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Sensing the System:

Collective Perception, Governance, and Conditions for Action in Complex Organizations

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Abstract

This paper presents an awareness-based research pilot conducted with a mission-driven organization navigating a transition from a volunteer structure to a more formalized governance model. The study examines how systems sensing practices, particularly systemic constellations, can support governance in complex, multi-stakeholder contexts by making relational and structural dynamics more perceptible and available for collective interpretation. Grounded in sensemaking, embodied cognition, and complexity-informed governance, the study conceptualizes governance as the coordination of perception, meaning-making, and authority in the formation and enactment of decisions. The intervention was designed to support the organization's efforts to strengthen strategic clarity, improve coordination, and develop greater alignment around roles and decision-making processes. Using a cooperative inquiry design, participants engaged in interviews, guided sensing journeys, systemic

constellations, and follow-up reflection. Analysis of interviews, workshop interactions, and participant reflections showed that systemic constellations enabled participants to surface and engage with relevant relational and structural dynamics, such as divergent leadership perspectives and role and authority misalignments, by making them more collectively perceptible and available as shared visual reference points. This allowed participants to examine, interact with, and reflect on these dynamics together in real time. However, these shifts in perception did not translate into coordinated action. The findings indicate that while systems sensing can expand what becomes collectively perceptible within governance processes, its influence depends on structural conditions, particularly the participation and alignment of decision-making authority and opportunities for collective integration. The study contributes an empirical and methodological account of how embodied and relational ways of knowing can inform governance by making previously implicit relational and structural dynamics more perceptible and available for collective sensemaking, and clarifies the conditions under which expanded perception can, or cannot, support coherent collective action.

Keywords
systems sensing, governance, systemic constellations, sensemaking, embodied cognition, decision-making, complexity, embodied knowing, participatory research

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Introduction

This paper presents an awareness-based research pilot conducted over a 10-month period. The pilot focused on an intervention with a mission-driven organization working to protect the Amazon rainforest. At the time, the organization was undergoing a shift in governance from a volunteer-driven, emergent mode of organizing, characterized by passion and experimentation, to a more formalized structure shaped by new funding, rapid growth, and increased expectations for accountability. The CEO engaged the author (hereafter, "I") to use *systems sensing* approaches to clarify ways to support the team in navigating the transition while strengthening *coherence* and building a sense of solidarity.[1,2]

[1] Systems sensing and related concepts are defined in the Theoretical Foundations section.

[2] Coherence is briefly described below and later defined in the Theoretical Foundations section.

Here, *governance* refers to the processes and structures through which collective affairs are steered, coordinated, and made actionable across independent actors. In contemporary scholarship, governance is understood not only as formal authority or top-down management, but as the ongoing coordination of decision-making, collective problem-solving, and collective action across complex systems (Bevir, 2012; Emerson et al., 2012; Jessop, 2002; Kooiman, 2016). In these complex multi-stakeholder contexts, groups must make and enact decisions under conditions of uncertainty, distributed knowledge, and competing interpretations.

In such conditions, governance challenges can persist not because groups lack solutions, but because they lack a shared perception of the system itself. Conventional approaches often assume that dialogue, analysis, and representational tools (e.g., models and frameworks) are sufficient for understanding complex situations. This study explores what becomes possible when embodied, relational, and experiential forms of knowing, drawing on felt experience, bodily perception, and interaction with others (Di Paolo et al., 2017; Fuchs & De Jaegher, 2009; Heron & Reason, 1997; Merleau-Ponty, 2005), are brought into governance processes.[3]

In the study, coherence was defined as a shared alignment in how participants perceive their relationships, roles, and context, in this case enabling coordinated action as the organization formalized its structure. The intervention engaged members of the organization whose roles spanned land stewardship, carbon mitigation, local practice, collaboration with Indigenous communities, philanthropic and institutional partnerships, and organizational functions such as management and communications. Each brought distinct perspectives that shaped what was perceived, valued, and acted upon.

This research examined how systems sensing practices, particularly "systemic constellations"—a facilitated method that uses spatial and embodied representation to explore relational and system dynamics (Hellinger et al., 1998; Weber, 2000)—might contribute to collaborative and participatory governance. Prior research suggests that systemic constellations can support organizational learning and effectiveness (Birkenkrahe, 2008; Scholtens et al., 2021). I served as lead facilitator and researcher of the pilot study, supported by co-facilitator Carri Munn, whose network consulting experience shaped the participatory design.

The inquiry guiding this study asks: How do embodied and relational ways of knowing influence systemic awareness and collective *sensemaking* in governance, especially in uncertain contexts? Here, sensemaking refers to the process through which individuals and groups interpret experiences to guide action (Maitlis & Christianson, 2014; Weick, 1995). A supporting question asks: What

[3] Embodied, relational, and experiential ways of knowing are defined further in the Theoretical Foundations section.

conditions shape whether insights generated through these practices translate into organizational action?

This paper contributes an empirical and methodological account of how systems sensing practices may expand collective perception within governance processes, particularly those related to collective decision-making, coordination across roles, and the shaping of emerging organizational structures during periods of transition. It also identifies the structural and relational conditions under which such expanded perception may influence how decisions are formed and carried forward into action.

This inquiry is grounded in a view of transformative learning and governance as a process that reorients perception, relationships, and action (Dirkx, 2001; Mezirow, 2003). From this perspective, governance is not only structural but also perceptual and relational, shaping how participants experience, orient, and act within the system.

What follows is not a story of success or failure, but of systemic learning. The intervention functioned both as an inquiry process and as a form of situated diagnostic, revealing how perceptions, participation, and power may be aligned or misaligned within the system. The study highlights a central insight: Even when a team develops a clearer understanding of its power dynamics, structural conditions still shape whether those insights can be translated into action. In this sense, the study contributes to research that positions governance in complex systems as the coordination of perception, the process of meaning-making, and the distribution and enactment of power and formal authority (Hutchins, 1995; Maitlis & Christianson, 2014; Uhl-Bien & Arena, 2018; Weick, 1995).

Theoretical Foundations

Governance and Complexity

Governance challenges in complex systems are often framed in terms of coordination, structure, or decision-making capacity. However, in practice, governance unfolds through ongoing patterns of interaction among actors (Stacey, 2012; Weick, 1995), where meaning, authority, and action are continuously negotiated rather than centrally determined. Organizational life is shaped not only by formal roles and decision-making processes, but by informal relational dynamics that emerge across teams, functions, and institutional boundaries (Schein, 2010; Stacey, 2012). These interaction patterns influence how information is interpreted, how priorities are set, and whose perspectives are taken up in decision-making processes, particularly in contexts characterized by distributed stakeholders, shifting relationships, and evolving conditions.

Organizational governance is also shaped by cultural dynamics, including tacit norms, unspoken agreements, and implicit boundaries around what can be seen, said, or challenged (Schein, 2010). These dynamics influence how power is

enacted and how participation unfolds in practice, often outside formal structures (Bourdieu, 1990; Clegg et al., 2006; Foucault, 1977). From this perspective, governance is shaped through the interaction between structure and culture, including how certain perspectives come to be recognized while others remain implicit or marginalized.

In the face of these challenges, leaders often rely on traditional forms of governance grounded in cognitive and analytic approaches. While these approaches remain essential for planning and coordination, they tend to privilege knowledge that can be explicitly articulated or measured. As a result, groups may struggle to perceive their own patterns of interaction and ways of operating in real time, including underlying relational dynamics that support or impede progress toward shared goals. Human communication is an embodied and interactive process that relies on non-verbal cues, many of which remain outside conscious awareness. These limitations become particularly evident within governance logics oriented toward coordination through planning, control, and explicit articulation, especially when the relevant signals in the system are diffuse, ambiguous, or only partially formed (Scharmer, 2016; Sutcliffe et al., 2016).

Complexity scholarship helps clarify why relational dynamics matter for effective governance. In multi-stakeholder, distributed systems, outcomes emerge from ongoing interactions among interdependent actors rather than from centralized control or linear causality (Stacey, 2012; Uhl-Bien et al., 2007). Relevant institutional knowledge is distributed across roles, relationships, and ongoing interactions, and is often only visible in the system's emergent behavior (Hutchins, 1995; Zhang & Norman, 1994). From this perspective, governance is less a matter of structural design, control systems, or strategic planning, and more an ongoing process of aligning perceptions, coordinating meaning-making, negotiating authority, and choosing actions in the face of uncertainty.

Deliberative and participatory governance approaches often emphasize agreement or consensus achieved through dialogue and reasoned exchange (Habermas, 1996; Mansbridge et al., 2012). More recent participatory and collaborative governance models extend this orientation in response to complexity by distributing authority, incorporating diverse stakeholder perspectives, and emphasizing dialogue and shared decision-making to strengthen legitimacy, trust, and coordination (Ansell & Gash, 2008; Emerson et al., 2012; Fung, 2006). However, across these approaches, participation continues to rely largely on cognitive and discursive forms of engagement, such as deliberation, negotiation, and structured exchanges of perspectives. As a result, tacit knowledge, emotional undercurrents, misaligned assumptions, and relational tensions that develop through ongoing interaction often remain outside of formal discussion (Fuchs & De Jaegher, 2009; Polanyi, 1966; Strati, 2007). These dimensions are frequently registered as a "felt sense" (Gendlin, 1981) before they can be clearly articulated. Systems sensing practices can provide a means to help surface and engage these otherwise implicit dynamics.

Systems Sensing

While participatory governance approaches aim to broaden who is involved in decision-making, they offer limited means for how participants can perceive and make sense of the system as it is experienced in real time. To understand how such perception becomes possible, this study draws on phenomenology and embodied cognition, which treat perception as something that arises through lived engagement with others and the environment, rather than as a purely cognitive activity (Fuchs, 2017; Heidegger, 1962; Merleau-Ponty, 2005). Awareness, from this perspective, is distributed across sensory, relational, and situational fields. People register shifts in tone, posture, timing, and interaction before they can fully articulate what they are noticing. Knowing, in this view, emerges through the interplay of body, mind, and environment (Di Paolo, 2021; Varela et al., 2016).

Heron and Reason (1997) extend this account by identifying multiple *ways of knowing:* experiential knowing (direct, embodied encounter), presentational knowing (expressed through images, metaphors, or symbols), propositional knowing (conceptual and theoretical understanding), and practical knowing (action-based or skillful engagement). Together, these theoretical strands support a broader epistemology in which embodied and relational experience can function as valid sources of information.

In this paper, systems sensing refers to a set of practices and an orientation that enables participants to engage in experiential forms of knowing in a structured way (Ritter & Zamierowski, 2021; Ryan, 1995). It allows them to perceive qualities of system elements, as well as relationships and emergent dynamics within the system patterns, that are difficult to access solely through discursive means. Ryan (1995) suggests that formal systems analysis captures only a portion of what a systems perspective can offer, pointing instead to the ways systems "whisper" through everyday interactions. Scharmer (2016) describes sensing as a mode of attention that integrates thinking and feeling, allowing participants to perceive the system from within rather than only from an external vantage point. This aligns with work suggesting that feelings, intuitions, and embodied responses can serve as meaningful signals rather than as noise (Schwarz, 2012).

In this regard, systems sensing complements systems thinking. Systems thinking, as described by Meadows (2008) and Senge (2006), engages underlying mental models and implicit dynamics, often through conceptual reflection and the use of maps or diagrams to represent relationships within a system. Systems sensing offers an additional mode of inquiry, inviting participants to engage in these relationships directly through embodied and relational experience, including aspects that may be difficult to access or fully make sense of cognitively. This can reveal patterns of tension, exclusion, and divergence that may be experienced viscerally and become observable through participants' interactions and articulated accounts.

Structured methods such as systemic constellations provide one way of discovering these hidden dynamics. Through this practice, participants rely on embodied representation and spatial orientation to co-create a dynamic image of the interactions of the key elements in the system and their relationships with one another (Hellinger et al., 1998; Peterson, 2019; Weber, 2000). Movement, positioning, orientation, affective responses, and even subtle shifts in direction of gaze or attention become part of the data as they are enacted and perceived within the group. In this sense, the information that emerges is generated through participants' engagement with the system of which they are a part, and meaning arises through that same participation, rather than from an external perspective. What might otherwise remain diffuse as a felt, yet inarticulate sense begins to take shape in ways that can be observed and eventually articulated. This aligns with accounts of "representative perception," where participants are able to access and express systemic patterns through their position and interaction within the field, without relying on prior knowledge (Schlötter, 2004, as cited in Birkenkrahe, 2008, p. 127). Participants are thus able to experience themselves in the system and to observe the system as a whole.

This process is also intelligible at the level of embodied social perception. Human beings share a broadly common embodied morphology and are highly attuned to social and spatial cues. These include proximity (Bogdanova et al., 2021), relational positioning and movement as indicators of others' intentions (Pavlova, 2012), direction of attention (Emery, 2000), and interpersonal distance as a socially meaningful variable rather than a neutral spatial feature (Sorokowska et al., 2017).

This may explain why the images generated during the constellation practice are often experienced as both affectively salient and collectively meaningful, and why coherence (shared alignment; see discussion below) among participants can quickly emerge from the images. This interpretation is informed both by my facilitation experience and by published accounts within the systems constellations field (Birkenkrahe, 2008; Weber, 2000). Studies suggest that coherence in organizational systems may be partly grounded in shared perceptual capacities that include sensitivity to space, bodies, attention, and relational positioning. This resonates with work on the social field, which suggests that system-relevant information is often held in the relational "in-between" rather than within any single individual (Pomeroy & Herrmann, 2024).

During systems sensing, participants move from felt experience to co-created representational image to shared reference. This process is designed to reorient how members understand the system, widening their frame of knowing beyond cognitive models and discussion toward an embodied "living map." These configurations function as shared images of the system, making relationships visible in a way that can be jointly observed and explored (Reich & Finckh, 2016).

Such images—whether created with physical bodies in space together or by using representative icons of elements on a shared board—can surface patterns of misalignment, tension, exclusion, and ambiguity that are difficult to identify

through dialogue, particularly in situations where multiple perspectives and competing interpretations are present (Scharmer, 2016; Schwarz, 2012). In conditions of uncertainty and complexity, where no single account is sufficient (Meadows, 2008; Snowden & Boone, 2007), this process can support the emergence of a collectively held understanding of what we are making together (Pearce, 2007; Peterson, 2019).

Emergence of Coherence

Coherence has been described as a global orientation through which individuals experience the world as comprehensible, manageable, and meaningful (Antonovsky, 1987; Geyer, 1997). In complex systems, coherence can also be understood as an emergent property arising through self-organization, in which coordinated patterns form through local interactions without centralized control (Haken, 1983). Building on this foundation, coherence is used in this study to refer to a dynamic condition in which members of a system share a sufficiently aligned perception of their relationships, roles, and context, such that coordinated action becomes possible without reliance on external control. Coherence emerges when previously fragmented or implicit relational information becomes collectively perceptible and meaningful, allowing participants to orient to the system as a whole rather than from isolated or competing viewpoints.

From a governance perspective, this matters because decision-making depends on how the system is perceived. When perception is limited to what can be readily articulated, coordination may rely on partial or competing interpretations, making alignment more difficult (Stacey, 2012; Uhl-Bien & Arena, 2018). When aspects of the system become more broadly perceptible across participants, there is greater potential for coordinated action without requiring full agreement or consensus (Maitlis & Christianson, 2014; Uhl-Bien & Arena, 2018; Weick, 1995). In this view, breakdowns in governance may occur not only when decisions are poorly designed, but when the system lacks a sufficiently shared perception to support coordinated action. This framing suggests that governance in complex systems depends not only on decision-making structures but on the system's capacity to perceive, interpret, and act on its own relational dynamics.

Methodology

Research Design

This study was designed as a qualitative case study grounded in participatory and awareness-based action research (Chandler & Torbert, 2003; Kemmis et al., 2014; Scharmer et al., 2021), using "cooperative inquiry" (Heron & Reason, 1997; Reason, 1999, 2003) as a guiding structure. Within this design, systems sensing practices—including systemic constellations—were used as primary methods for

generating experiential and relational data through embodied, spatial, and interaction-based exploration of system dynamics. Cooperative inquiry is a participatory form of action research in which participants act as both co-researchers and co-subjects, collaboratively exploring questions through cycles of action and reflection (Heron & Reason, 2008). In this study, the inquiry unfolded through iterative phases of identifying a shared focus, engaging in action, becoming immersed in the experience, and reflecting on emerging insights to inform subsequent cycles (Reason, 2003).

These cycles of inquiry enabled knowledge generation through lived engagement and collective sensemaking (Weick, 1995). This approach is grounded in a participatory worldview and an *extended epistemology*, in which knowing unfolds through multiple interdependent ways, including experiential knowing (Heron & Reason, 1997). As Heron and Reason (1997) describe, experiential knowing involves "feeling and imaging the presence of some energy, entity, person, place, process, or thinking" (p. 280). It is also the creative shaping of a world through inner resonance with what is present (Heron & Reason, 1997) and through perceptual enactment, where knowing arises not only through cognition but through embodied and relational engagement with the world (Varela et al., 2016).

Unless otherwise noted, references to "I" denote the author acting in the dual role of facilitator and researcher.

Research Context and Participants

The research was conducted as a 10-month pilot (June 2025 to March 2026) with a geographically distributed, mission-driven organizational team collaborating primarily through virtual platforms. All 18 team members were invited to participate in the study, with 10 to 12 members choosing to engage in each of the three research phases. Most participants remained consistent throughout. Participants represented multiple roles and levels of authority within the organization, including leadership, programmatic, and operational functions.

Data Collection Methods

Data collection activities were organized across three research phases (see also Table 1):

1. **Discovery and Inquiry Co-Design:** Semi-structured interviews (n = 10) were conducted across departments and organizational levels to collaboratively identify key systemic challenges, opportunities, and guiding question(s).
2. **Systems Sensing Sessions:** Two facilitated virtual workshops were held (approximately two hours each):
   Session 1: A sensing journey (Zamierowski & Ritter, 2025) was conducted involving sequential attunement to key system elements (e.g., land, people, or qualities), inviting participants to take the perspective of each

element and to attend to sensory, emotional, and relational experience, followed by dialogue and collective reflection.
Session 2: A blind systemic constellation was facilitated through a structured process in which participants embodied system elements (e.g., people, roles, institutions, or qualities) without prior knowledge of what these represented, positioning themselves in relation to one another based on embodied perception. This process generated a dynamic spatial configuration through which relational patterns became visible and available for collective reflection.

3. **Integration and Reflection:** A collective dialogue session was held, followed by individual interviews.
Session 3: A follow-up dialogue and collective reflection were conducted with participants and were designed to surface insights, collaboratively construct meaning, and identify next steps.
Post-Session Interviews: Brief one-on-one follow-up conversations were conducted with participants who elected to take part. The aim was to understand whether insights emerged during the process, and how, if at all, they were carried forward into organizational practice.

A fourth research phase, focused on decision-making and governance, was planned but did not occur; its absence became analytically relevant to understanding the conditions influencing the translation of insight into action.

All activities were conducted virtually using the video meeting platform Zoom and collaborative tools such as Miro and Google Slides. Data sources included interview transcripts, workshop recordings, facilitator observation notes and memos, visual maps, and participant reflections (verbal, written, and chat-based).

Phase	Description	Purpose	Activity	Participants	Data
1	Discovery and Inquiry Co-Design	Areas of focus Guiding inquiry	Interviews Small focus group	10 3	Transcripts
2a	Systems Sensing Session 1	Perceptions and metaphors	Sensing journey	12	Transcript Reflections
2b	Systems Sensing Session 2	Systemic dynamics of guiding inquiry	Blind systemic constellation	10	Transcript Visual map Reflections
3a	Integration and Reflection Session 3	Shared insight	Team dialogue and reflection	14	Transcript Reflections
3b	Post-Session Interviews	Individual insight	Interviews	7	Transcript Reflections

***Table 1**: Data collection*

Data Analysis

Data analysis drew on constructivist grounded theory principles (Charmaz, 2014) and used an inductive approach to identify system-level patterns across multiple forms of qualitative data and to generate analytic categories grounded in participants' experiences. Initial open coding led to the development of six analytic categories that were refined and stabilized through iterative coding: (a) embodied perceptions of system elements, expressed through participants' spatial positioning and reports of felt experience; (b) relational dynamics, including patterns of connection, disconnection, and orientation; (c) systemic and structural dynamics, reflected in the overall configuration of roles and alignment with purpose; (d) shared insight; (e) conditions influencing participation; and (f) conditions influencing the translation of insight into action (Table 2).

Coding was conducted across interviews, workshop data, and observation notes. To preserve the integrity of participants' language, particularly the vivid, metaphorical expressions used to describe their experience, in vivo codes were used alongside analytic codes. This helped differentiate participant-generated meaning from researcher interpretation, which was particularly important given the use of embodied, metaphorical, and relational forms of expression.

Analytic Category	What Was Observed/Coded	Example Indicators From Data
Embodied perceptions of system elements	Participants' sensory, emotional, intuitive, and spatial experiences when attuning to system elements, including how these perceptions were expressed and enacted through position, orientation, and movement.	"Feeling pressure that cannot flow" (Participant 04; September 12, 2025 session 2); "I face out to a beautiful window" (Representative for Element C; September 12, 2025 session 2); positioning closer to or farther from elements; turning toward or away; shifts in stance or direction of attention.
Relational dynamics	Patterns of interaction and relational response between participants, including perceived tension, attraction, or resistance; shifts in alignment or divergence; emotional tone; and disruptions in communication or connection.	Moving closer to another element; turning away; describing pull, resistance, or disconnection; divergent orientations (e.g., facing away); delayed responses or lack of response; communication disruptions (e.g., dropped calls).
Systemic and structural dynamics	Patterns across the system as revealed through aggregated spatial configurations, sustained orientations, and relational dynamics, including distribution of influence, role positioning, and alignment between formal roles and enacted authority.	Leadership or decision-making elements positioned at the periphery; multiple elements clustering around the center shape; repeated expressions of exclusion or constrained autonomy; expressions of competing priorities or divergent perspectives.
Shared insight (partial and distributed)	Moments where individual perceptions converged into shared or partially shared understanding, including the formation of shared reference points through interaction, as well as variation in uptake across participants.	Group recognition of patterns, including verbal agreement, embodied signals (e.g., head nods), convergence around shared symbolic representations (e.g., central organizational icon), chat-based affirmations, and statements that reflected a participant's experience as shared.
Conditions influencing participation	Factors shaping who was able to engage, contribute, or move within the process, including relational, structural, and experiential conditions affecting agency, connection, and inclusion.	Expressions of wanting to move but not being able to; silence following dominant contributions; references to lack of agency or permission; non-participation or skepticism toward the method; differential engagement across roles.
Conditions influencing translation of insight to action	Structural and governance conditions affecting whether and how insights were taken up in decision-making, including alignment between perception, meaning-making, and authority, as well as availability of integration spaces.	Absence or partial participation of decision-makers; lack of follow-up or integration space; limited visibility into decisions; statements indicating the absence of buy-in or that nothing had changed; divergent leadership perspectives; reliance on hierarchical control or centralized decision-making.

***Table 2**: Data analysis categories*

Implementation

This intervention was conducted with an organization embedded in a multi-stakeholder network focused on environmental protection in the Amazon region. Initial conversations with the CEO and team affirmed that the organization was at a pivotal "it's-going-to-take-all-of-us" moment, as it sought to validate its service model, strengthen and coordinate its partner network, and secure next-stage funding to expand from a country-level pilot to a pan-Amazon initiative.

The collaboration began eight months prior to the formal research, when I first met the CEO at a conference. We discovered a shared curiosity about how embodied practices might support strategic clarity while also building empathy across a geographically distributed team. The CEO described a desire for the organization "to know itself like I've come to know my cat," meaning an intimate, embodied familiarity with the organization's identity, needs, moods, and potential.

This aspiration was later codified into four guiding aims: (a) gain strategic clarity by linking the organization's vision to concrete actions; (b) strengthen internal coordination and decision-making capacity; (c) cultivate emotional cohesion, understood as trust and mutual understanding across the team; and (d) develop greater organizational coherence, including clarity of individual roles and how individual purpose contributes to the organization's mission.

To support these aims, the process was structured across three phases: (1) a discovery and inquiry co-design conducted through interviews with key participants; (2) two systems sensing workshops; and (3) a reflection and integration process based on both group and individual feedback. A fourth phase focused on decision-making was originally intended but not realized.

Phase 1: Discovery and Inquiry Co-Design

Ten semi-structured interviews were conducted across roles and levels within the organization to understand the key issues as perceived by different participants, and to formulate the guiding question for the sensing sessions. Interviews revealed deep commitment to the mission alongside strain and fragmentation, with participants describing fractured communication, coordination bottlenecks, and limited psychological safety. Participant 13 shared, "For me, it's the big issue, our internal communication. … We should talk better with us" (July 2, 2025 interview). Participant 17 said, "I'm emotionally exhausted" (July 1, 2025 interview).

Interview data suggested tensions between differing governance orientations within the organization. On one side were efforts to strengthen coordination through hierarchy, formalized procedures, standardization, and managerial oversight. On the other were desires for greater cross-functional collaboration, shared sensemaking, and opportunities to coordinate work relationally across departments. This dynamic is common in mission-driven organizations, where competing priorities—including efficiency, accountability, external credibility,

participatory collaboration, and responsiveness to local context—must be continuously negotiated.

Several participants described challenges related to limited opportunities for collaborative coordination and participation in shaping organizational direction. As Participant 04 noted, "We're not visioning together. … We're not co-creating across departments. … We're not building on each other's ideas" (July 8, 2025 interview). Others described the reduction of broader collaborative forums in favor of more centralized coordination structures. Participant 09 recalled a director saying, "If all the heads and directors of each department are aligned, then we don't need a general meeting" (July 3, 2025 interview).

In contrast, participants in leadership or coordination roles emphasized the importance of organizational structure, credibility, and operational consistency. Participant 12 explained: "We must have our policies, we must have our playbooks, manuals, and this kind of thing" (July 8, 2025 interview). Participants described these structures as responses to organizational growth, reputational concerns, and early operational crises.

At the same time, several participants expressed concern that increasing managerial oversight and procedural coordination were occurring alongside reduced opportunities for operational collaboration and direct cross-departmental communication. Participants described challenges related to information flow, responsiveness, and access to decision-making processes. Participant 13 noted that communication within [the managing department] had become increasingly "private" (July 2, 2025 interview), while Participant 10 described being discouraged from continuing direct conversations with the CEO, despite both parties considering the dialogue important (July 2, 2025 interview). Participants also described long delays in follow-up on critical exchanges. Participant 09 explained, "I really needed this communication because otherwise my projects wouldn't be able to happen" (July 3, 2025 interview).

More broadly, these differences appeared to reflect differing assumptions about how coordination should occur, whose knowledge should guide decision-making, and how the organization should balance accountability, efficiency, and collaborative participation during a critical transition period. The coexistence of these orientations appeared to contribute to difficulties in coordination in expectations, communication, and follow-through across the organization.

Each interview concluded with a brief systems sensing exercise,[4] as a low-pressure way for participants to engage with the approach. Participants were invited to "sense" into or take the perspective of a *resource* (a quality, capacity, or flow) that might support greater organizational coherence by listening deeply to that perspective with the body and felt senses. This approach helped surface

[4] The systems sensing aspects of the intervention were designed developmentally, starting with small moments during interviews and building incrementally each session; this offered a way of teaching new methods experientially, while laying foundations for participatory practice.

concepts such as “grace” as a resource, understood here as curiosity and openness toward understanding one another. It also highlighted felt connections to the Amazon rainforest and its ancestors and elders. When participants sensed from the perspective of the organization’s emerging Potential (a named element), metaphors of connection emerged, such as “two hands in a handshake” (Participant 03; June 27, 2025 interview), “building each other up” (Participant 13; July 2, 2025 interview), and “creating more spaces for ideating together” (Participant 04; July 8, 2025 interview). The sensing exercises contributed to developing a shared symbolic vocabulary that was later incorporated into session design.

Interview data and sensing reflections were synthesized into a visual slide presentation, presented during the first workshop session. Non-verbal feedback suggested resonance among participants. However, follow-up conversations with the CEO indicated that the insights were not perceived as new to the organization’s management team.

Phases 2a/b: Systems Sensing Sessions

Carri Munn and I co-facilitated two virtual workshops on Zoom. Each of the two sessions included 12 of the 18 team members, although the composition of participants differed slightly between the sessions. Participants represented a range of roles, including leadership, operations, and programmatic functions across multiple locations. Notably, two people with formal decision-making authority were absent from both sessions: a department head and an advisor connected to the funder.

Session 1: Guided Sensing Journey

In Session 1 (July 29, 2025), participants engaged in a two-hour guided “sensing journey” (Ritter et al., 2025), a structured, sequential somatic exploration of a system in which participants attune to different elements or key aspects or dimensions of the system. The process is akin to “making stops along a journey,” and visiting elements one at a time, with each element offering a distinct vantage point into the system (Zamierowski & Ritter, 2025, p. 14).

The elements identified in Phase 1 included the “Amazon rainforest,” its “ancestors,” the “organization” (past/present/future), “pressure/tension,” and “grace.” The inquiry guiding the process asked: What is there to know for the organization to move toward its fullest potential?

I facilitated the journey by inviting participants to imagine stepping into the perspective of each element and to sense what it is like by “listening deeply,” focusing their awareness on somatic sensations, intuitive or visual signals, and relational impressions as they brought their attention to each element at a time. Participants silently recorded their reflections on each element, followed by a structured dialogue in which insights were shared collectively.

Participants described vivid embodied experiences, such as:

> "The ancestors are underneath, supporting the whole network structure" (Participant 07; July 29, 2025 session 1).

> "We're a mycelial network; our power lies in collaboration across the network. To harness this power, we need to strengthen our own connections within the organization first" (Participant 06; July 29, 2025 session 1).

> "The water pressure of the Amazon River that cannot flow … that's the pressure our organization faces, and the need for trust" (Participant 08; July 29, 2025 session 1).

The metaphors echoed key interview themes, suggesting how the participants experienced or *felt* their own ecosystems within the organization. For example, interview data described communication breakdowns and blocked coordination across organizational activities, which Participant 08 (July 25, 2025 interview) experienced as "water pressure… that cannot flow." Similarly, a desire for greater connection and collaboration was expressed through the image of a "mycelial network" (Participant 06; July 29, 2025 session 1), pointing to interdependence and relational strength. In this way, the systems sensing exercise appeared to move participants beyond discursive accounts and into direct embodied engagement with system dynamics.

Session 2: Blind Systemic Constellation

In the second two-hour workshop (September 12, 2025), participants engaged in a blind systemic constellation (Hellinger et al., 1998), a structured, spatial method for exploring relational dynamics within a system. In this case, the system elements consisted of key organizational roles and departments identified during the co-design session. Participants were each asked to choose one of these elements (labeled A-L), but were not told which element they represented. This "blind" design allowed the process to unfold without being shaped by bias, prior interpretations, or interpersonal narratives.

Working with a shared online visual board (Google Slides), each participant moved their chosen colored icon relative to others until its position felt appropriate to them based on their embodied perception; they then oriented their "nose," or focus of attention, in the direction that felt correct to them. The virtual format was adapted from systemic constellation practices that moved online during the COVID-19 pandemic. Participants were guided to remain attentive to bodily sensations, impulses, orientation, emotional responses, and shifts in attention while interacting with the shared spatial representation on screen. In this way, the visual field functioned as a relational and embodied point of reference through which participants engaged the system together despite physical distance. Spatial position, orientation, and movement were treated as

primary forms of data, together suggesting relational and systemic dynamics and generating a "living map" of the system. The co-created guiding inquiry question was: How can the organization activate its network from the inside out to realize its full potential?

Initial placements

The initial constellation placements (Figure 1) evoked a timeline of the organization's origins. The individual embodying Element A (later revealed as the CEO role) positioned his icon near the center. Element B, differentiated into B1 and B2 (later identified as the advisor and the initial funder), positioned themselves at the periphery. The individual representing Element A (CEO) described sensing a "flow of water," later understood by the representative as symbolizing early capital investment. The individual embodying Element C (a decision-making role) also selected a position at the periphery and oriented outward toward a "beautiful window."

During this phase, the participant embodying Element J experienced intermittent connection disruptions while attempting to take a position in the field.[5] This was observed by the group, and I noted it as potentially indicating communication challenges associated with this role, consistent with patterns reported in the interview phase.

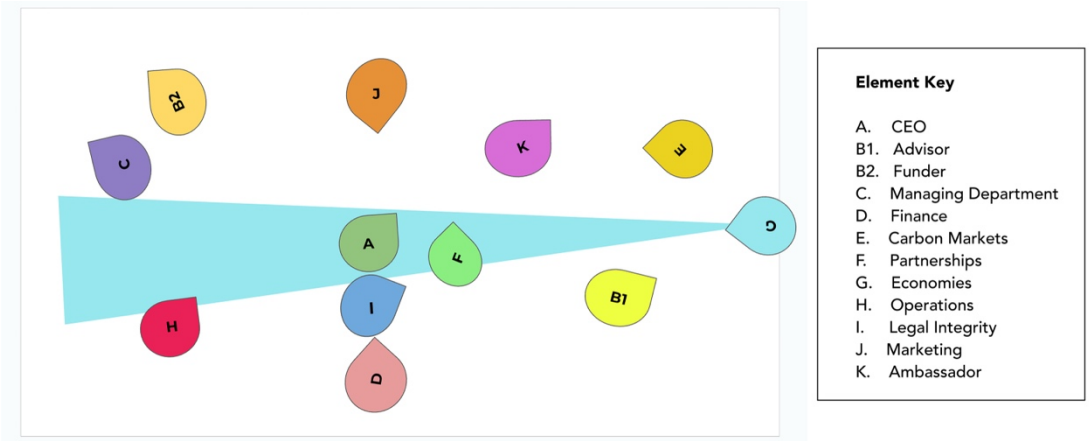

***Figure 1**: Initial constellation placements*

Mid-phase movement and interaction

As the constellation developed (Figure 2), I invited participants to adjust their positions in response to their felt experience. Relational patterns began to

[5] Participants were each assigned an element and embodied that element during the exercise. For readability, the movements and observations are described in terms of the elements themselves, rather than "the participant embodying the element."

emerge through movement, interaction, and participant descriptions. A founding-mission element (G), related to creating sustainable economies in the Amazon, moved diagonally across the field and requested to leave a "wake," represented visually as a blue triangular shape. Several participants responded to this movement. Element F described the experience as "innertubing[6] together with Element A," while Element A reported a "chaotic rush of energy … like a nest of ants erupting," later interpreted in the reflection session as the emergence of ideas. Element A later reported feeling more settled after the wake's influence, and Element K (the ambassador) oriented away from the triangular shape, explaining, "I feel I'm a house of people … I'm protecting."

Other participants responded differently. Element B2 (funder role) reported "the sensation of looking away and down … not wanting to be noticed." He later described, "I have a sensation of a philanthropist who gave away money and now … I regret it," and requested to transform into a "donut shape" to represent his attention turning inward.

At the same time, several elements expressed a pull toward the center. Element E described feeling "empty and light … like a balloon with a small tether to the ground." Element E shared a desire "to get closer to the center, it's a yearning," which was echoed by Elements H and G. Element I attempted to request movement into the center, but experienced repeated audio disruptions, making the request difficult to hear. In prior interviews, the participant in this role had described feeling unheard and mispositioned within the organization. It was also observed that Element G was positioned near the edge of the board and expressed a desire to move toward the center, but did not feel able to do so.

During this phase, a central shape began to stabilize as the earlier "wake" transformed. Element G described it as becoming "a pond … more settled … and still includes everyone." Other participants built on this shared image, with Element F describing it as "teeming with life" and Element D responding, "like a light growing." As facilitator, I offered a possible interpretation that the central form could relate to the organization's essence or purpose. Participants' responses—including head nods, verbal affirmations, and subsequent elaborations—suggested resonance with this framing. Element A then requested that the central shape expand so "everyone can be connected," which was met with affirmative responses (e.g., "awesome," "great") from Elements E, G, and H as their elements became fully positioned within the central form.

[6] "Innertubing" refers to a recreational activity of floating down a river together on inflatable tubes, used here as a playful metaphor for shared movement and flow.

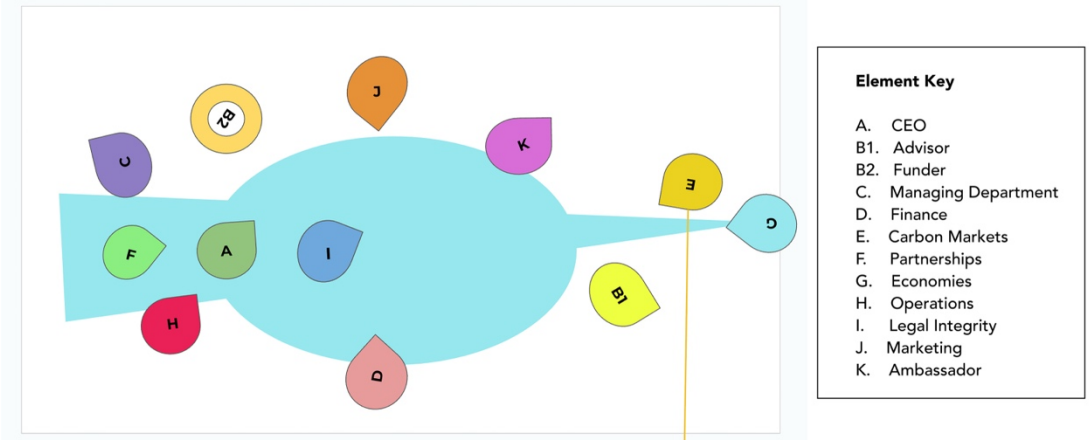

***Figure 2**: Mid-phase constellation placements*

Final configuration

In the final spatial arrangement (Figure 3), participants settled into a relatively stable configuration. Most elements gathered around the central blue form, which was generally associated with the organization's essence or purpose. However, three key roles, B1/B2 (advisor and funder roles) and Element C (a decision-maker), remained positioned outside the central field and oriented away in different directions.

At the conclusion of the exercise, the identities of the elements were revealed before the session ended. Participant 01 noted that "it makes sense that [legal integrity] is at the center of everything." Due to time constraints, there was limited opportunity for a debrief or integration. I indicated that a subsequent session would be dedicated to reflecting on and integrating insights from the process.

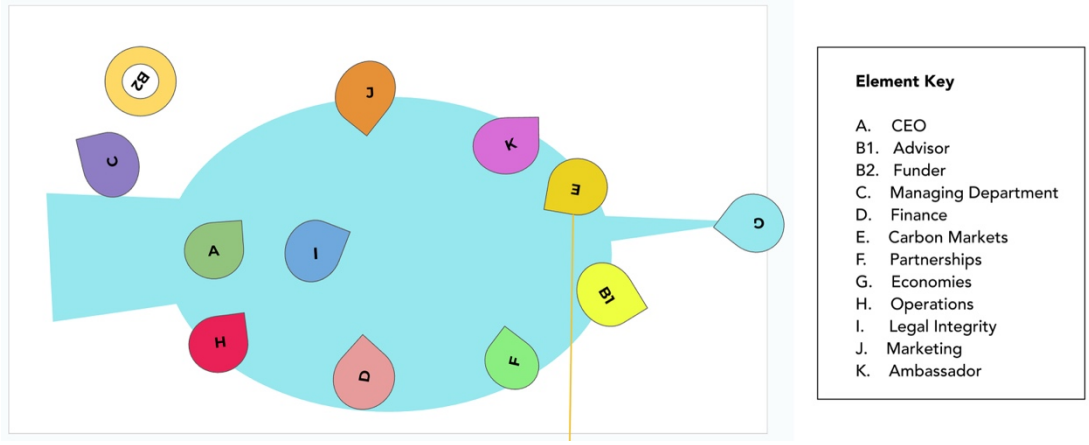

***Figure 3**: Final positions on the living map*

Phases 3a/b: Integration and Reflection

Phase 3 included a brief 30-minute integration and reflection session (3a), followed by individual post-session interviews (3b). Due to scheduling constraints, the integration session was embedded within a regular operational meeting rather than a dedicated container. Follow-up interviews were conducted with participants who chose to reflect on insights from the process and whether these were carried forward into organizational practice.

Session 3: Integration Session

Session 3 was held one week after Session 2 (September 17, 2025). Several team members who had not participated in the two earlier systems sensing sessions were present during the operational meeting. Minutes before the integration session began, a decision to cancel an upcoming team retreat was communicated. Following this announcement, I observed shifts in tone of the meeting: facial expressions appeared more tense, some participants became more still, while others spoke more quickly and urgently. After checking whether it was still appropriate to continue, Participants 01 and 03 affirmed that Session 3 should proceed.

The session began with participants sharing a few insights from the constellation. Two participants who had not attended the systems sensing sessions expressed reservations about the legitimacy of the process. Participant 08, who had previously reported enjoying the first session, dismissed the constellation outcomes as "projections." A senior leader (Participant 12), who had not participated in the earlier sessions, then spoke at length, emphasizing the need to refocus on strategy.

Given time constraints within the broader meeting, the session concluded shortly thereafter. As a result, there was a limited opportunity for collective reflection or integration of insights at the group level. Just before closing, Participant 03 noted in the chat that the constellation's final image represented "a desired state, not the current one." A flurry of thumbs-up followed.

Post-Session Interviews

Follow-up one-on-one conversations in subsequent months provided an opportunity to assess whether insights emerged during the systems sensing process, and how, if at all, they were carried forward into organizational practice.[7]

[7] Some follow-up conversation occurred in the weeks following the last session and others in the new year due to conference and holiday schedules.

Several interviewees described the blind systemic constellation as supporting awareness of relational and systemic dynamics. Participant 04 reflected that the exercise "revealed the shape of our power dynamics … that are felt" (March 17, 2026 interview), while Participant 06 noted that it surfaced assumptions that "were already in our perception but were not expressed" (March 18, 2026 interview). Participant 09 similarly shared that "it helped us understand our internal dynamics" (March 19, 2026 interview), particularly through the visual map, which supported conversations to "connect the dots." Participant 09 added, "We saw [the central pond shape] as something like the Amazon region and the work that we do."

Some interviewees described shifts in how they related to others in the organization. Participant 01 reported that "a long-simmering tension that had drained energy across departments … vanished" (November 10, 2025 email), and that team members expressed greater empathy for one another. Participant 17 noted that participants "took away a broader appreciation for each other" and that the exercise initially made them feel "hopeful or empowered … like it was a launch pad for moving the organization forward" (March 10, 2026 interview). Participant 01 further reflected, "I felt the emotions of other team members and stakeholders. Those emotions carry memories. … This helps with strategic long-term planning and conflict resolution" (November 10, 2025 email).

At the same time, interviewees described limits to how these insights were taken up at the organizational level. Several participants (04, 06, 09, 10, 17) reported that little had changed in the organization, which they attributed in part to the limited participation of decision-makers. As Participant 17 stated, "There was no buy-in" (March 10, 2026 interview), while Participant 04 observed, "I don't feel like there was space to share our reflections or insights as a team because it was not prioritized … and I don't think [leadership] ever sat down and asked … what did this show us?" (March 17, 2026 interview). Participant 10 perceived resistance to change within the leadership (March 20, 2026 interview). Participant 02 similarly noted that no actions were carried forward, stating, "unfortunately, no" (March 12, 2026 interview).

Interviewees also described limited visibility into decision-making processes. Participant 06 noted, "we don't know the conclusion of [leadership]" (March 18, 2026 interview), while Participant 17 reflected that "there is a lot less transparency about why things happen" (March 20, 2026 interview).

Several participants described divergent perspectives among the leadership, including differences in how the organization's direction, roles, and priorities were understood. Participant 10 noted that leaders held "very different points of view" (March 20, 2026 interview). In reference to the final constellation image, Participant 06 described the differing orientations of leadership elements as "like magnetic fields … everyone is trying to keep with their own assumption on what is needed to be done" (March 18, 2026 interview). Participants also reflected on the outward-facing orientation of certain elements, noting that this positioning could be understood in multiple ways. For example, Participant 06 suggested

that Element C's outward orientation reflected how the [Managing Department] "brings a new perspective … of how [the organization] can position ourselves to the world" (March 18, 2026 interview).

Interviewees also pointed to differences in how specific roles were understood and positioned within the organization. In the constellation, Element I (Legal Integrity) was placed centrally within the configuration, which several participants (01, 06, 10) described as resonant with their experience of its importance. At the same time, participants noted that this role was not consistently prioritized in the organization's current structure. Participant 10 reflected that the advisor viewed this function as "risky" (March 20, 2026 interview), highlighting a contrast between how the role was perceived within the constellation and how it was valued in practice.

Participants described misalignment between formal roles and enacted authority. In some cases, decision-making influence appeared to be located outside formally designated roles. Participant 10 described a perceived discrepancy between formal leadership roles and how decision-making unfolded in practice (March 20, 2026 interview). Participant 17 similarly described "an unresolved dynamic" between leaders with differing visions and leadership styles (March 10, 2026 interview).

Several interviewees pointed to challenges in creating a shared organizational identity and direction. Participant 06 identified the core challenge as a lack of coordination, noting the absence of a "pedra angular" (cornerstone) in the form of a clear mission, vision, and values (March 18, 2026 interview). Participant 10 stated, "We still don't have a final decision about who [the organization] is" (March 20, 2026 interview), and described inconsistencies between how the organization was presented externally and how it was understood internally.

Some participants elaborated on ongoing challenges in organizational functioning. Participant 06 stated, "There is still dysfunction" (March 18, 2026 interview), while Participant 17 observed that decision-making had become "much more hierarchical… very vertical" (March 10, 2026 interview).

Findings

Analysis of the systemic constellation data, interview data, sensing journey reflections, and follow-up conversations identified three patterns in how participants experienced the systems sensing processes within this case. Specifically, participants described:

1. Increased awareness of relational and systemic dynamics,
2. Partial and uneven formation of shared understanding, and
3. Limited translation of insight into coordinated action.

Increased Awareness of Relational and Systemic Dynamics

Participants in the systems sensing sessions described increased awareness of relational and systemic dynamics, particularly through the articulation of perceptions that had previously been felt but not clearly expressed. The experiential engagement with the systemic constellation helped to make implicit or unarticulated aspects of the system more perceptible through sensations, spatial positioning, orientation, interaction, and the formation of a shared visual configuration.

Many participants experienced the process as clarifying or confirming existing organizational dynamics, suggesting that the constellation supported the recognition and articulation of previously unspoken perceptions. As participants engaged with the systemic constellation over time, patterns related to orientation, connection, distance, and attention became more noticeable and discussable within the process. Participants noted specific dynamics that became more perceptible, including differences in orientation toward central elements and shifts in perceived connection or agency.

These patterns corresponded with pre- and post-session interview data describing challenges related to clarity of direction, divergent perspectives among leadership, differences in how roles and priorities were understood, and fragmented coordination across the organization. Participants also described ongoing challenges in coordination and collaboration, alongside an emerging shift toward more centralized or hierarchical decision-making.

One interpretation of the constellation is that additional structure alone may not address these types of challenges in organizational governance. Rather than needing additional structure (hierarchy, procedures, protocols), a central issue appeared to involve differences in how authority is positioned and oriented across perspectives, as well as variation in how a central element—identified as purpose or the work in the Amazon—is experienced and enacted across the system.

Overall, the systemic constellation functioned as a structured context in which participants generated and engaged with perceptual and relational interpretations of the system in that moment. What became visible reflects a co-constructed and situated form of perception, emerging through interaction, embodiment, and context. In systemic constellation practice, such configurations are understood as relational representations influenced by the context and interactions within the field, rather than as fixed or objective depictions of the system (Hellinger et al., 1998). This includes both relationally shaped perception and interpretive processes, including the possibility of projection.

Partial and Uneven Formation of Shared Understanding

The systems sensing process generated moments of shared recognition and connection, but these did not fully stabilize across the group. During the systemic constellation, certain elements emerged as temporary shared reference points through participant interaction. For example, the emergence of a central “pond”

became a recurring point of orientation that gained resonance through repeated responses and interactions over time. The distributed process generated opportunities for implicit or felt experiences to become more collectively perceptible. Through interaction, certain perceptions were reinforced and elaborated, while others fell away. The process also sparked conversation about the meaning of the elements and their positions, orientations, and patterns, allowing implicit perceptions to become shareable and open to collective engagement.

However, shared understanding remained uneven. Participants described differences in how the process was experienced, including variation in what aspects of the constellation were noticed, taken up, or considered meaningful. In many cases, recognition of specific patterns or insights remained localized within subsets of participants or informal conversations, rather than becoming collectively integrated.

These variations suggest that while shared perception may begin to form through interaction, in this specific case study, it remained partial and uneven, shaped by differing perspectives, limited opportunities for collective sensemaking, and varying levels of engagement.

Limited Translation of Insight Into Coordinated Action

Participants described limited translation of the insights that emerged during the systems sensing process into coordinated action. While moments of increased clarity and partial shared understanding were reported, these did not consistently lead to identifiable changes in organizational practice.

Participants attributed this to several conditions. A central factor was the absence or only partial participation of individuals who held formal decision-making roles, which limited the integration of insights into decision-making processes. When key decision-makers did not participate in the systems sensing sessions, they were not part of the shared experiential process through which insight was generated and were therefore not positioned to carry it forward into action.

Participants also described limited opportunities for collective integration and reflection, resulting in insights remaining localized. Some noted skepticism toward the systems sensing method among those who did not participate, further limiting the uptake of insights. In addition, participants described limited visibility into how decisions in the organization were made and uncertainty about whether any actions had resulted from the process. The absence of a shared experiential process across participants and non-participants had made it difficult to move into the planned fourth phase, which was intended to focus on collective integration, decision-making, and next steps.

In this pilot study, the translation of insight into coordinated action depended on structural and relational conditions, including participation across authority structures, opportunities for collective integration, and the extent to

which insights became shared across the group rather than remaining localized. Where these conditions were limited, insights remained primarily diagnostic, with limited pathways for incorporation into ongoing governance and decision-making processes.

Discussion

This study began from the belief that governance challenges in complex systems may arise not only from difficulties in coordinating action, but also from how perception, meaning-making, and authority are formed, shared, and negotiated across participants. In this specific case study, systems sensing practices contributed to making relational dynamics more perceptible through spatial positioning, orientation, and interaction. In doing so, the process created conditions in which aspects of the system that were previously implicit became available for collective engagement and interpretation.

However, making aspects of the system more perceptible did not automatically lead to a stable shared understanding or coordinated action. While participants experienced moments of partial shared recognition regarding certain elements of the system, differences in how roles, priorities, and organizational direction were interpreted persisted across the group. These findings suggest that coherence is not a fixed end state, but a fragile and ongoing condition dependent on how perception is formed, shared, and sustained within a group.

The findings further show that making the system's implicit dynamics more collectively perceptible was insufficient on its own to translate insight into coordinated action within the organization. In this case study, opportunities for collective integration and participation across authority structures were uneven, limiting the extent to which insights generated through the process became integrated into governance practice. This reflects a structural gap between those involved in generating insight and those positioned to act on it, consistent with research showing that participation does not guarantee influence in decision-making (Ansell & Gash, 2008; Emerson et al., 2012).

These findings suggest that governance challenges may arise not only from a lack of solutions but also from the absence of conditions under which perception becomes sufficiently formed, shared, and actionable. When perception remains fragmented or when those involved in generating insight are not positioned to act on it, coordination becomes difficult to sustain. Under such conditions, organizations may default to more centralized, hierarchical, or control-oriented forms of governance rather than developing coherence through shared orientation and understanding.

The outcomes of this case may also have been shaped by the intervention design which unfolded through a limited number of virtual sessions during a period of significant organizational transition. More sustained engagement, broader participation of decision-making actors, or the use of in-person

facilitation may have created different opportunities for collective integration and coordinated action.

Conclusion

This study suggests that governance challenges in complex systems may arise not only from how decisions are made, but also from the conditions under which shared understanding, meaning, and coordinated action become possible across participants. Systems sensing practices supported participants in articulating relational and systemic dynamics and, in some cases, forming partial shared recognition. However, the findings suggest that the movement from perception to action depends not only on awareness, but on governance conditions that support the collective formation, integration, and enactment of insight across participants and decision-making structures.

From this perspective, systems sensing practices offer one possible approach for expanding how groups engage systemic dynamics, while also revealing the structural and participatory conditions under which insight may be more likely to become actionable. This points to an important direction for future research and practice: how governance processes might be designed not only to support participation and decision-making, but also to enable shared perception to become integrated into collective ownership, commitment, and coordinated action within complex systems.

Conflict of Interest Statement

The author declares no conflicts of interest regarding this manuscript. The author had a prior professional connection with an employee who facilitated the initial introduction to the organization.

Ethics Statement

Participation in the research pilot was voluntary, and it was framed as an organizational learning process exploring systems sensing practices. The study was conducted in accordance with California Institute of Integral Studies' Human Research Review Committee guidelines. Participants were informed that the research pilot included a reflective research component, and written consent was obtained for the use of anonymized reflections, workshop observations, and scholarly reporting. Identifying details (including names, roles, and contextual specifics) have been altered and anonymized to protect participant confidentiality. All data were securely stored on password-protected devices and encrypted platforms accessible only to the research team. Data were handled in accordance with institutional guidelines to ensure confidentiality and protection of participant information.

Generative AI Statement

The author used ChatGPT (OpenAI) to assist in identifying potentially relevant literature, supporting the structural organization of selected sections, and assisting with sentence-level phrasing and lexical choice during editing. All content was written, reviewed, and verified by the author.

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