and instructors connect better with diverse academic content. A praxis-based form of learning encourages students and instructors to take these modes of reflexivity, democratic inquiry, and radical action into other environments, which is part of the culture and aligns with theories of liberating and critical education (Freire, 2014; hooks, 1994).

Community design practice: Italian design educator Ezio Manzini’s (2015) calls for “expert designers” to engage with “diffuse designers” to surface insights and co-create solutions, essentially producing the distributed design knowledge needed for increasingly wicked problems. New roles for professional designers in creative processes include being a humble and enabling facilitator. Yet we understand that most (western) university design education lacks exposure to inclusive organizing methods. Training and academic practices might instead reinforce one-way presentations, patronizing and harsh design reviews, and/or alienating public charrettes featuring near-final designs for nominal approval. LS methods can better support including all people as diffuse designers of social innovations. To this end, expert designers can join online or local LS networks and learn to identify and string together methods like Appreciative Interviews (with stakeholders), Troika Consulting and Improv Prototyping in community workshops.
Social movement organizing: Other schools of thought around non-hierarchical activism also value the complexity principles underlying liberating structures. LS praxis seems consistent with the Jemez guidelines for organizing that emphasize inclusivity, personal development, self-determination, bottom-up organizing, relational justice, and mutuality and solidarity (Brown, 2017). Brown sees these as guidelines key principles for facilitation, a core activity of emergent strategy for movement organizing. LS can therefore offer concrete protocols for facilitators and organizers to amplify their impact, engage new members in leading actions, and reach diverse constituents previously excluded from action arenas. These types of dynamic interactions can help more grassroots organizations shift from dogmatic and closed-system tendencies towards the more adaptive and collaborative behaviors required for distributed and localized “design in a connected world” (Manzini, 2015, p. 29). Social movement leaders could, for example, organize a day-long annual unconference featuring structures like Open Space Technology, User Experience Fishbowls and Conversation Cafes to build their movement effectively.

4.3. Tools for Pluriversal World-Weaving
So far, we have argued that LS can help creatively and unobtrusively dismantle structures of oppression within ruling institutional environments through including more voices and challenging default modes. Yet we recognize that many more institutions, groups, dreams, and creeds exist beyond those mainstream scenarios and institutions. LS can also help reassemble elements in these systems by reorienting the fragments – the “waste” of people, ideas, resources --towards inclusive and fruitful meetings. LS can help cultivate the pluriverse, a world where “many worlds fit” (Kothari et al., 2019 p. xxviii referencing the Zapatista autonomists). We find pluriversal scholarship on knowledge systems, design ontologies, and systems awareness to offer rich food for thought that suggests other possibilities for applications of LS:

Supporting Epistemic Plurality: Pluriversal world-making calls for epistemic justice and valuing alternative forms of knowing about the world (da Sousa Santos 2014; De la Cadena & Blaser, 2018). LS methods, since they include and give voice to many, can help align gatherings with political aims of undoing the epistemic hegemony of European rational models and moving towards valuing local, self, and relational knowledge. LS protocols can support learning, coalition-building, and designing transitions from non-western centers. LS methods for facilitation can surface different ways of understanding the world, such as through experiential knowing, valued traditions, and scientific evidence. Furthermore, pluriversal organizers can experiment with LS microstructures and methods. The LS global community can begin enabling adoption by translating existing protocols into other prominent global languages like Mandarin, Swahili and Arabic (the https://liberatingstructures.eu/ website already has links to Liberating Structures resources in different European languages). We can envision more adaptations of the visual alphabet (see Figure 2) for non-dominant language groups, non-literate or oratory cultures, and multicultural gatherings. Especially for these contexts mentioned, we expect that facilitators have already created new LS methods already that can be shared more widely. Learning and playing with the deeper principles of LS also allows facilitators to identify dominant epistemologies in their own environment underlying default ways of gathering, and to disrupt the notion of one way of doing things.

Convening Multiple Worlds: Pluriversal thinking leads to valuing relational orientations towards nature and each other, challenging governing notions of western individualism and progress-through-accumulation (Escobar, 2018). As examples, look to how the embodiment of a caring and generative natural world in the goddess or concept of Pachamama influences eco-movements, communal living or feminist thought in the Andean region (Lerma, 2019; Cullinan, 2019). What is the place for LS in holding such alternative visions? As the practice of purposeful gatherings appears ubiquitous among cultural and social groups, convening can be an act of constellating many worlds or reaching agreement across them (Brown, Yarrow & Green, 2017). Indigenous tribes will need to meet with government officials and
corporate stakeholders/extractivists to manage conflicts, address property arrangements, negotiate land management, and even rewrite national constitutions. LS approaches can help empower marginalized voices in these proceedings and help political blocs navigate divergent interests; perhaps through methods like Heard, Seen, Respected (for improved listening), Social Network Webbing (for relationship and resource building), What I Need From You (for reconciling needs across system locations) and Integrated Autonomy (for transcending conflicts to “both/and” resolutions).

**Designing for Social Change:** “Convening across worlds” implies the necessity of co-design. If the world is indeed transitioning away from Euro-modernity towards multiple models of living (ideally sustainable); and if design can help shepherd these transitions through “local cosmopolitanism” (Manzini, 2015, p.2), then diverse groups must co-create new, albeit distributed, futures. Therefore, everyone must be capable of imagining worlds into being. Pluriversal thinking recognizes that design is a human ability found everywhere. Thus, it calls for emancipatory design (Noel, 2016), building design capabilities for citizens (Manzini, 2018), and expressly not appropriating peoples’ designs for other commercial ends. Democratizing design capacities frees space for individual expression within larger designs and allows many solutions to emerge. Challenging a dominant paradigm does not call for another overarching, hegemonic solution to replace it (such as with Marxism, communism replacing capitalism), but for a wide range of “alternatives” in the same space. Expert and diffuse designers can use LS methodologies to support sense-making, creativity and experimentation vital for empowering designs (Mulgan, 2019). LS themselves exemplify transformative social innovation by creating feedback loops among dynamic, collective design processes and establishing new social relations of mutual power (Escobar, 2018).

5. **Conclusion**

This paper aims to help diffuse Liberating Structures principles and the 33 facilitation methods within the pluriversal design community. We see LS as a set of useful, tried-and-true tools that scholars, designers, activists and other changemakers can adapt and augment for diverse needs, in both in-person and online gatherings, for pluriversal world-weaving.

We shared how Liberating Structures reflect a worldview of complexity acknowledging interconnectedness, feedback, adaptation and emergence. For these, LS offer new, simple rules of interaction – the design elements of microstructures – that better organize our time and attention. Our examples of applying LS illustrate these elements at work. From our experiences within dominant US cultures and modern institutions of higher education and non-profits, we offer key principles for enhancing inclusion and challenging default microstructures in similar settings, and with attention to online gatherings.

We also explored how LS intersects with pluriversal thinking, seeing multiple intersections to support ways of organizing society beyond hegemonic forms of modernity. LS methodologies can ease the practical work of dismantling oppressive systems and reassembling those elements for pluriversal worlds. Learning the principles and specific protocols can energize dynamic communities of learning, design, and organizing and transform convening patterns away from top-down, one-way communications towards decolonial and pluriversal values. Small shifts in interaction quality, will, we hope, lead to tipping points in behavior change among human actors at many levels, offering us more ground-breaking university seminars and design studios, effective community-based participatory action research, sustainable and democratic grassroots collectives, and powerfully networked social movements.
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Laura Murphy: I am fascinated by human-environment-technology interactions and the pursuit of transdisciplinary solutions to wicked problems. My research and teaching are shaped by living, playing, and working around the world. I began unpacking my socio-cultural baggage in Jakarta back in the 1980s. I gained respect for small-scale farmers as ‘aid worker’ in Kenya. I felt that I missed the lives of real people behind the statistical analysis of Ecuadorian Amazon deforestation I did for my 1990s dissertation in a regional planning department; that has led me to continue exploring methods for knowledge creation and learning. I am a middle-class, able-bodied, non-straight, white woman, born and raised in the western USA. I am (still) holding an American passport and recognize my privilege in being able to travel and live around the world. I am a delighted parent to a multi-cultural, multi-ethnic global citizen.