Planetary Pedagogies: Ceremony as Legal-Design Method for More-Than-Human Design Education

From Ecological Experiment to Ceremonial Legal-Design for More-Than-Human Design Education

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With thanks to the generous and collaborative community of staff, students, community members and more-than-human beings involved in the Falmouth University Ecological Citizenship project.

Abstract

Design education is continually expected to address the nested critical challenges of our planetary crisis. Yet design education remains largely anthropocentric, continuing to privilege human-centred design and agency. Even as awareness of designing as ecological systems and incorporating planetary worldviews grows, the pedagogical structures that train future designers continue to operate within extractive and individualist logics that marginalise the agencies, knowledges, and relations of the more-than-human.

Planetary Pedagogies explores how ceremony, understood not as an import from other cultures but as a relational technology that western modernity has largely forgotten, can serve as a method for reimagining design-based pedagogy as a place-based ecological practice. The research documents an eight-month pedagogic experiment, Ecological Citizenship (Eco-Cit), at Falmouth University, in which weekly peer-led gatherings of students, staff, and community members generated their own governance through the act of meeting in circle, collectively determining what to learn, and establishing shared norms through repeated practice. Post-hoc reflection on this experience revealed six pedagogic terrains of being: recurring modes of ecological engagement, each held by a corresponding ontological territory, that defined the gatherings as an implicit ceremonial legal-design space. By legal-design space, this paper means a designed process through which communities generate, enact, and renew collective obligations through embodied practice.

The terrains also revealed that while the more-than-human was present in the content of the experiment, it was not yet integral to the process. The Co-Creation Council was therefore developed to extend the ceremonial jurisdiction across this threshold. Convening educators and learners as a multispecies coalition, the Council utilises kin-objects as co-educators, translating relational insights into pedagogical forms through embodied mapping and storytelling. By collectively navigating the ontological territories through five ceremonial phases, each performing a distinct legal-design function, a planet-centred, place-based educational geography forms. Traversed differently by each community, this geography uncovers its own pluriverse of living, symbiotic planetary pedagogies and legal-design forms.

Keywords: more-than-human rights, ceremony, legal design, ontological terrain, planetary pedagogy, relational ontology, Indigenous jurisprudence, design education

1. Introduction

Design education is increasingly called upon to respond to the ecological crises of the Anthropocene. These are not only technical problems; they are relational failures that emerge from pedagogical systems that privilege human agency while marginalising the agencies of other beings. As Haraway (2016), Escobar (2018), and Tsing (2015) have argued, the planetary condition demands a shift from human-centred design toward relational practices that acknowledge the interdependence of humans and more-than-human worlds.

Despite this recognition, the pedagogical structures within Higher Education Institutions that train designers remain rooted in modernist assumptions of control, mastery, and extraction (Machado de Oliveira, 2021). Design pedagogy positions the designer as an autonomous problem-solver rather than a participant in ecological systems. Even sustainability-oriented curricula often frame nature as a resource to be managed rather than a community of relations to be respected. If the aim of education is to surface relational ways of knowing, and if those ways of knowing must be practised rather than described, then the pedagogical form itself becomes the site of research.

This paper introduces Planetary Pedagogies as a framework for redesigning design education through a planetary-centred axiology. Central to the design of Planetary Pedagogies is the proposition that ceremony can function as a legal-design method: a structured practice through which communities gather, enact relationships, negotiate obligations, and generate shared norms that support ecological citizenship through education. By legal-design space, this paper means a designed process through which communities generate, enact, and renew collective obligations through embodied practice. Drawing on Indigenous jurisprudence, rights-of-nature scholarship, and more-than-human design theory, the paper argues that ceremony is not merely symbolic. It is a site of governance where law is enacted through practice, relationship, and collective decision-making (Borrows, 2010; Napoleon, 2009). Understood not as an import from other cultures but as a relational technology that western modernity has largely forgotten, ceremony offers a structure for investigating how ecological pedagogies can form. As Yunkaporta (2019) writes, the assistance people need is not in learning about Aboriginal knowledge but in remembering their own. The knowing has to be lived, and the living has to be collective.

This paper documents one such attempt. Between October 2023 and June 2024, an experimental educational space called Ecological Citizenship (Eco-Cit) operated at Falmouth University. Weekly peer-led sessions, open to students, staff, and community members, created the conditions for a sustained inquiry into what ecological education might actually require. What emerged across

roughly forty sessions was a recognisable pattern of ecological engagement that kept recurring across different activities, facilitators, and weeks. Reflecting on this pattern produced a framework of six pedagogic terrains: educational spaces where distinct modes of ecological engagement and different ways of being and knowing coexist and cross-pollinate. These ritual gatherings seeded the recognition of the pedagogical experiment as a ceremonial legal-design space where shared decisions and mutual understanding emerged through relational practice.

The terrains also highlighted that while the more-than-human was integrated into the content, it was not yet integral to the decision-making process. The Co-Creation Council was therefore designed as a ceremonial extension for collaborative governance between human and more-than-human participants. When participants collectively navigate the terrains, a planet-centred educational geography forms, and a pluriverse of living planetary pedagogies can emerge.

2. Context

2.1 The Cartesian Problem in Design Education

Central to developing responses to environmental challenges is reuniting the Cartesian split between self and material reality, humanity and ecology, place and community. This reunification already exists in many Traditional Ecological Knowledges (TEK) but has been systematically excluded from western educational structures (Yunkaporta, 2019). Design, as a field of criticality, systems thinking, and reflexive practice, is well placed to establish networks of mutual exchange between human and more-than-human systems. Yet, as educational experiences become increasingly digital and human-centred, design disciplines risk deepening the very separation they claim to address.

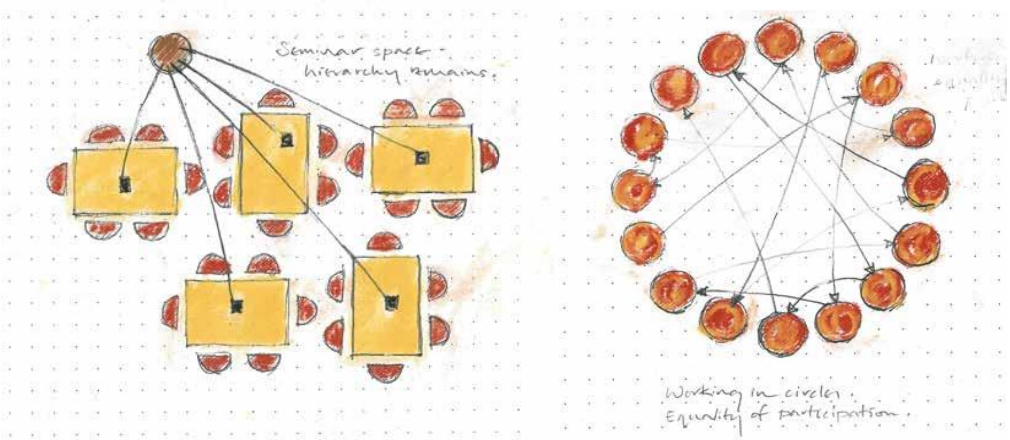
David Orr (1991) argued decades ago that the ecological crisis has been substantially created by the kind of education that universities provide: education that privileges abstraction over relationship, expertise over participation, and individual mastery over collective response. The industrial design mindset, design as problem-solving for human users, still dominates curricula across design fields and studio cultures. As Zachary Stein (2019) argues, education itself is between worlds. The old models are failing and the new ones have not yet formed. Vanessa Machado de Oliveira (2021) names this condition precisely: we are in a period of hospicing modernity, doing the difficult work of letting go of systems and identities that are dying without rushing toward

premature replacements. The task is not to design a better version of what we have. It is to create the conditions for something genuinely different to emerge.

The study of Indigenous perspectives on environmental relationship provides models for understanding what that renewal might look like. Robin Wall Kimmerer's (2013) account of reciprocity between humans and plants offers an ethics of gratitude and mutual obligation rather than extraction, grounded in centuries of Potawatomi botanical knowledge. The working relationships with the natural world built into Indigenous cosmologies were not abstractions held at a distance from daily life; they were incorporated into the physical and social structures of communities. Design education needs to learn from these traditions, not by extracting their content but by attending to their form: how knowing is structured, maintained, and renewed.

2.2 The Design Studio as Apparatus

Karen Barad's (2007) agential realism shows why pedagogical form is inseparable from pedagogical content. For Barad, knowing is not a mediated activity performed by a self-contained subject upon an external world. It is a direct material engagement, a practice of intra-acting with the world, as part of the world, in its ongoing reconfiguring. Apparatuses, including educational ones, are not neutral instruments. They are material-discursive practices that produce the phenomena they purport to study.



Drawings by Daro Montag: Hyphae 01 pg32 and pg33

The design studio is therefore not a neutral container for learning. It is an apparatus that enacts specific separations: between teacher and student, human designer and nonhuman material, knowledge and its application. If we want ecological knowing that recognises entanglement, reciprocity, and more-than-human agency, we need pedagogical apparatuses capable of enacting

those relations. When we rearrange chairs into a circle, remove the table between teacher and student, and bring the more-than-human into the room as participant rather than object of study, we produce a different apparatus, and that apparatus produces different knowledge.

This is consistent with the Māori principle of Ako, reciprocal teaching and learning in which the roles of teacher and learner are fluid and contextually determined (Stucki, 2012). Stucki describes Māori pedagogy as a whole ecosystem: socio-political forces form the ground, learning theories form the soil, and curriculum, teaching methods, and teacher characteristics are trees within it. This ecological model of pedagogy provides a precedent for the framework this paper proposes.

The concept of ecological citizenship captures the expanded scope of what such an apparatus might produce. To be an ecological citizen is not merely to know about ecology. It is to recognise oneself as participant in a web of mutual obligation with human and nonhuman others. As one Eco-Cit participant wrote, it is "the blurring of the line between self and other... the expansion of our capacity to care for and identify with that which is extrinsic" (Furness, in Hyphae, 2024). A pedagogical apparatus designed for ecological citizenship would need to produce this recognition, not merely describe it.

2.3 Ceremony as Legal-Design: Indigenous Jurisprudence and More-Than-Human Rights

The question, then, is what kind of designed practice could produce ecological citizenship rather than merely describing it. Indigenous legal traditions offer a working answer. In many Indigenous legal traditions, law is not confined to written statutes or institutional courts. Instead, law is enacted, generated, and renewed through stories, relationships, and ceremonial practices that articulate obligations between humans and the more-than-human world. John Borrows (2010) describes Indigenous law as a living system of knowledge transmitted through narrative and embodied practice. Val Napoleon (2009) argues that law is not a static set of rules but a dynamic process of interpretation and adaptation grounded in community relationships. Little Bear (2000) describes Indigenous law as a living system maintained through repeated ceremonial practice, closer to cultivation than codification.

Donna Haraway's (2016) insistence on making kin across species boundaries provides the ethical grammar for extending legal relationships beyond the human. If we are already kin with the more-than-human, then including nonhuman agencies in governance is not an act of generosity or abstraction. It is an acknowledgement of existing relationship. Haraway's work reframes the

question from whether nonhuman beings should have legal standing to how we might design governance practices that honour the kinship obligations that already bind us.

A foundational orientation must be stated. Yunkaporta (2019) writes that "the assistance people need is not in learning about Aboriginal knowledge but in remembering their own." The purpose of attending to Indigenous legal traditions is not to replicate them. It is to recognise that ceremony, as a relational technology for generating collective obligations through embodied practice, is not the exclusive property of any culture. It is a capacity that all human societies have possessed and that western modernity has suppressed through the enclosure of commons, the professionalisation of law, and the architectures of industrial education that separate knowing from doing. TEK does not provide a template but a reminder. The task is remembering, and from that remembering, developing our own approaches to ecological education and relational governance.

This research develops a legal-design space that can harness, extend, and allow emergent ecological understanding to appear through traversing the terrains of knowing with more-than-human co-creators. Ceremony here is a relational technology: a structured, embodied, place-based practice for generating collective commitments that demands presence, relationship, and accountability to place. This understanding of law resonates with emerging rights-of-nature frameworks, which recognise ecosystems as legal subjects rather than objects of property. The recognition of the Whanganui River as a legal person in Aotearoa New Zealand was accompanied by ceremonial agreements that affirmed the river's status as an ancestor rather than a resource (Charpleix, 2018). Ecuador's 2008 constitution grants enforceable rights to Pachamama (nature). These legal developments are not symbolic gestures. They are experiments in more-than-human jurisdiction.

2.4 Design as Legal Practice

Design is often understood as a creative activity focused on producing objects, services, or experiences. But design is also a form of governance. Every design decision establishes conditions that enable or constrain the actions of humans and nonhumans alike. As Tony Fry (2009) argues, design is inherently political because it shapes the futures that become possible.

The concept of ontological design, introduced by Anne-Marie Willis (2006), emphasises that design not only creates artifacts but also shapes ways of being in the world. From this perspective, design education is a legal practice in the sense that it establishes norms about how humans should interact with other beings. When design education incorporates ceremonial methods, it creates opportunities for educators and students to participate in the formation of ecological educational

norms rather than simply shallow pedagogical gestures. Design studios and practices become sites of legal experimentation where new forms of governance can emerge.

Elinor Ostrom's (1990) work on commons governance provides the institutional mechanism for understanding how this works in practice. Ostrom demonstrated that sustainable resource management depends on locally developed rules and shared understandings of responsibility. Her design principles for successful commons (clearly defined boundaries, collective-choice arrangements, monitoring, graduated sanctions, conflict-resolution mechanisms) describe governance systems that are not imposed from above but grown through participatory practice. These rules are often established through processes that resemble ceremonial practices: repeated gatherings, collective deliberation, and the ongoing negotiation of shared obligations.

Three perspectives converge here. Indigenous jurisprudence shows that ceremony can generate law (Borrows, 2010). Design theory shows that every design decision already functions as a form of governance (Fry, 2009; Willis, 2006). And the sociology of communities of practice shows that groups which sustain shared practice develop their own regimes of competence and accountability (Wenger, 1998). The Co-Creation Council sits at this intersection of all three: it is a ceremony that generates relational law between human and more-than-human participants, a designed practice that establishes governance conditions, and a community of practice that develops its own norms and collective obligations through repeated enactment. It draws together Indigenous jurisprudence, rights-of-nature precedent, and commons governance into a single designed practice. The following section shows how this convergence was first observed in the Eco-Cit experiment before it was formalised in the Council.

2.5 The Gathering as Ceremony: Implicit Legal-Design in Practice

Image: Hyphae 01 pg05

Ceremony need not imply formal ritual. Turner's (1969) work on communitas describes how gatherings that suspend ordinary social structures create liminal space in which new norms emerge. Stengers' (2005) cosmopolitical proposal asks what it would mean to slow down collective decision-making to attend to who is being excluded. Any learning space that genuinely asks "who needs to be in the room that is not yet here?" is already performing jurisdictional expansion.

This frame allows us to recognise that a sustained gathering of people who meet in circle, collectively determine what they will learn, establish norms through repeated practice, and invite participation from beyond institutional boundaries is already engaged in legal-design. The gathering is not preparing the ground for ceremony. It is the site where ceremonial legal-design is already being practised.

Wenger's (1998) communities of practice provides the sociological mechanism. Communities formed around shared practice develop their own regimes of competence: tacit agreements about what counts as knowledge, who counts as a practitioner, and what accountability holds. These emerge through ongoing negotiation of meaning, not external authority. All communities of practice are self-legislating.

What makes this relevant as legal-design is the question of jurisdiction. In a conventional university context, the institution determines what counts as learning and what rules govern the educational relationship. When a learning space dissolves these boundaries, inviting community members, retired people, and local practitioners to participate as equals, it performs jurisdictional expansion. The norms governing the space are generated by those present. Arturo Escobar's (2018) concept of the pluriverse, a world in which many worlds fit, provides the ontological ground for this expansion. If multiple ways of knowing and being can coexist in the same space without one needing to subsume the others, then jurisdictional expansion is not a dilution of rigour. It is a recognition that the predicament we face cannot be adequately known from any single position.

The further question, the one the Co-Creation Council addresses, is whether this jurisdiction can expand to include the more-than-human. This is the step from ecological citizenship as human practice to ecological citizenship as more-than-human jurisdiction.

3. Method: The Ecological Citizenship Experiment

3.1 Origins

Image: Hyphae 01 pg19

The experiment began with a student occupation. In November 2022, a four-day End Fossil Fuel sit-in at Falmouth University's main lecture theatre demanded that the climate and ecological crisis be communicated coherently across the university's curricula. A working group of students, alumni, and staff from both Falmouth and the University of Exeter responded by establishing Ecological Citizenship. Not as another course within the institutional portfolio, but as a proposal for a different model of education entirely. To borrow a phrase from E. F. Schumacher (1973), Eco-Cit set out to experiment with "an education of a different kind."

3.2 Structure and Principles

Eco-Cit operated as weekly, open, peer-led sessions across the 2023/24 academic year. Attendance was voluntary, with no register, no assessment, and no fixed curriculum. Sessions were facilitated rather than taught, with facilitation led by students wherever possible. The group actively trained new facilitators throughout the year. The following principles were embedded from the outset:

1. Staff and students learn together. The hierarchy between those who know and those who are yet to know was deliberately dissolved.

2. Teaching and learning takes place in a circle. Chairs arranged without tables remove the architectural encoding of hierarchy that characterises most university teaching.

3. The curriculum is responsive. The programme evolved week to week. All participants could propose topics or offer activities.

4. Sessions are intergenerational and transdisciplinary. Participation was open to people of all ages, from multiple universities and disciplines.

The approach is grounded in conviviality. Food and laughter were integral to the process, not separate from it.

3.3 The Experiment as Implicit Ceremony

Image by Tom Crisp

The governance of Eco-Cit was partly explicit and partly implicit. The structural features are not merely pedagogical principles. They describe a ceremonial practice: a sustained gathering that generated its own governance through the act of meeting. Early sessions established practical agreements: hand signals for facilitation, preferred pronouns, and the principle that attendance was a response rather than an obligation. Participants showed up when called by a particular topic and were free to be absent without penalty.

Most governance was implicit. The norms that came to define Eco-Cit (radical inclusivity, active listening, the suspension of expertise-based hierarchy, the expectation that all responses to the predicament would be welcomed and open to respectful questioning) were not voted on or codified. They emerged through repeated practice. Week after week, the act of arranging chairs in a circle, sharing food, and listening to unfamiliar perspectives produced tacit agreements about

what this space was and how one should be within it. In Wenger's (1998) terms, Eco-Cit developed its own regime of competence through the ongoing negotiation of meaning within a community of practice.

The jurisdiction of this practice extended well beyond the university. Community members, retired people, local practitioners, and people from partner institutions attended regularly as equals. This intergenerational, trans-institutional gathering performed a quiet act of jurisdictional expansion: the norms governing this space were generated by those present, not imposed by the institution. The experiment was making a collective case, worked out in practice over eight months, about what ecological education is and who counts as an ecological citizen.

The more-than-human was present at the threshold of this jurisdiction but had not yet been formally included. When participants walked into the walled garden, told their life stories through rivers and trees, or worked the soil at Loveland, the nonhuman world entered the pedagogical space indirectly, through exercises that brought participants into relationship with more-than-human agencies rather than bringing those agencies into the circle as acknowledged participants. The question left open was whether the jurisdictional expansion already accomplished (from institutional to intergenerational, from disciplinary to transdisciplinary, from individual to collective) could extend into the more-than-human. The Co-Creation Council was developed to formalise that extension, providing a structured way for communities to develop pedagogies and values through co-creation with the living systems they inhabit.

3.4 The Experiment as Research Method

Image: Loveland, Penryn by Tom Crisp

The Eco-Cit experiment can be understood as participatory action research, but it resists neat categorisation. Its closest analogue may be what Barad (2007) describes as an apparatus: a material-discursive practice that does not merely observe phenomena but constitutes them. The experiment was an enactment of ecological pedagogy from within, with the researcher embedded as participant-facilitator.

The primary documentation is the Hyphae archive (2024), a collectively authored publication containing essays, poems, images, and reflections by twenty-five contributors. The archive was produced after the experiment's first year as an act of collective sense-making rather than compiled as a conventional dataset.

3.5 How the Terrains Were Identified

The six terrains emerged through post-hoc reflection: editing the Hyphae archive, developing new ceremonies, writing reflective accounts and this paper required looking back across forty sessions and asking what kept recurring. This is a form of what Schön (1983) calls reflection-on-action, the practitioner's retrospective interrogation of experience to surface tacit knowledge embedded in practice. Where Schön's reflective practitioner reflects on individual professional episodes, the process here involved reflecting on a collective experiment across an extended period.

The accumulated experience of facilitating and participating in sessions produced a felt sense of recurring pedagogical modes, ways of knowing that kept showing up regardless of format. A session on interfaith dialogue and a session on soil microbiology both activated something recognisable as the same terrain, though their content was entirely different. The naming happened through iterative writing: drafting descriptions, testing them against session memories, discarding names that did not hold, and refining those that did.

This process has clear limitations. It relies on one researcher's retrospective interpretation, informed but not systematically validated by participants. The Hyphae archive provides a form of triangulation (contributors' accounts can be read against the terrain framework) but the framework was not co-produced through structured validation. What the method offers is fidelity to the way ecological knowledge tends to emerge: not through pre-established categories applied to experience, but through patient attention to patterns that reveal themselves over time. This is close to what Yunkaporta and Kelleher (2025) describe as the development of collective contextual understanding through yarning, where knowledge surfaces through sustained relational conversation rather than through the application of predetermined analytical categories. The

terrains were grown rather than designed, and the post-hoc naming is an honest account of how that growth was recognised.

4. Findings: Distilling the Six Terrains of Being

Across roughly forty sessions, People's Assemblies, ecological autobiographies, sensory attention exercises, communal cooking, agroecology volunteering, Climate Fresk card games, interfaith dialogue, nature-sound workshops, and teach-outs with visiting practitioners, a set of recurring pedagogical terrains became visible. Each terrain described a distinct mode of ecological engagement: a terrain through which participants repeatedly passed, though not in any fixed order and not with any predictable destination. The word terrain is chosen deliberately. It asks for active participation. One needs to experience these terrains, to navigate, traverse, get lost, get stuck, or turn back. The terrains are laid out in a sequential order for the ease of western logocentric understanding. In reality, like any journey, one will encounter different terrain at different times, depending on the journey taken.

4.1 Pedagogical Terrains and Ontological Territories

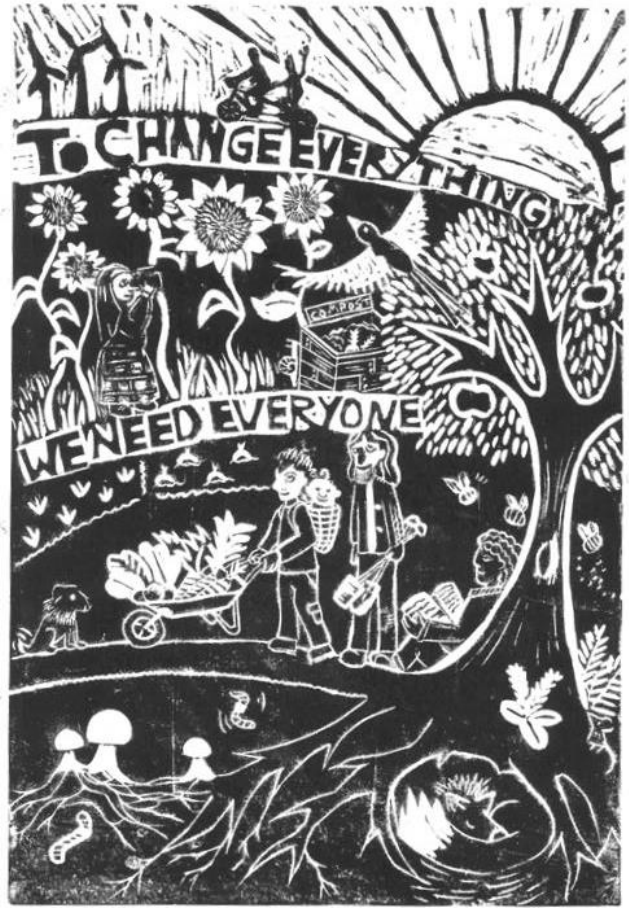
The six terrains name distinct pedagogical modes: Being, Grounding, Relating, Cultivating, Responding, and Meaning. Each terrain is held by a corresponding ontological territory: a condition of being that makes that particular pedagogy possible. The territory is not a location one visits and leaves. It is a way of being in the world that the terrain's pedagogy opens up. The correspondence between terrain and territory is not exclusive. A session grounded in local food-growing (the terrain of Cultivating) may also activate the territory of the Entangled, as participants encounter the microbial ecologies of soil. A People's Assembly (the terrain of Responding) may open into the territory of the Worlded, as collective deliberation surfaces previously unexamined assumptions. The terrains overlap within and across territories. Ecological knowing does not proceed through isolated categories but through the recognition that every pedagogical act touches multiple ways of being at once. Table 1 maps the six terrains to their corresponding territories, descriptions, and operational questions.

Table 1: Six Terrains of Being

Pedagogical Terrain	Terrain Description	Ontological territory	Territory Description
Being	Teaching and learning that begins from the recognition that our worldviews are active constructions, and that attending to them is a prerequisite for ecological knowing.	**Worlded**	The ontological condition of recognising oneself as always already within a world rather than observing one from outside. In this territory, the separation between knower and known dissolves. Worldviews are experienced not as transparent windows onto reality but as active, inherited constructions that shape perception and constrain response. To enter the Worlded is to become aware of the ground you are standing on before you take a step.
Grounding	Teaching and learning that connect us to place, peoples, and the pluriverse shaped by multiple knowledge systems existing at the same time with no single correct interpretation.	**Plural**	The ontological condition of inhabiting multiplicity. Here, more than one knowledge system operates at the same time without any single system claiming authority over the others. The Plural does not resolve difference into consensus. It holds difference as a productive condition, recognising that ecological predicaments cannot be adequately known from any single cultural or disciplinary position.
Relating	Teaching and learning through practices that cultivate attention to nonhuman agencies, rhythms and the interdependencies that bind us to them.	**Entangled**	The ontological condition of irreducible interdependence with more-than-human others. In this territory, the boundary between self and environment, organism and ecology, human and nonhuman becomes porous. Identity is experienced as relational rather than autonomous. To be entangled is to recognise that we are not outside observers of the world but part of the world in its ongoing intra-activity.
Cultivating	Teaching and learning through material practice at a local scale (growing food, making things, building capacity) that is connected to global ecological patterns and practices.	**Cosmolocal**	The ontological condition where the local and the planetary are experienced as continuous. Here, the soil under your feet is understood as connected to global ecological patterns, and local material practice (growing, making, repairing) is recognised as participation in planetary systems. The Cosmolocal refuses the separation between the particular and the universal.
Responding	Teaching and learning that stewards us through collaborative co-creation, participatory process, and ritual engagement cultivating conditions of unexpected forms of agency.	**Kindred**	The ontological condition of expanded kinship. In this territory, the category of "kin" extends beyond the human family to include nonhuman beings, ecosystems, and the relationships between them. Governance and collective action are experienced as obligations arising from kinship rather than contracts between autonomous individuals.
Meaning-making	Teaching and learning that encourages reflective and integrative practice through which participants articulate what the experience has asked them to become.	**Emergent**	The ontological condition of ongoing becoming. Nothing here is settled. Meaning, identity, and relationship are experienced as processes rather than products. This territory cannot be arrived at deliberately; it opens when the other territories have been traversed with sufficient honesty and attention. Emergence is where new knowing appears, not as conclusion but as continued practice.

4.3 How Eco-Cit Surfaced the Pedagogical Terrains

Terrain 1: Being



Linocut Illustration by Phil Green: Hyphae 01 pg20

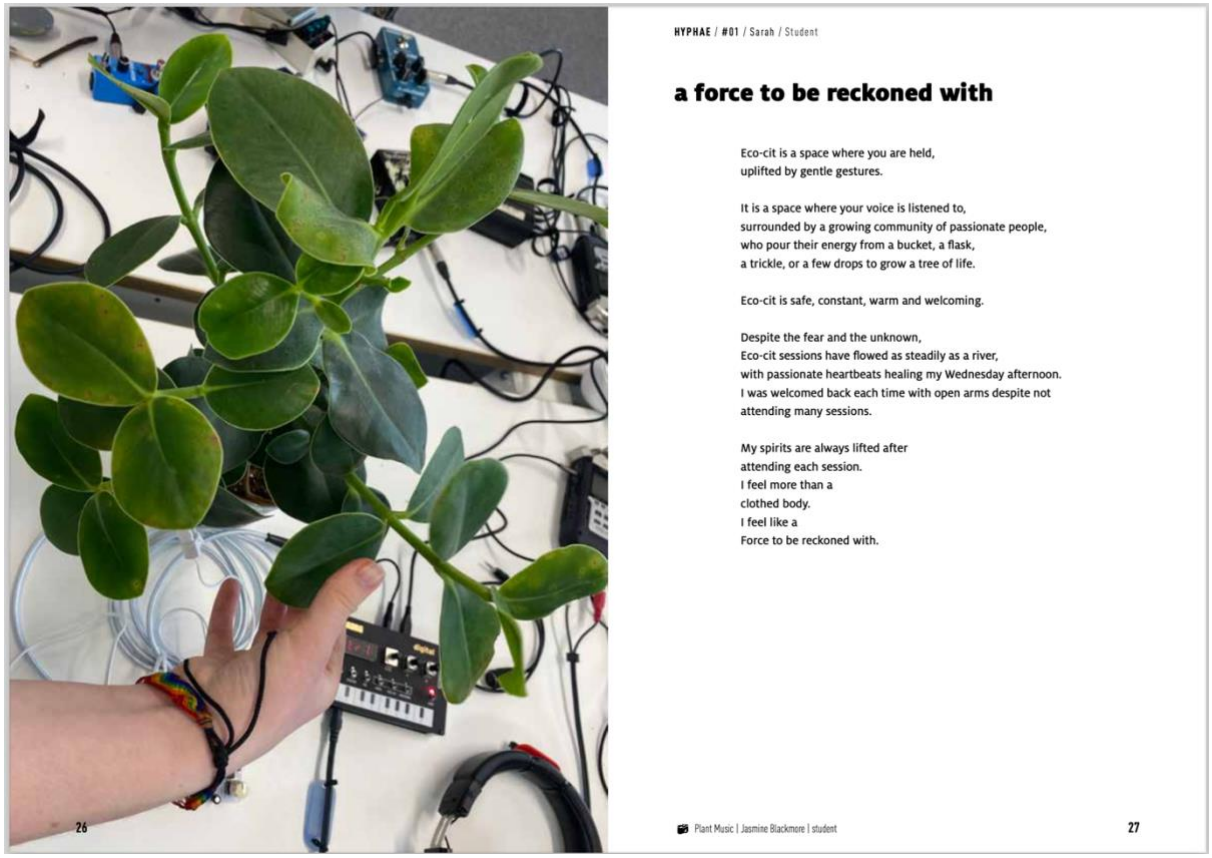
This terrain invites participants to examine their assumptions about the nature of reality. Drawing on David Abram's phenomenology of perception (1996), the terrain of Being encourages individuals to recognize themselves as participants in a living world rather than observers of an external environment. This terrain surfaced most clearly in sessions that asked participants to slow down and attend to their own embodied experience. When Siddharth Kumar led an exercise inviting participants into the walled garden to find beauty, notice the feelings evoked in your body and bring a difficult question to a tree, the group encountered a mode of knowing that could not be arrived at through discussion alone. One participant described what they called a "profound transformation" upon entering through the narrow stone doorway: a shift that arrived through spatial and somatic encounter rather than intellectual effort. The Worldviews and Deep Ecology session, reflecting on the assumptions steering our moment-to-moment decisions, operated in this same terrain. In legal-design terms, this is the work of surfacing the assumptions that precede any deliberation.

Terrain 2: Grounding

Image: Hyphae 01 pg23

The terrain of Grounding emphasizes connection to place and community. Arturo Escobar's concept of the pluriverse provides a theoretical foundation for this terrain, highlighting the coexistence of multiple ways of knowing and being. Grounding was enacted through sessions that physically relocated learning into the land. Volunteering at Loveland community garden, labouring alongside the soil and the local food system, was Grounding in its most literal form. The Interfaith Week session, "Who do we turn to for help?", explored how inherited spiritual traditions inform engagement with the ecological crisis. Sessions on diet, animal agriculture, and the role of microbes in soil and gut health connected participants to the living ground beneath consumer food systems. In legal-design terms, this is the jurisdictional question: whose knowledge counts in this place, and on whose ground do we stand?

Terrain 3: Relating



HYPHAE / #01 / Sarah / Student

a force to be reckoned with

Eco-cit is a space where you are held,
uplifted by gentle gestures.

It is a space where your voice is listened to,
surrounded by a growing community of passionate people,
who pour their energy from a bucket, a flask,
a trickle, or a few drops to grow a tree of life.

Eco-cit is safe, constant, warm and welcoming.

Despite the fear and the unknown,
Eco-cit sessions have flowed as steadily as a river,
with passionate heartbeats healing my Wednesday afternoon.
I was welcomed back each time with open arms despite not
attending many sessions.

My spirits are always lifted after
attending each session.
I feel more than a
clothed body.
I feel like a
Force to be reckoned with.

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Plant Music | Jasmine Blackmore | student

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Image: Hyphae 01 pg14

This terrain acknowledges the interdependence of all beings. Donna Haraway's notion of "making kin" underscores the importance of cultivating relationships across species boundaries. This terrain was most visible in the active listening games that became a signature Eco-Cit practice. Pairs would tell each other their life stories constrained to speaking only about rivers, or trees. The constraint forced participants to narrate their autobiographies through entanglements with other species, producing what facilitator Catarina Fontura called ecological autobiographies. Stories that locate human bodies in more-than-human ecologies. As Fontura writes, these exercises help us "stumble upon more-than-human ecologies so deep and so involved in our own autobiographies, as what we call 'the self'" (Fontura, in Hyphae, 2024). Jasmine Blackmore's nature-sound workshop, listening to plants, extended this relational terrain beyond human language. In legal-design terms, this is where obligations are discovered rather than imposed: the recognition that entanglement already binds us before any contract is written.

Terrain 4: Cultivating

Image: Hyphae 01 pg43

The terrain of Cultivating focuses on the development of local economies and cultural practices that support ecological resilience. Manzini's (2015) work on social innovation provides insight into how communities can design systems that align with ecological principles. Eco-Cit's Cultivating terrain ran as a practical thread throughout the year. The plant-based cooking working groups, the recipe card project, campus vegan cookalongs, the Loveland volunteering sessions, the facilitator training programme, and the action groups formed after the Power Mapping session each represented a different mode of cultivation, growing capacity, growing food, growing new forms of social organisation. Joseph Beuys' concept of Social Sculpture, discussed in several sessions, provided a frame for understanding these activities as creative practice rather than logistics. In legal-design terms, this is the commons question: what shared resources and capacities can be sustained from here, and by whom?

Terrain 5: Responding

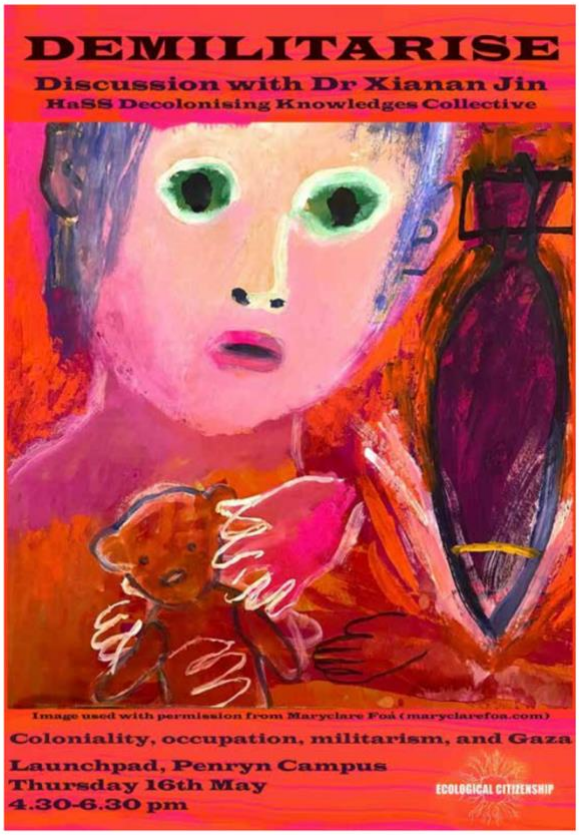

Image: Hyphae 01 pg63

This terrain involves collective action and governance. Participants learn to collaborate with diverse stakeholders to address environmental challenges. The People's Assembly was Eco-Cit's primary technology for this terrain. Developed and refined across the year through Faculty for a Future workshops, multiple on-campus assemblies, and a student-facilitated Climate Community Assembly at Truro Cathedral, the Assembly functioned as what Mat Osmond described as a "tool for thought", a space where a chorus of perspectives could co-exist without needing to be reconciled. The "good enough question" principle emerged through these sessions: the question that opens deliberation need only be good enough to bring people into the circle. In legal-design terms, this is the procedural core of any deliberative assembly: determining who is present, how decisions are made, and what counts as agreement.

Terrain 6: Meaning-making

Image: Hyphae 01 cover

The final terrain represents the integration of knowledge gained through previous experiences emerging through stories and relational engagement. Meaning emerges not as a fixed conclusion but as an ongoing process of interpretation. Meaning was the terrain that arrived last and could not be scheduled. It appeared in the reflective essays written toward the end of the year. Siddharth Kumar's account of a perceptual transformation in which "the whole enfolding landscape transformed" and "the mundane and the numinous live together"; the anonymous contributor who reported that Eco-Cit "helped me realise the things I can do to help feel less anxious about the crisis and has given me a good breathing space." The Hyphae archive itself is an enactment of this terrain: it holds the experiment's outputs in an open form that invites continued interpretation. The publication's title names the connective tissue (hyphae) rather than the whole organism (mycelium), honouring the in-between, the relational, the still-growing. In legal-design terms, this is where commitments take form: not as fixed rulings but as ongoing obligations that participants carry forward and renew through practice.

4.4 From Terrains to Legal-Design Space

Once the six terrains and their corresponding territories were named, something else became visible. The terrains did not only describe pedagogical modes. They described the constituent practices of a governance process. Read in sequence, the terrains trace the arc of a legal proceeding: establishing jurisdiction, hearing testimony, deliberating, and generating obligations. Read as a set of overlapping territories, they describe the ontological conditions necessary for a governance process that includes more-than-human participants.

1. The Worlded territory ensures that participants recognise their own positionality before they deliberate.
2. The Plural territory ensures that no single knowledge system dominates.
3. The Entangled territory ensures that nonhuman agencies are acknowledged.
4. The Cosmolocal territory ensures that deliberation is rooted in material place.
5. The Kindred territory ensures that governance is experienced as kinship rather than administration.
6. The territory of Emergence ensures that the outcomes remain open to continued revision.

This was not planned. The Eco-Cit experiment did not set out to build a legal-design space. But the terrains, once distilled, revealed that the experiment had been functioning as one: a sustained practice of collective norm-generation, jurisdictional expansion, and relational accountability. The Co-Creation Council formalises what was already happening and extends it across the threshold that the experiment approached but did not cross. Where Eco-Cit's jurisdiction expanded to include intergenerational and trans-institutional human participants, the Council expands it further to include the more-than-human. The following section describes how.

5. Synthesis: The Co-Creation Council

The Council is designed for educators and communities of learners to co-design ecological pedagogies in collaboration with the more-than-human. It has emerged from a patchwork of insights through application in design education, design workshops, and community learning contexts. The Co-Creation Council inherits the ceremonial form the Ecological Citizenship experiment and extends it across the threshold into more-than-human jurisdiction, convening a multispecies coalition that utilises kin-objects as co-educators to translate relational insights into pedagogical forms through embodied mapping and storytelling.

The Council emphasizes embodied experience as a foundation for decision-making. It draws on a lineage of established practices including Joanna Macy's Council of All Beings (Macy and Brown, 1998), which uses structured ritual to enable participants to speak on behalf of nonhuman beings; Tim Ingold's (2013) anthropology of making and correspondence, which understands knowledge as arising through skilled material engagement with the world rather than through detached observation; and the broader tradition of arts-based participatory research (Leavy, 2015), which positions creative practice as a legitimate mode of inquiry.

The Council is a structured ceremonial engagement practice designed to deepen relational attunement between humans and the more-than-human world in a legal-design space. Kin-objects are physical materials gathered from the local ecology (stones, soil, water, leaves, bark, seeds, fungi) that serve as both pedagogical tools and representatives of more-than-human agencies within the ceremonial space, enabling nonhuman participants to enter the circle as witnesses whose material properties shape testimony, deliberation, and the obligations that result.

5.1 The Five Phases

The ceremony unfolds through five phases. Each phase corresponds to a specific legal function, maps to specific terrains, and draws on precedents established during the Eco-Cit experiment.

Phase 1: Attunement (Terrain of Being): Threshold

Image by Tom Crisp

The ceremony opens in a circle, outdoors wherever possible, in direct proximity to a local ecological site connected to the participants. A land acknowledgement grounds the gathering in place-specific history. Participants are guided through a sensory attunement practice moving through sound, touch, smell, and sight, shifting attention from predetermined agendas toward receptive presence with the living world. The circle format equalises participation from the outset, dissolving the expert-audience hierarchy that conventional engagement reproduces.

In Eco-Cit, the sessions that most effectively activated the terrain of Being involved precisely these embodied practices: walking in the walled garden, listening to plants, attending to bodily sensation. These were not warm-up exercises. They were threshold practices that shifted participants into a different register of attention, drawing on what one participant described as the shift from exercising the brain "excessively" to engaging "a different part of my mind and body."

In legal-design terms, this phase performs the function of a threshold: establishing the conditions under which participants can surface their own assumptions before any deliberation begins. No legal proceeding can adjudicate fairly if the worldviews operating in the room remain invisible. Attunement makes those worldviews available for examination, clearing the ground on which the subsequent phases will build.

Phase 2: Gathering (Terrains of Being and Grounding): Jurisdiction

Image by Tom Crisp at Nansidwell Beach, Falmouth, Cornwall

Where Sections 2.5 and 3.3 described jurisdictional expansion as the widening of who participates, the Gathering phase also establishes jurisdiction in its spatial sense: the physical territory that grounds the Council's deliberations in a specific place. Participants move through the site individually and in silence, gathering kin-objects: stones, leaves, bark, water, soil, seed heads, fungi. The selection happens not through deliberate choice but through attentiveness to what draws interest. This gathering walk is a form of multispecies ethnography in which attention is redistributed from human agendas toward the intelligence already present in the landscape (Ingold, 2013). Participants notice resistance as well as attraction. What refuses to be carried? What feels inappropriate to take? These questions develop the relational sensibility that the council will deepen. Kin-objects are introduced as co-educators, grounding the Council's deliberations in material reality.

This phase extends beyond what Eco-Cit practised. In the experiment, the transition into ceremonial space happened through the circle arrangement, shared food, and spatial transitions that marked the shift from ordinary university time. The gathering walk adds a new element: a structured encounter with the material intelligence of place.

In legal-design terms, this phase establishes jurisdiction in two senses. It defines the physical territory that grounds the Council's deliberations in a specific place. And it constitutes the relational territory by gathering the nonhuman participants whose agencies will shape what follows. No court can proceed without first establishing where its authority holds and who falls within its remit. The gathering walk answers both questions through practice rather than proclamation.

Phase 3: Council Testimony (Terrains of Relating and Cultivating): Evidence

Participants return to the circle and begin making with their gathered materials: weaving, binding, arranging, marking, without a prescribed outcome. As hands work, each participant is invited to speak as the material or more-than-human being they have gathered. This practice transforms materials into witnesses, enabling them to participate in delivering testimony. Latour (2004) describes this as the creation of a "parliament of things" in which nonhuman entities are represented in political decision-making. Speaking-as-material redistributes authority within the group and recognises experiential knowledge as a legitimate source of insight, aligning with Indigenous methodologies that emphasise relational accountability (Kovach, 2009). Testimony emerges not from prepared expertise but from what the making itself releases. A designated

witness holds the broader human and institutional perspective, noting where material testimonies converge or diverge from official assessments.

Image by Tom Crisp at Nansidwell Beach, Falmouth, Cornwall

In Eco-Cit, the ecological autobiographies, river and tree listening exercises, and Climate Fresk sessions all functioned as forms of testimony: ways of assembling knowledge about entanglement.

In legal-design terms, this phase performs the evidential function. It assembles the knowledge that the Council will deliberate upon. But unlike conventional evidence-gathering, which privileges human expertise and quantitative data, the testimony phase admits nonhuman witness. The materials of place are not illustrations of human arguments. They are sources of knowledge in their own right, and the obligations they surface through the making process constitute evidence that no purely discursive method could produce.

Phase 4: Collective Assemblage (Terrain of Responding): Deliberation and Adjudication

Individual made objects are brought into a shared centre, functioning as a collective material map of the council's testimony. Facilitated reflection opens with the question: what did the making reveal that speaking alone could not access? Facilitators work with participants to identify what the testimony suggests about overlooked system relationships, whose perspectives remain absent and how they might be drawn in, and what the place itself, through its materials,

appears to require. Stengers (2010) describes such practices as cosmopolitical gatherings: forums in which diverse beings participate in shaping shared futures. The collective assemblage is not a finished artwork. It is a working document, a spatial argument made from the materials of the jurisdiction itself.

Image by Tom Crisp at Nansidwell Beach, Falmouth, Cornwall

The People's Assembly, with its principles of radical inclusivity, active listening, and constructive dissonance, provided the Eco-Cit precedent. The "good enough question" principle is built in: the question that opens deliberation need only be good enough to bring people into the circle.

In legal-design terms, this phase is adjudicative. It weighs competing claims, acknowledges perspectives that cannot be reconciled, and works toward decisions that all parties, human and nonhuman, can live with. The material map at the centre of the circle functions as the court's assembled evidence made visible: a shared reference point that holds the complexity of what has been heard and prevents deliberation from collapsing into the loudest human voice in the room.

Phase 5: Response-ability (Terrain of Meaning): Relational Contract

The session closes with a ritual of return. Each participant decides what to leave at the site and what to carry forward: a deliberate act of response-ability (Haraway, 2016) about what knowledge belongs to place and what may inform decisions made elsewhere. Participants articulate what they will do, for whom, and with what accountability. This closing holds the ethical boundary that distinguishes ceremonial engagement from extraction. The council creates something that remains with the land as well as something that travels. Response-ability implies a cultivated capacity to respond, something practised and renewed, rather than a fixed debt.

Image: by Tom Crisp at 7th Rise

In Eco-Cit, this phase was visible in the action groups formed after the Power Mapping session, the facilitator training commitments, and the ongoing partnerships with external organisations such as Loveland community garden.

In legal-design terms, this phase produces the relational contract. Unlike a conventional legal contract, which binds autonomous parties to predetermined terms, the relational contract generated through ceremony binds participants to ongoing obligations that are renewed each time the ceremony is enacted. The commitments are not enforced through compliance but maintained through practice. What is left at the site constitutes an offering to the jurisdiction: an

acknowledgement that knowledge was taken and something must be returned. What is carried forward constitutes the obligation: a commitment to act on what the ceremony has revealed. Together, these form a body of relational law that is locally specific, collectively authored, and open to revision through future enactment.

5.2 From Ceremony to a Pluriverse of Living Pedagogies

The Council is designed to be run with individuals or groups and uses materials found locally, so that the thought processes behind the pedagogical design are grounded in the material reality of place. Through reflecting on the way the ceremony has been performed, each person will respond differently when designing their pedagogy, developing a pluriverse of different pedagogical meanings and intentions. In legal-design terms, each enactment of the ceremony produces a different set of relational contracts, a different configuration of obligations between human and more-than-human participants, because the jurisdiction is constituted anew each time by the specific place, community, and nonhuman agencies present.

This is the autopoietic principle observed within Eco-Cit itself. Different pedagogies, offered from each individual's journey through the terrains of knowing, came together each week to weave a living organism of pedagogical experiences. The interactions between these pedagogies informed the design of the educational journey, which in turn shaped the autopoietic design of the learning group and further teaching practice. The governance structure of each session was not inherited from the previous one but regenerated through the act of gathering, just as commons governance is maintained not through static rules but through the repeated practice of collective deliberation (Ostrom, 1990). From the intra-action between the pedagogies, new forms of teaching and learning emerge.

The ceremony is not a finished product. It is a generative legal mechanism, a jurisdictional seed that, planted in different places with different communities, produces different governance structures and different pedagogical organisms. The ceremony provides the constitutional conditions. What grows cannot be predetermined. This is consistent with Barad's insistence that apparatuses are not static structures but material configurations that are themselves open to rearrangement. By collectively navigating awakening multispecies ontologies through the ceremony, a planet-centred educational geography forms, and this geography, traversed differently by each community, uncovers its own pluriverse of living, symbiotic planetary pedagogies. Each pluriverse constitutes a locally generated body of relational law: obligations, practices, and norms co-created with the living systems that hold a particular place.

6. Conclusion

This paper has traced a line from a student occupation through an eight-month pedagogic experiment to a ceremonial legal-design practice. The terrains of knowing were distilled from the experiment. The Co-Creation Council was synthesised from the terrains as a way of making them operational, portable, and generative. The terrains of knowing were distilled from the experiment and the Co-Creation Council was conceived as a standalone ceremony by synthesising from the terrains as a way of making them operational, portable, and generative.

The Eco-Cit experiment showed that when a university learning space is reorganised around principles of circularity, conviviality, and ecological attention, the knowledges that emerge are neither purely intellectual nor purely practical. They are embodied, relational, and ongoing. The six terrains name these knowledges. The Co-Creation Council provides a ceremonial form in which they can be enacted. And the pluriverse of living pedagogies that results (different each time, in each place, with each community) is the contribution: not a fixed model but a living method for designing education adequate to the times.

The ceremony is simultaneously the output of this research and a method in its own right. Each time it is enacted, it creates the conditions for new ecological pedagogic terrains to be traversed, new relational insights to be mapped, and new symbiotic pedagogies to emerge. The pedagogies that form through the ceremony cannot be authored by any individual. They are co-created by humans and the more-than-human participants whose agencies, knowledges, and design rights the ceremony exists to acknowledge. We will flourish together, or not at all.

7. Implications for More-Than-Human Rights and Further Research

The ceremonial legal-design practice described in this paper carries implications that extend beyond pedagogy into the development of more-than-human rights frameworks. The Co-Creation Council does not merely discuss the rights of nonhuman beings in the abstract. It creates a governed space in which those rights are exercised through practice. When a participant speaks as a gathered kin-object, when the materials of a place shape the deliberation, when commitments are made to leave knowledge with the land, the ceremony enacts a form of more-than-human representation that the western legal system is only beginning to accommodate through instruments like the Te Awa Tupua legislation and Ecuador's constitutional rights of nature.

The research suggests three specific implications. First, ceremonial legal-design may offer design educators a method for generating the relational foundations that ecological pedagogy requires. A module on ecological ethics can describe the obligations humans hold toward nonhuman systems, but description does not produce the felt recognition of entanglement that changes how a designer works. The Co-Creation Council addresses this gap by structuring embodied encounters with place and materials before any analytical or discursive activity begins. The relational knowledge generated through ceremony is not supplementary to ecological pedagogy. It is the substrate on which ecological pedagogy depends. Without it, sustainability curricula remain intellectual exercises that leave the Cartesian split between designer and environment intact.

Second, the research indicates that design education can be repositioned as a site of legal experimentation. If design studios adopt ceremonial methods, they become spaces where students and communities practise generating ecological norms before those norms enter policy frameworks. An community-orientated MRes in Design for Planet, currently being developed using the terrains framework, represents an early test of whether this kind of norm-generation can be embedded in institutional curriculum design.

Third, the Eco-Cit experiment and the Co-Creation Council together suggest that the gap between grassroots relational practice and formal environmental governance is not an obstacle to be overcome but a productive space to be inhabited. The response-abilities generated through ceremony are not weaker than codified obligations. They are different in kind: relational, ongoing, and renewed through practice rather than enforced through compliance. Whether and how these two forms of obligation (ceremonial and codified) can be brought into productive relationship is the most pressing question for further research, and one that would benefit from partnerships with legal scholars working in environmental law, Indigenous jurisprudence, and commons governance.

While developed for design education, the ceremonial structure has potential application in any context where communities need to generate shared ecological norms through embodied practice. Testing this wider applicability is a task for further research.

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